# NUNAVUT WATER BOARD Public Hearing

#### Iqaluit Municipal Water License Renewal

November 22, 2000

**Chairperson:** Thomas Kudloo

[TK = Thomas KudlooBH = Bob HansonJM = John MatthewsMH = Matthew HoughBT = Bill TillemanLW = Lee Webber

SP = Unidentified Speaker]

[Start of Tape 1 - Side A]

TK: Good evening. The Nunavut Water Board welcomes you to this public hearing in Iqaluit. We are here to hear evidence from the applicant, interveners, and the general public, with regards to the renewal of the municipal water license for the town of Iqaluit.

The Nunavut Water Board issued the town of Iqaluit a water license on December 15, 1999, for water use, waste disposal, for municipal purposes. That license included provisions for water use, sewage treatment and disposal, and solid waste disposal. The current water license is due to expire on December 31, 2000.

Before we begin the public hearing, I would like to briefly talk about the Nunavut Water Board, which is an institution of public government created pursuant to Article 13 of the *Nunavut Land Claims Agreement*. It is responsible for the use, management and regulation in the Nunavut settlement area. The Nunavut Water Board was officially established on July 9, 1996, when it took over the roles and responsibilities from the North West Territories Water Board, who had jurisdiction, power and authority in the North West Territories since the early 1970s as a fresh water management regulatory regime.

Article 13.7.1 of the *Nunavut Land Claims Agreement* states, and I quote, "With the exception of domestic or emergency use of waters, no person may use or dispose solid waste into water without the approval of the Nunavut Water Board." This means that the Nunavut Water Board must approve any water use or disposal of waste into water. Disposal of waste could be in the form of liquid, gaseous, or solid form. This includes water use and disposal activities associated with the municipal services, mining exploration, mining development, water diversion, and any other water use.

To fulfil its objectives in accordance with Article 13 of the Nunavut Land Claims Agreement, the Nunavut Water Board is required to hold a public hearing before approving any application for water use or disposal of waste into water. The Nunavut Water Board has all the powers and authority of the Commission under the *Inquiries Act*. This means that the Water Board can subpoena witnesses to appear before it, at any hearing, to provide relevant information and evidence, which would become part of a public record, and the information received may be used in the licensing decision process.

In today's hearing, we are hearing an application for water license renewal filed by the town of Iqaluit, which deals with municipal services for the town, including consideration for water supply, sewage treatment, and solid waste disposal. Sufficient concerns were expressed, and the Nunavut Water Board decided to hold this public hearing, and that is the reason why we are here today.

As I stated earlier, the purpose of this public hearing is to ensure that the Water Board hears the concerns and views of the applicant, the general public, and any other interveners or government agencies who have a role or interest with respect to the matters under review.

I would like to emphasise that Article 13.9.1 of the *Nunavut Land Claims Agreement* states, "Where approval of the Nunavut Water Board is required for application, the applicant shall not proceed until approval has been granted."

The enforcement of water licenses is done by DIAND and the Nunavut Water Board does not carry out inspections for water licenses it approves or issues. The Minister of DIAND designates inspectors in a manner consistent with the Memorandum of Understanding between DIAND and the Nunavut Water Board.

The inspector conducts regular inspections of the municipal infrastructures and issues inspection and compliance reports related to the water license requirements. Again, the Water Board has no role in the enforcement, and any matter related to it should be directed to DIAND.

It is very important to note and acknowledge that a municipal license is a legal document, with legal implications, which has the force of law, and therefore it binds the licensee to specific terms and conditions. There is no such thing as a draft license, and a license issued by the Board has a force of law immediately.

Unlike the provinces in Canada, where water is a provincial field of competence, jurisdiction over fresh water anywhere in the three northern territories is vested in the Crown, that is, the federal government and the Canadian Constitution.

Because of its fundamental nature and properties, water does not belong to any individual. It belongs to everyone. Since the municipal license affects all of us, I invite

each and every one of you to participate in this public hearing. I will inform you later about the proper time to make your presentations or submissions. Your comments, concerns and recommendations are important, and the Water Board will consider them when we are going to make our decision and issue our water license for the municipality of Iqaluit.

Once the hearing is adjourned, the Board will meet to review the written and oral evidence presented at this hearing process. We expect to make a final decision, and eventually issue a license, within a reasonable period of time.

The Water Board staff has the complete public registry of all documents and correspondence regarding the town of Iqaluit water license, including the most current license, compliance report, and other documents filed at this hearing. These documents are public, and anyone can consult on them on site. Copies can be made available if required.

I will now give you some brief instructions on how to proceed with your presentation, submissions or comments. When you come up to make your presentation, ask questions, or to answer questions, please state your name for the record, and spell it out if you have to, so that our staff can record it properly. Please be advised that we will not prepare transcripts of this public hearing.

Anyone who will present evidence shall do so under oath or affirmation sworn before Mr. Bill Tilleman, legal counsel for the Nunavut Water Board, but this requirement does not apply to people who simply want to ask questions. All questions shall be directed through the Chairman who will, in turn, ask the applicant, the interveners or technical resource people to answer it.

Since we have simultaneous translation in Inuktitut and English, it is very important that only one person speaks at any given time, and please speak clearly.

I would also like to make a brief statement, here, with regards to Elders. The Board shall give due regard to Inuit traditional knowledge in all its proceedings. The Board may, in a hearing, receive evidence from elders, and shall give them the opportunity to speak at the beginning of a hearing, during a hearing, or at the conclusion of a hearing, and to make submission or repeat submissions at a time convenient to them.

At this time I would like to introduce the Nunavut Water Board Members, and they are, to my left is Mr. Bob Hanson, who I don't have to introduce. He's a resident of Iqaluit. And there's Joe Ohokannoak from Cambridge Bay. And George Porter from Johaven(?). And Guy Kakkiarniun from Kavalu(?), formerly known as Pelée Bay. And to my right is Lootie Toomasie from Broughton Island... pardon me, Totariok(?). And

Jackie Nakoolak is a current resident of Rankin Inlet, but he's formerly from Coal Harbour. And there's Thomas Kabloona from Baker Lake, and Kono Tattuinee from Alvuit(?).

At this time I would also like to introduce the staff. We've got Philippe di Pizzo who is the Executive Director for the Nunavut Water Board; Dionne Filiatrault, Technical Advisor for the Nunavut Water Board; and Aretha Becker, Licensing Administrator; and our legal counsel for the Nunavut Water Board is Mr. Bill Tilleman.

And right now I would like to introduce our interpreters, Juliana Boychuk and Ben Polowit(?) [Kogvik?], and (Blandina Tuluwarit?). Their job is extremely important and stressful. It is important that only one person speaks at any given time, to ensure that they provide a precise, clear and timely interpretation of what is being stated.

Now I would like to pass on the mike to Mr. Vice-Chairman.

BH: Thank-you, Mr. Chairman. Good evening, ladies and gentlemen. Before proceeding with the hearing itself, I would like to address a perception of fairness and possibilities of the appearance of a conflict with one of the Nunavut Water Board members, namely myself. As many of you know, I, the Vice-Chairman, Bob Hanson, is President of RL Hanson Construction, Ltd. Our company is based in Iqaluit, and is in the business of a general contractor, heavy equipment work, and construction in and around Iqaluit.

In the past, I have also served the municipality as Deputy Mayor, and most recently as member-at-large of the Public Works Committee, which I resigned about a year ago.

I and the Board would like to offer all parties the opportunity to raise concern and even object, if they wish, to my participation in this public hearing and discussion respecting the town of Iqaluit's license renewal. As some of you know, I do snow clearing in this town. I do not do it for the municipality, I do it for the private citizens of Iqaluit and a number of private businesses. I have excavating within my company. Very little work is on behalf of the municipality. I do probably 90% of the \_\_\_\_\_\_ lift in this community, unloading the boats, and in that I do have a contract with the municipality to unload the boats, and I also haul their material to site, and that's a contract I've probably had since I came in business back in the early 80s. And the bussing that I have, the bussing is not for the municipality, it is for the Government of Nunavut, formerly known as the Baffin Division of the Board of Education. So, as you see, I have very little to do with the municipality in my business. I wish there was more!

As you might expect, the appearance of fairness is of utmost importance to myself and to the Board, and we would like to hear any concerns or oppositions from the

public with respect to my participations in these deliberations before the commencement of the hearing. And for those of you who do not know me, I have lived in Iqaluit for 35 years, since 1965.

We, and myself, invite anyone who has concerns on my participation in this hearing to please come forward now.

TK: Thank-you. No one has come forward to object to Mr. Hanson's participation.

If I could now ask His Worship, Mayor John Matthews, to give his... to introduce to us who will be presenting the application on behalf of the Iqaluit?

JM: Thank-you, Mr. Chair. I'd like to take this opportunity to welcome the Board to Iqaluit. It's always a privilege to have visitors, and an esteemed group like yourself, it's an honour. And I'm sure Mr. Hanson will agree with me that we hope your stay is very enjoyable, and profitable.

Before I introduce the people at the table, I'd like to take this opportunity to introduce the councillors and staff in attendance. Glen Williams, Keith Irving, (Kirtie Jesiak?). We have some other councillors who are unfortunately not able to attend because they're tied up or travelling. I'd like to introduce our Chief Administrative Officer, Rick Butler. And finally, I'd like to introduce our presenters, the Director of Public Works and Engineering, Matthew Hough, and our legal counsel, John Tidal.

Thank-you, Mr. Chair.

TK: Thank-you. Looking around the room, here, I'm looking for Elders who may want to make verbal presentations.

Okay, at this point in time I would like to mention the applicants. They will be making written evidence before the Board. Also, we've got submissions from the Department of Sustainable Development. We've also got written submissions from community government and transportation. We've also got a written submission from Mr. Marcel Mason. Is he here? No. We also have written submissions from DIAND, DFO, and Environment Canada. Pardon, me, I skipped one here. Baffin Health and Social Services have also given us a written intervention statement.

Are there any individuals or organisations who have not submitted a written intervention statement but would like to speak at this hearing? I take it there's none.

Are there any objections to this public hearing? I take it there's none.

If we can now proceed with the presentation by the town of Iqaluit.

BH: Mr. Chairman, just for the licensee members, what we're going to do - Robert Hanson - what we're going to do tonight, we'll do the introductions and get everything going. We know we have an hour and a half left, but we think your presentation perhaps may need

more time, and we're just wondering if you would prefer doing this starting tomorrow morning at 9 o'clock. Now, I know we do have a site visit scheduled for 10 o'clock, but we went through this rather quickly, so if you would prefer... I know there's various things going on this evening, there's a debate down at Makter(?) School I understand members of the public may want to go to. So I was wondering if we got to this far, but again we can carry on, I think, Mr. Chairman, if that's the wish of the licensees, or we can wait until tomorrow morning and start at 9:00. We are flexible.

JT?: Perhaps, I think the question is, to the town, is there a convenient break point tonight where you could start and then come to a point where it would be logical for you to break? I appreciate that would introduce the swearing of witnesses and leaving(?) something, but would it be... what is your game plan? Would it be helpful to start tonight, break and then go tomorrow, or how do you see it?

Thank-you. I think we could get started. I think the biggest is we're surprised it went fast, and we had some overheads, and we find that there's no screen, so it might be better to do that in the morning. What I could do is go through how we intend to proceed with the town's presentation, and then perhaps... I was going to ask the mayor to say a few words beyond introductions. If you would, he would be what I would refer to as our first witness, but perhaps we could do that, and then when we come down to dealing with the issues, and going through them one at a time - and I'll describe how we're going to do that - perhaps that would be a logical place to break, so that then in the morning we'll get set up and we'll be ready to go.

TK: Mr. Vice-Chairman.

BH: Thank-you, Mr. Chairman. I don't want to stress how important it is, when you speak, always say your name, and if need be please spell it. In the last hearing I had to constantly say, 'Your name, please. Your name, please.' I do not want to do that, okay? Please say your name when you come to the microphone, because this will be transcribed onto paper, and we need to know who is speaking prior to speaking. Thank-you.

TK: Thank-you.

JT: My name is John Tidal, and I've actually spoken \_\_\_\_\_. I appreciate the fact

First of all, I just want to say it's an honour for me to be here. It's the first time I've appeared before the Board and so it's very much my pleasure to be here before you.

By way of introduction, the municipality of Iqaluit is applying, as you have said, for a renewal of its water license for a period of five years. Now, the Board should have, and all parties should have, certain documents that have been filed up until now, and that

will be referred to. The first is the application itself, which is two or three pages long. Going with that is the supplementary questionnaire. Thirdly, there is a document called Written Evidence of the Municipality of Iqaluit, and I think all of that is available at the front table, there. And fourthly, we filed something called a Solid Waste Management Plan which had been prepared, and I think it's dated September of this year.

Those are the documents that are before the board from the municipality, and I know from reading the transcript last year that at some point it's the Board's practices to make those exhibits, and if you were going to do that at some point if you'd just advise us what the numbers are and we can refer to them.

The municipality is seeking the Board's approval to continue to use water from Lake Geraldine, and to deposit waste into water in two forms, waste water from the sewage collection and treatment, as well as from land filling. The Board's staff held a pre-hearing meeting on September the 25th, and at that time there was the opportunity for most of the parties that you have before you in the room, here, to discuss issues, and a number of issues were identified.

And we appreciate that other issues may well be raised during this hearing, but we've done is structured the written evidence around those issues, and I think there's about ten of them. They're not really in sequential numbering, so I'm not sure about that. But we structure around those issues, and for the most part the intervention statements did, as well.

For the purposes of our presentation, we'll adopt the same approach, and what we'd like to do is sort of go issue by issue through them. One thing we will try to do, because we've had the ability to review the intervention statements is to respond to specific points that have been raised by other... by interveners to the hearing, where it's appropriate for us to do that. And of course, if there are any other questions, Mr. Hough or others will be happy to try to answer them.

The format that we're going to use, to try to keep this flowing fairly smoothly, is on each issue I will lead and simply introduce it, and identify what the issue is, and then I'll ask Mr. Hough to speak to it.

There is a series of slides, as I said, and they're very brief, and they really just highlight the main points - I think there's only ten of them - and once we get things set up for that we'll have slides showing. They've been translated so they're in both English and Inuktitut, and people will be able to follow along, I hope.

The other thing that we intend to do throughout the presentation is to make suggestions as to condition of a proposed new water license. In some cases we may

suggest to you that certain conditions be deleted from what is in the current license, and in some cases we will be suggesting new conditions.

I guess I am somewhat in the Board's hands as to how we deal with that in a formal way. What I thought we would do, to give everybody a chance to understand where we're going, is as we go through, I will simply say to you what we are going to propose by way of conditions, and then at the end of the day, down at somewhere, I think, number 16 on your order of events, I'll try to summarise all of that, and it may be that the Board may want to receive written submissions after the fact. I don't know what you want to do.

Anyway, the first thing that I would like to do is ask the Mayor to say a few words regarding the license, in general, before we start into the actual issues.

JM: Mr. Chairman, we're happy to... sorry. If I could just respond to a couple things. One is the overhead, the machine, if you do want to use it tonight it should be here in just a couple of minutes. In fact, it's here already. So, the overhead, the machine...

My recommendation, Mr. Chairman, on the list of draft terms and conditions, would be that for the benefit of all the parties and the Board, if you could maybe type those out, and at some point distribute them to the parties and the Board. That way it would be easier to contemplate and discuss.

And the other... oh, exhibits. We could file, if you wish, those exhibits you mentioned for, and we could just... I realise we have written submissions from everyone, but perhaps we should just file as we go, each written submission. In your case, then, you identified four things. The first one is the application for the water license, which we could mark as Exhibit #1. The second one was a supplemental questionnaire which, Mr. Chairman, I propose to mark as Exhibit #2. The third one would be the written submissions of the town, which, Mr. Chairman, we could mark as Exhibit #3. And the fourth one would be the September 5th Golder Report on Solid Waste, which we could then mark as Exhibit #4. If there were any other documents, then, Mr. Tidal, you could present them to us and we could mark them accordingly.

And if... we're now to the point of giving evidence. I don't know if the mayor's going to speak as a witness - he's your client - but if so, then I should swear either he or Mr. Hough or whoever else you're going to begin with, right now.

Thank-you, Mr. Chairman.

Sorry, Mr. Chairman, there was one other thing, and that was the overheads, and I can't... were - the overheads you had available - were they in English and Inuktitut, and do we have them already, or should we... are they part of this? Then we should mark

them. If we haven't seen them, then, could we get copies of those and have them marked as Exhibit #5?

JT: The overheads are fairly brief, and they're really -

BH: Name?

JT: Sorry, John Tidal. Sorry. They're intended simply to capture the main points of the evidence, but we've got them, and we'd be happy to make copies, if you want to mark them as Exhibit #5, and we'll have copies made for the morning for everyone, so you can follow along. And I'm certainly prepared to do the same thing with the conditions, have those in the morning, as well.

And I think it probably would be a reasonable idea to swear both the mayor and Mr. Hough in, then that'll be out of the way, as well.

JM: John Matthews, j-o-h-n m-a-t-t-h-e-w-s.

JT: Do you swear that the evidence that you are about to give is the truth, the whole truth, and nothing but the truth, so help you God?

JM: Yes, I do.

JT: Thank-you very much. Please state you name and spell it for the record.

MH: Matthew Hough, m-a-t-t-h-e-w h-o-u-g-h.

JT: And do you swear that the evidence you are about to give is the truth, the whole truth and nothing but the truth, so help you God?

MH: I do.

JT: Thank-you.

[End of Tape 1 - Side A]

[Start of Tape 1 - Side B]

JM: For those members of the Water Board who are not aware, there was an election in Iqaluit recently, and two-thirds of the council is new, as well as a new mayor, and the top administrative position is new since we've had the last meeting.

It's the town's... it has been the town's intention, and it will continue to be the town's intention, to work as closely as possible with the Water Board to attempt to comply with all the direction the Water Board provides. It's certainly agreed, within the town, that it's in the interests of the community to work closely with the Water Board. So we're hopeful that we can come, at the conclusion of this, to a very satisfactory resolution that's in the best interest of all concerned.

You will see, when we go through our application, that we have attempted to comply with all the conditions that were put on the last license. Where we haven't been able to comply, we have indicated very reasonable target dates.

So, I think that's the hallmark of our presentation, reasonableness, and I hope you can come to an agreement with that. It's important you realise the incredible challenges that this community's facing since it became capital. We have so much on our plate, today, and tomorrow, and we're trying to meet all these challenges in a way that's, again, in the best interest of the residents.

To name a few, we're dealing with the new sewage treatment plant, then we will... we are dealing, and will continue to deal with the solid waste disposal site, and we are dealing, and will continue to deal, with the new water supply. So, these are incredible tasks that our administration is facing in the course of a very short time. Other communities way face these same tasks over years and years and years, but certainly not in the short time-frame that we're trying to resolve these issues.

We are very hopeful that the Water Board will agree to our request for a five-year license. We have a lot on our plate, and we feel that if the Water Board agrees to this license, with monitoring processes, it will allow us to continue to develop the new initiatives that we're undertaking with the other projects, without having to spend an inordinate amount of time preparing material for the Water Board.

So, if we are given the green light, then I just repeat that it would be in our best interests, and we will comply with any conditions that are imposed on us.

Thank-you for your time.

TK: Thank-you, Mr. Matthews. Please proceed.

JT: Thank-you, Mr. Chair. It's John Tidal. I'm thinking that it would probably make more sense to take Mr. Hanson up on his suggestion. I think by the time we get everything organised, here, we're going to lose a major chunk of tonight, and it would be easier to pick up with Mr. Hough's evidence in the morning.

I don't know whether it would be appropriate, at this time, if there are any questions for the mayor arising from what he just said, he could deal with them now, and then tomorrow we could just have the two of us up there.

TK: Are there any questions from the floor for Mr. Mayor? Any questions from the Water Board staff? Okay, what we will do now is adjourn until 9 o'clock tomorrow morning, and thank-you for coming, and we'll see you at 9 o'clock.

JT?: ...you about the tour. We are convening at 9:00, and we'll have evidence for an hour, and then we'll go on the tour. And does the Board wish to go to the water plant? We're just trying to sort out who's going to be available where. There was some thinking that perhaps, since the Board had seen the plant last year, and there isn't very much change, that you might not want to go there, and you might want to go simply to the sewage

treatment plant and to the waste disposal site. If you could just let us know, we'd appreciate it.

TK: Mr. Tilleman?

BT: My only question is slightly different, and that is, would it make sense to... does it make sense to break the hearing up tomorrow morning, as well, or would it make sense to do the... whatever visit you're going to do first, and then just go through the evidence and finish at noon? I don't know if you have a timing problem, or if the Board has preference, because until now we hadn't talked about it. But would you... would it be possible to start by doing the tour and getting that right out the way first, Mr. Tidal?

JT: [inaudible]

BT: It can't be at 9 o'clock.

TK: [inaudible]

BT: Sorry, Mr. Chairman. Bill Tilleman. Does the public have any problems if the Board did start first thing with the tour, and then came back here and just got right into the hearing, so there were no further interruptions?

TK: Mr. Webber?

LW: Mr. Chair. Lee Webber, Justice Canada. I'm quite happy with the idea of getting the tour done first thing, and then moving into an uninterrupted series of presentations. On the other hand, I'm just a little bit concerned that the advance advertising for these proceedings identified, if I remember correctly, 10 o'clock for the start of the tour, and I suppose it is possible that there might be members of the public who aren't here this evening and who are expecting to show up at 10 o'clock and participate in the tour. So, I just raise that for your consideration.

TK: Mr. Tilleman?

BT: That's a good point, Mr. Webber. Subject to the town's willingness to do this, you could nevertheless do the tour, and perhaps advertise on the radio, get someone to just, if possible, announce first thing in the morning that there's a change of plans. But in addition to that, if someone showed up at 10 o'clock, perhaps the town could accommodate him in any event, so that the worst scenario would be that maybe there would be two tours, one for everyone at 9 o'clock, and then if a few stragglers did show up, then they're certainly entitled to find out what the plant is all about.

Now, that does not answer the question that Mr. Tidal posed to the Board, and that is, does the Board want to see both the water plant and also the sewage treatment plant? And if he's suggesting that there's no change to the water plant, I... Mr. Tidal, was that correct, that there hasn't been any substantive change to the water plant itself?

JT: It's John Tidal. Mr. Chair, Mr. Hough is advising me that there's a couple of pumps changed in the chlorine room. I don't know that would be a significant difference. We're happy to do it, we're just trying to sort out what's going to happen.

The other possibility on timing, I suppose, is that we could start at 9:00 and run through the town's presentation, even if it took to, perhaps, 10:30. We could then go on the tour, if that's easier. I don't know how that works for the school buses, if we had a school bus or whatever kind of bus we have. I don't know how that works, but that's another possibility.

TK: Okay. Before I forget, here, for those of you who may not have signed with the licensing administrator for your presentations or submissions, whether it be submissions or oral, please do so with Rita Becker.

You had a question?

BT?: While the purpose of a site visit isn't to gather evidence, so we shouldn't be there examining, it's my advice to the Board that we shouldn't be there to examine and conduct a hearing inside, unless you want to. It might, nevertheless, be helpful to have them do their presentation in the morning so that maybe you get the bigger picture if you did go to do the site visit, for those in the audience. They might understand how it kind of fits together better. So... and I see some of the audience nodding, so perhaps that might, after all, be the best suggestion, to stick to the agenda, given Mr. Webber's concerns, take advantage of your presentation first thing in the morning, take a logical break and go through how it all works together.

TK: Okay. Mr. Weiss.

\_W: Thank-you, Mr. Chairman. Basically the bus is, what I understand, is at your disposal for the whole duration of your meeting, if you should wish to go at 9:00, 10:00 or 10:30. I do agree with Mr. Webber's comment that it has been published at 10 o'clock, so if we do run a bit late people that are here, if they see any more outside, they can say that the tour would happen at 10:30. It shouldn't take very long to do a complete tour. The town is only so big, so it shouldn't take us more than a half-hour to an hour, probably, maximum, because we have gone to the different places. I think the biggest problem is it's a public tour, also, and the public has problems... 90% of them have probably never gone to the water treatment plant, let alone the new sewage treatment plant. So there may be interest there. We may have to do a couple runs, or something. That can be dealt with by your driver and your staff. Not my driver, your driver!

Thank-you, Mr. Chairman.

TK: Thank-you. Any more comments? Mr. Tilleman?

BT: On a matter of housekeeping, if you will, then my suggestion is we should start promptly at 9 o'clock and have everyone here, and stick to a pretty tight time table. By the site visit I would suggest that that would just be how the big picture fits together. You can show where Lake Geraldine is, you can... anything that is relevant to what we couldn't otherwise discover within the walls of this room, even as opposed to what happened last year, which was a more detailed walk around the dump and that kind of a thing. I'm not sure, Mr. Chairman, that that is appropriate.

TK: Okay. Any other comments? If not, we'll start at 9 o'clock in the morning. Thank-you, we'll see you in the morning.

[End of Tape 1]

# NUNAVUT WATER BOARD Public Hearing Iqaluit Municipal Water License Renewal

November 23, 2000

Chairperson: Thomas Kudloo

 $[TK = Thomas Kudloo JT = John Tidball BT = Bill Tilleman \\ MH = Matthew Hough LW = Lee Webber AW = Anne Wilson$ 

JG = Jordan DeGroot MM = Marcel Mason SP = Unidentified Speaker]

[Start of Tape 2 - Side A]

TK: ...not registered, please do so with the Licensing Administrator, Rita Becker. And please, when you make a comment or statement, please remember to state your name.

Good morning. We shall reconvene. At this time I would like to ask the municipality of Iqaluit to make their presentation. Thank-you.

JT: My name's John Tidball. That, Mr. Hanson, doesn't count. Next time I'll try to keep...

As I said yesterday, we're going to go through the issues one at a time, and I will be introducing them, and then Mr. Hough will be speaking to each of the issues.

The first one is in relation to the use of water for municipal purposes. There are two issues under that topic. Or, we consider them to be two issues. The first has to do with long-term water supply, and the second has to do with the Lake Geraldine dam.

First of all, on the long-term water supply, the Board will note that in the application, the application asks for the applicant to indicate how much water is going to be needed under the license, and what we did - and Mr. Hough can describe this if you have questions - but what we did is actually put in the amount of water that the municipality is using, plus a little bit. So, you will see that there is... the application is for 1.2 million litres of water per day, on average.

Traditionally, the license has been expressed of cubic metres of water per year, and I notice that in the submission - the joint submission made by the three federal departments - their suggestion was that the license remain at 1.1 million cubic metres of water per year, and I just wanted to say at the outset we're fine with that, and we didn't necessarily intend that it would be any different in the new license. We were trying to be accurate in the license and that was all.

So, first of all, on the issue of long-term water supply, I'm going to ask Mr. Hough to speak to that issue.

MH: Good morning. My name is Matthew Hough with the municipality of Igaluit.

On the issue of long-term water supply, it is our submission that a new long-term source is needed, within five years, to service rapid growth. The word "source" is a little misleading. Next year we are planning on retaining a consultant to study long-term water supply options. We want that consultant to look at our present Lake Geraldine, the watershed that services Lake Geraldine, and the capacity of our water treatment plant. We know that our water treatment plant needs upgrading and re-sizing to suit the growth of the town for the next 20 years. We know that Lake Geraldine may be able to handle that growth over the next 20 years. However, we want to ensure that that is exactly the case. So, next year we will be retaining a consultant to do just that.

We agree with the federal departments that the study should include hydrologic assessment of Lake Geraldine, an assessment of the environmental impacts of increasing draw-down. And we also request until December 31st, 2001 to submit the study, if the Board feels this condition is necessary.

JT: Mr. Chairman, there was a document left on the table over there, and I don't know if the Board has it yet. You'll recall that we had a discussion yesterday about some proposed wording for conditions, and we prepared a one-page document that I don't think's been marked as an exhibit yet, or perhaps it has.

TK: Bill?

BT: Mr. Chairman, we've marked that as Exhibit #6, which is the new conditions proposed by the municipality.

TK: Thank-you.

JT: Does the Board have copies of it? The first condition, there, speaks to this issue, and you'll recall Mr. Hough just said the municipality would like to the end of next year to do this report. What we put together as a condition, if the Board is inclined to attach a condition to the license, then it would simply say - it's the first one there - the licensee shall submit to the Board by December 31, 2001, a report on long-term water supply options for the municipality of Iqaluit.

I should say - and I will pick this up on the way through - our intention was that condition would replace the existing Condition 7 under Part C of the license, and rather than take a lot of time to go through that I'll sort of pick this up at the end, but if you wonted to make a note of that, that's what we're proposing.

The next issue that has to do with water supply has to do with the integrity of the Lake Geraldine dam, and I'll ask Mr. Hough to speak to that issue, as well.

MH: Matthew Hough again. With respect to Lake Geraldine dam, we are unclear for the basis of the concerns with the Lake Geraldine dam. To the best of our knowledge, the dam is structurally sound. Since 1997, when improvements were made, the dam has been inspected several times by our consulting engineers and no problems have been noted. I spoke to them this week on this particular topic, after going through the submissions by the interveners, and they've assured me that, once again, the dam is structurally sound. The dam has a concrete core. That core was part of the re-construction, and over the top of it is where the dykes are placed.

The condition of the dam is also being evaluated as part of a risk assessment commission by the GN in relation to a new hospital. The federal departments state that their concern's regarding the dam's stability have not yet been adequately addressed. We have reviewed DIAND's 1999 submissions to the Board, and the transcript of the hearing, and there is no discussion of why DIAND is concerned. From Iqaluit's perspective, it is vitally important that we maintain the integrity of the Lake Geraldine dam. The Board can be assured that we intend to do so regardless of any condition that may be imposed. We simply don't believe that a formal geotechnical inspection and report is justified.

Upon recruiting the consultant for the study that I referred to in the last section, we will also be formulating along-term O&M plan for our water supply, and as part of that particular study, there would be a schedule for inspections. And we request that the Board not re-impose Condition C-5 and C-6 in the new water license.

JT: The next section that we're going to deal with is getting into the area of waste disposal into water, and first of all dealing with sewage treatment.

The first issue that's been identified as of interest to the various parties is the status of the new sewage treatment plant, and I'm sure that's something that will be of interest to the Board as well. We will be seeing the plant later this morning, and Mr. Hough, I guess, could expand on what he's about to tell you then, but I'll ask him to speak about the plant right now.

MH: Now, as far as the plant system, we described it at the 1999 hearing, and as John referred, we will be seeing it later today and I will describe the process at that point in time again.

To move on, we agree with the Department of Health and Social Services that there will be a vast improvement in the new plant when it's commissioned. Iqaluit is as anxious as anyone to see the new plant opened. The plant is not yet in a position to open, even though it was 90% completed by February of this year. The reasons for the delay are related to construction deficiencies with the concrete in the four tanks, and when we visit the site later today I will point that out to all Board members. Some of the form work has been removed from the inside of the tanks, and what it reveals is a concrete structure that literally does not hold water. We're doing everything we can right now to repair that. The bonding company is involved, that insures this work. It takes time to do it properly, and time to pay for a problem such as this.

This repair work is proceeding, and should be completed... [tape blank 15 s.] Once the repairs are completed we will proceed to complete the construction, such as the installation of the filters, aeration systems, and commissioning of the plant.

We are still hopeful that the plant will be operational by the spring of 2001. We ask the Board to recognise that we are doing our very best. We want to start up the new plant more than anyone else, and we will do it as soon as we can.

Nothing gained by adopting a suggestion of the federal departments to impose a deadline, unfortunately. There's no difficulty on providing a status report to the Board at the time when the new plant is commission.

JT: Mr. Chairman, on that issue, you will see that the first condition on, I guess it's Exhibit #5, under Conditions Applying to Waste Disposal... I'm sorry, it's Exhibit #6, Conditions Applying for Waste Disposal into water, here's what we're proposing, that the licensee shall direct all piped and pump-out sewage to the sewage treatment plant as soon as the plant is operational. Until that happens - or, the plant is operational - all sewage shall be disposed of in the sewage lagoon.

And then, to pick up on Mr. Hough's last point, there, the licensee shall submit a status report to the Board within seven days of the plant becoming operational, and our thinking on that one is simply it will be a short report to the Board to advise you that the plant is now up and running.

Now, staying with the new sewage treatment plant for a moment, the next issue that is on the list of issues has to do with sewage sludge. At last year's hearing, as I understand it, there was some evidence directed to that issue, and I'd like to ask Mr. Hough to speak to that.

MH: As the plant has yet to be operational, there is no sludge yet. We expect the plant to produce about 5 m<sup>3</sup> of sludge per week, and we agree with the Department of Sustainable Development that we need to develop a short-term plan and long-term plan. Our short-term plan is to take the sludge to the current landfill site for composting. We'll

place it on an HDP liner, cover it, and test it regularly. Whenever it's in suitable form, we hope to use it as cover material at the landfill site, or in other places.

We agree with the Department of Health and Social Services, and the Department of Sustainable Development, that there isn't much information about composting under Arctic conditions. We hope that our short-term plan will be the pilot project that DSD was asking for last year.

We will need some time to properly evaluate the options for long-term sludge management. We would like to evaluate how composting works, and we are hopeful that the new incinerator for solid waste will also be able to handle sludge.

JT: Mr. Chairman and members of the Board, what we're suggesting is the second condition there under Conditions Applying to Waste Disposal into Water, and we're suggesting that the Board impose a condition requiring the municipality to submit a long-term sludge management plan by no later than the end of next year, that is, December 31st, 2001. In light of what Mr. Hough has just told you, the municipality believes that would be an appropriate period of time to figure out what the options are, and as you'll hear in a few minutes, there will be some finality to the notion of whether or not the incinerator that is to be constructed will be suitable for sewage sludge, and at that point they'll be able to evaluate whether that's the appropriate thing to do or something else should be done. And we'd also suggest that the current condition, Number 9 under Part D, be deleted. This is really to replace that.

The next issue having to do with sewage is the integrity of the dykes at the sewage lagoon. Again, that was an issue that was raised last year, and there are conditions in the current license dealing with it. I'll ask Mr. Hough to speak to that.

MH: The Department of Sustainable Development and the federal departments have requested a geotechnical inspection of the lagoon dykes. Iqaluit does not believe that there is any basis for the request. The dykes were re-built following wash-outs in '81, '87 and '91. The current dykes are approximately double in size from what they were in '91, and no problems with integrity or stability have been noted. A spillway has also been built into the system to ensure that if the level in the lagoon does increase rapidly, that there is an escape mechanism for it.

There was seepage resulting from a build-up of snow and ice at the toe of the west dyke in 1997. Our consultant recommended that the level in the lagoon be lowered, the dam be monitored on a daily basis, and that snow and ice be cleared from the base of the west dyke on a regular basis. We closely monitor the level in the lagoon. We do daily inspections. Although the volume of sewage being discharged to the lagoon is

increasing, that does not affect the level maintained in the lagoon. The designed retention time is a minimum of four days. At the moment, we are averaging 6.18.

We see no sign of any problems with the dykes, and do not believe that a formal geotechnical inspection and report is necessary.

JT: Mr. Chairman, if it would assist the Board, I had some difficulty following something Mr. Hough said until he explained to be with a diagram the other day, and that had to do with the problem in 1997 which resulted in the recommendation to lower the level of the dyke. And I think I assumed, as I think many parties and perhaps the Board also assume, that that meant that there was a stability problem with the dyke, and that the level had to be lowered because of that. What Mr. Hough just told you is something different, and if you would like, we could have Mr. Hough sort of draw you a little diagram here to show you what the problem was in '97, and how it was fixed.

MH: Now I know how my professors used to feel!

All right, the west dyke is shaped as such. Now, I apologise for the straightness of my lines. The water level in the lagoon is represented by this, the west dyke represented here, and the toe of the west dyke is what I'm pointing at right now. Now, the toe of the dyke is comprised of a much more coarse granular material than the rest of the dyke itself. When the sewage passes through the dyke, the design calls for it to drop through the toe of the damn and exit as such.

The reason for this is so that if it was ever to be that the sewage goes straight through the dyke, such as that, it will take with it a lot of fine material, which decreases the stability of the dyke. The design calling for it to drop through the toe was marred in 1997 with a build-up of snow and ice in front of the toe. So, the passage of the effluent had no choice but to travel straight through the actual dyke. That's what our consultants found at that point in time, and the recommendations for constant monitoring have been followed.

Now, they also recommended that we lower the level of the lagoon. We have done that, and at to this day it has worked very well for us. We haven't noticed any excessive seepage through the dyke since.

JT: Mr. Chairman, we'll be wrapping this up at the end of the hearing, when we get the chance to go through it one more time, I guess, but our suggestion will be that the current Conditions 6 and 7 in Part B are not necessary, and we're going to be asking you to remove them.

JT:

The final issue on sewage disposal is an issue about the closure of the lagoon, how that is to be effected. Again, there was discussion on that issue last year, and I'll ask Mr. Hough to speak to that as well.

MH: The issue of lagoon closure... once the new sewage treatment plant is commission, Iqaluit intends to pump the contents of the lagoon to the plant for treatment. The lagoon sludge will be allowed to dry, and then removed. The lagoon will be left empty for use as a back-up to the new plant.

We will need to carefully address the issues of dyke condition in the absence of liquid in the lagoon. And this is actually where we feel we should be spending our time, developing an operation and maintenance plan for the long-term use of that lagoon as an emergency storage centre, I guess. If dykes dry, the stability of them could be compromised, and that's exactly what we'd be looking at when we prepare our long-term plan next year.

Iqaluit will submit a formal plan for the conversion of the lagoon to a back-up facility, including maintenance plans, within six months of commissioning the new plant. In that regard, Mr. Chairman, members of the Board, the third condition that you see on Exhibit #6, under Conditions Applying to Waste Disposal into Water, is proposed as follows. The licensee shall submit to the Board within six months of the new plant becoming operational a plan for the conversion of the lagoon to a contingency back-up facility for short-term storage and treatment of sewage. The plan shall address long-term maintenance and inspection of the lagoon dykes. And that's to pick up exactly on what Mr. Hough has just mentioned to you.

Now, the last set of issues have to do with solid waste disposal. Before I ask Mr. Hough to speak to this issue, I wanted to address the Board on a couple of issue that have been raised by... in some of the intervention statements. And I think it's important that the Board recognise the limits of its jurisdiction in regard to waste management. Several of the parties have suggested to you that you have the ability to impose conditions regarding larger issues of waste management, and I simply wanted to remind you, at this point - and you know this, it was in you statement at the beginning of the hearing yesterday, Mr. Chairman - that the Board is given power to regulate the deposit of waste into water. It's not give the power to regulate waste management.

In most provinces in Canada, certainly the provinces that I'm familiar with, there is specific waste management legislation that deals with this, and it might be that there is a need for that in the Nunavut Territory, but at the moment it doesn't seem to exist, and it doesn't seem to exist at the federal level for Nunavut, and I would urge you not to simply

expand your own jurisdiction to try to fill that gap. If there's a gap that should be addressed by the Legislature, then it should be addressed by the Legislature, or the federal government.

We have provided you, by way of documentation, with the solid waste management plan. We did that to provide the Board with evidence of the municipality's plans and planning process towards a new landfill, and a different type of landfill. But, having said that, I really don't believe that the Board has any jurisdiction to regulate a number of issues such as - and I'll list them for you - waste collection - I don't think you do - recycling, incineration, or hazardous waste management.

And in that regard, then, the municipality - and you'll hear in a moment Mr. Hough describe it - plans to construct a new incinerator, but I don't think the municipality would be applying to the Board for construction of the incinerator, because it doesn't have anything to do with the deposit of waste into water. In fact, I believe that application may have to be made to one of the regulatory agencies in the Nunavut Territory.

As a result of that, we are not going to be addressing... I'm not going to ask Mr. Hough even to speak to it. The request by Health and Social Services for as series of conditions dealing with... requiring a more detailed waste management plan from the municipality, from the municipality's perspective, you will by next year some time, hopefully, get an application to construct a new waste disposal site.

We're not going to address the comments made by both DSD and the three federal agencies requesting conditions about development of a hazardous waste plan, or hazardous waste conditions. And to the extent that the DSD's comments go to suggesting that the Board needs to impose conditions about recycling, we will make the... again, we think that's beyond what the Board has the power to do, and we won't be addressing it.

That - and I'm a little reluctant to get into this, because I know it was a subject of great discussion last year - I will be asking Mr. Hough to speak to the issue of open burning. I know that is a significant issue for the Board, and I know it's a significant issue for the community. However, I simply wanted to make it clear that, from our point of view - and I'm not sure the extent to which it was made clear to the Board last year - that we don't believe that the Board really has that much ability to control emissions into the air. And I again, without re-opening that whole discussion, simply wanted to say that. Having said that, I'm going to have Mr. Hough speak to that, and he's going to speak to burning at the site. And I guess, from our perspective, it's a necessary evil, and

Mr. Hough can speak to how long that will go on, etc., and if people want to ask him questions, I guess they will ask him questions.

So, having said that, I will ask Mr. Hough to speak, first of all, to update the Board on the status of planning for new facilities for waste disposal.

MH: On the status of new facilities, in accordance with the solid waste management plan adopted my municipal council, Iqaluit is proposing to establish an incinerator as a primary method of waste disposal, with a new landfill for the ash residue and the metal waste.

We are currently in the process of site selection and technology selection. Report on the site selection is due to us by Christmas. We will apply to the Board for approval to construct the new landfill once we have selected a site and developed the necessary reporting documents. We cannot agree to an arbitrary date for submission of that application as suggested by the federal departments.

JT: The second issue under waste management has to do with the contingency plan. Again, this was an issue that came up last year, members of the Board. There was, I think, a fair bit of discussion about what contingency would be in place when the current landfill is full. I'm going to ask Mr. Hough to speak to that issue, please.

MH: We expect the current landfill to be full by October of next year, even with continued burning. If a new incinerator or landfill is not ready, we will need to implement a contingency plan. Our current plan is to construct a small extension of the current site at the east end, and the use of berms to increase the height in necessary. We accept suggestions made by the Department of Sustainable Development and the federal departments that a detailed contingency plan be submitted, and we suggest a date of August 30.

Now, just a quick note on that. This is not a situation that any of us with the town wanted to be in. This is a very frustrating situation, and one that we're working very hard to overcome. Our primary objective, right now, and our goal, is to have our new incinerator in place at this time next year, so that we do not have to pursue the contingency plan that we will draw up.

The second to last condition that's on Exhibit #6, Mr. Chairman and members of the Board, is suggested as follows. If new solid waste disposal facilities will not be operational by the time that the landfill site is at capacity, the licensee shall submit to the Board by no later than August 31, 2001, a contingency plan for the interim period, and that's just to incorporate what Mr. Hough has just said.

The third issue under waste disposal has to do with operations of the current site, and I indicated that Mr. Hough would speak to that. Mr. Hough, could you do that, please?

MH: The municipality recognises concerns over open burning. The lack of disposal capacity makes it essential. Burning addresses other issues that have yet to be noted in a forum such as this. During the solid waste management plan, we found that the Department of Transportation had a rule of thumb limit for food waste landfills of three kilometres from the centre line of the runway. The current landfill site is within that three-kilometre zone. The reason Transport Canada has that rule is that food waste landfills attract birds. Bird strikes, for airlines, are incredibly dangerous.

Additional piling of food waste would increase the amount of leachate into the ground, and as everybody is very aware, our landfill site is not an engineered landfill. It's a dump.

So, with respect to the continuation of burning, it's a necessary evil at this point in time. Once again, it is not something that our council deems desirable. On many occasions, our councils have noted to us that this is a priority, and that should be stopped.

We do not have a current... sorry. We do have a current operation and maintenance plan for the landfill. It can be made available to the Board, if they wish. The Department of Health and Social Services has asked us to review it. We once again submit that we are pursuing other alternatives, in the incinerator and a new \_\_\_\_\_ considerably, and I hope you note, when we do our site visit today, and have also adjusted our operations to better fit... follow our operation and maintenance plan.

JT: The last issue we wanted to speak to is the issue...

[End of Tape 2 - Side A]

[Start of Tape 2 - Side B]

JT: ...within the responsibility, or under the responsibility of the municipality, and I would like to ask Mr. Hough to speak to that issue, please.

MH: Iqaluit is responsible for the closure of three sites, plus the existing site. We visited those last year. There's one in Apex and two adjacent to the current.

There are two other sites that are not the responsibility of Iqaluit. One is the responsibility of Transport Canada, and they are cleaning it up next summer. That site is a metal dump that borders on the Sylvia-Grenel(?) River, and it will see the clean-up of quite a number of old oil drums, vehicles and other metal waste, and the complete closure of that site next summer. We've very excited that Transport Canada has taken it upon themselves to come in and do this.

On another note, the site in the north 40 we still believe to be a federal government responsibility, and we hope that the federal government takes it upon themselves to do something about it.

We plan to remove all waste above ground and use earthworks to berm and cover the remaining site - that's on the Transport Canada site - and we can accept the suggestion of the federal departments that new closure plans for the waste sites for which the municipality is responsible be prepared and submitted to the Board, and we suggest a submission by December 31st, 2002 to give us time to deal with the many other priorities.

JT: And in that regard, Mr. Chairman and members of the Board, the last condition that you'll see we're proposing in Exhibit #6 is that the licensee shall, by no later than December 31, 2002, submit to the Board closure plans for all closed waste disposal sites for which it is responsible, and you've just heard Mr. Hough describe which those sites are, but just to recap, it's the current site, the two small sites adjacent to it, and the old Apex dump.

I think that was all we had to say by way of presentation. Thank-you.

TK: Thank-you very much Mr. Hough, and Mr. Tidball. Are there any questions to be addressed to the applicant from DIAND? Okay, would you like to take five minutes? Okay, we'll recess for five minutes or so.

[recess]

TK: Could we reconvene, please? Ladies and gentlemen, before we proceed, Mr. Bill Tilleman has a comment to make with regards to one of the Board members, Lootie Toomasie.

BT: Thank-you, Mr. Chairman. During the break, Mr. Toomasie felt quite sick, so he decided that for health reasons he needed to go lie down. We're not sure how long that... what that might mean, and hopefully he'll be back right immediately following the site visit, but if that does not take place, then we'll just update you as the day goes on, because the update will deal with whether or not he continues to participate on the panel, and if so, under what terms and conditions. For example, he'll need to hear the tapes and read the... we don't transcripts, but he'll have to listen to the tapes and read the exhibits. But the audience just should know that it was only for health reasons. He's very sorry that he had to leave, and we hope that he comes back soon. We'll provide updates as the day goes on.

Thank-you, Mr. Chairman.

TK: Thank-you, Mr. Tilleman. Mr. Webber, would you please proceed with your comments or questions?

LW: Thank-you, Mr. Chairman. Lee Webber, Department of Justice. What I'd like to propose is that the first round of questions come from the Department of the Environment rather than DIAND \_\_\_\_\_\_.

TK: By the way, apparently your mike is not working. [pause] Would you please repeat your comment?

LW: Yes, Lee Webber, Federal Department of Justice. I'd like to propose that the first round of questions come from the Department of the Environment, rather than from DIAND, if that's okay with the Board.

TK: Fine.

LW: Thank-you.

TK: Anne Wilson.

AW: It's Anne Wilson representing the Department of the Environment. Thank-you, Mr. Chairman. I have a few questions for the municipality, and I'd like to just start at the beginning of our intervention and cover the items in the order that you had presented them.

The first one is to do with the inspections on the Lake Geraldine dam. Would the engineering reports be available to the Board and to the interveners? I realise they aren't formal geotechnical reports, but that might be helpful in addressing our concerns.

TK: Okay, before we proceed, I would like to remind all of you that all questions shall be directed to the Chairman. Please proceed.

MH: Thank-you, Mr. Chair. Matthew Hough. Thank-you, Mr. Chair. Yes, those reports can be made available, the inspection reports. The consultant is OMM Trault(?) out of Ottawa.

Just a quick query, Mr. Chair. When we are giving answers to the interveners' questions, are we able to quickly spout off one?

My question was that when we are giving answers to the interveners, are we able to quickly reiterate a point that we made in our submission?

Okay, yes, those reports are available, if the Board so deems that they would wish to see them. But I would like to reiterate that having reviewed DIAND's '99 submissions, we still see no discussion as to why DIAND is concerned, and we would like to know that.

AW: Mr. Chairman, Anne Wilson, here. Can we defer that question until DIAND is up to ask their questions?

Thank-you, Mr. Chairman. Anne Wilson, again. My next question is to do with the sewage lagoon dykes, and I appreciated the explanation provided by Mr. Hough on the 1997 incident that led to the concerns for the dyke, and my question is, did the effluent going through the dyke while the toe was blocked with snow and ice compromise the structure of the upper part of the dyke, and was that checked by an engineer?

MH: Thank-you, Mr. Chair. Yes, it was checked by an engineer. It was done by Ferguson Simmet(?) Clark. Those reports indicate that there was no adverse damage to the lagoon dykes. The recommendation was that we lower the level in the lagoon, that we monitor on a daily basis, and that we ensure that there is not an excessive build-up of snow and ice at the toe.

AW: Thank-you. Anne Wilson again. One question that came to mind was, how does the lowered freeboard affect the retention time? You'd said that currently it's 6.1 days, and what reduction did that result in?

MH: Thank-you, Mr. Chair. Matthew Hough again. The effect on the retention time didn't bring it down lower than 6.1. The report also shows that it lowered the retention time from 8 days to 6 days, 6.18 days was the figure that was indicated in the report. So, it didn't adversely affect the retention time or put in anywhere near the four-day minimum that our lagoon is designed to handle.

AW: Thank-you. Anne Wilson again. Just to comment that a 25% reduction in retention would effect the treatment of the effluent, just for their concerns for effluent quality.

I'll just move on to my next question, Mr. Chairman. With respect to the commissioning of the new sewage treatment plant, and the management of sludge that that generates, our intervention - our joint intervention - requested a sludge management plan be made prior to implementation. Is the municipality willing to provide a short-term sludge management plan prior to implementation? And then, as they have requested in Exhibit #6, subsequently do the long-term management plan?

MH: Thank-you, Mr. Chair. I think we've already addressed that in our submission. Not only the short-term sludge management plan with the placement of sludge on HDP liner at the solid waste site, but also our submission that we will draw up a long-term sludge management plan.

AW: Thank-you. Anne Wilson again. I guess my real question is, are you going to formalise this in a plan which will be submitted for approval as requested in our intervention?

MH: Mr. Chair, in response to the question, we honestly didn't think it was a necessity to outline something that we had already discussed, and once again detailed today. Now I'll

speak for the one that would probably have to write such a thing, that it would be a very simple one-pager, if that's what Environment Canada is looking for.

AW: Thank-you, Mr. Chair. Anne Wilson again. If that provides enough detail, that would certainly be helpful.

My next question is to do with solid waste disposal, and I understand that the municipality has definitely chosen the option of incineration, and that, in my mind, was what we were looking for in the request to submit a final proposal, was to identify definitively the option which has been selected. So, that was that was getting at. Can you describe for me the types of technology for incineration that you're investigating?

MH: Mr. Chair, thank-you. Matthew Hough again. In answer to the question, no, we are currently in the process of site selection and technology selection, and it would be... I would mistaken if I was to circumvent that process by bringing to the table today an discussion that hasn't gone through our solid waste management committee or our counsel.

AW: Thank-you, Mr. Chairman. Anne Wilson. Just to comment that we'll look forward to seeing the options... I hope to see the options that you'll be pursuing. I think this will be a great improvement on current practices.

With respect to hazardous materials, I have a great concern that this is not going to be formally addressed, and I have to disagree with the town's submission that this does not fall within the purview of the protection of the water environment. I think that anything currently entering the landfill definitely has the potential to migrate and enter surface waters, and the management of hazardous materials should be an important aspect of the town's waste management. And I believe this is the proper forum to address it at.

MH: Mr. Chair. Actually, no, we don't have anything to respond in answer to that question. I think Mr. Tidball's submission during our intervention stands, and the discussion of our opinions on the jurisdiction over hazardous waste.

AW: Anne Wilson, again. With respect to the town's operation and maintenance plan, the last approval we've aware of is in March, 1995. I was just wondering if there has been a subsequent that has been approved by the Board that I'm not aware of.

MH: Mr. Chair, Matthew Hough again. No, there isn't.

AW: Okay, and again on the issue of planning - Anne Wilson speaking - with respect to spill contingency planning there were no comments from the town on the status of that plan. Could I ask where it's at?

- JT: Mr. Chair \_\_\_\_\_ address that sort of at the end. I think the joint submission of the three federal departments suggested that the current condition, which requires a resubmission within three months of approval, was something that we were in agreement with, so we didn't even address it. So, we're fine with that suggestion.
- AW: Anne Wilson again. Thank-you very much. That is all the questions I have at this time.
- LW: ...Justice Canada. Thank-you, Mr. Chairman. Mr. Hough, first of all, the lagoon dykes... a statement has been made today, and a statement was made in the town's documentation that no problems with the stability or integrity of the dykes have been observed, have been noted. Now, perhaps we can deal with the period since the breach of the dyke in 1997. In that period of roughly three yeas, what inspections of the dyke have been carried out?

Sorry, I've been corrected. It wasn't a breach. I gather there was what we might call an incident.

- MH: Thank-you, Mr. Chair, Matthew Hough again. I think it's very dangerous to refer to it as a breach, or even an incident. It was seepage through the actual dykes themselves. The inspection done by Ferguson Simmet Clark was throughout the latter part of 1997. The report was actually submitted early in 1998. Since then, we have continued to follow their advice, advice of continued monitoring on a daily basis, ensuring there is no freeze-up at the toe of the sewage lagoon dyke, and the spillway has actually been doing its job very well. I noted the spillway in my submission, and that spillway was actually lapped at that's a way to describe it when we had a period of heaving rainfall in the summer. It worked as it should. It released the surface water at a very, very little amount, and we were able to quickly get down there, lower the level of the dam, and it was taken care of.
- LW: Lee Webber. You've just referred to monitoring. Who has been doing the monitoring, and with what frequency?
- MH: Thank-you, Mr. Chair. Matthew Hough again. Our monitoring is done on a daily basis by our utilidor(?) crew, and our utilidor crew comprised of qualified water treatment and waste water treatment operators, and they do that on a daily basis.
- LW: Thank-you, Mr. Chair. Lee Webber. Mr. Hough, does the utilidor crew include any engineers?
- MH: Thank-you, Mr. Chair. No, it would be very rare to have an engineer on a utilidor crew. However, I can submit that they are very well-qualified in their trade as water and waste water operators.
- LW: Could you give a description of what it is that a waste water operator's trade consists of, and to what extent it includes inspection of lagoon dams?

MH: Sure. All of our utilidor crew have taken the introductory course for water and waste water treatment. We have that... four out of the five have Level 1 of the water and waste water treatment course, and our utilidor foreman is challenging the Level 2 this very week in Yellowknife.

It consists of courses on the basics of water and waste water treatment, both in treatment plants and in lagoons. It involves the maintenance of water treatment plants and waste water treatment facilities, and as far as inspections are concerned, they are fully-briefed in inspection needs and approaches.

TK: I would like to remind you all that.. always state your name for the record, please.

LW: Lee Webber, again. Mr. Hough, I wonder if you could clarify for us something about the closure plans, and this may purely be a point of clarification. The town is proposing to have closure plans for which dump sites by when? And when I say which dump sites, I'm encompassing both the current dump site and any former dump sites. Which sites have closure plans or will have closure plans, and by when?

MH: Thank-you, Mr. Chair. Matthew Hough again. Once again, in our submission we spoke of three old sites, and the present site. There is one dump site in Apex, there are two adjacent to the current landfill site, and the present site. And once again, we suggested a date of December 31st, 2001... or, 2 - 2002, sorry - to give us time to deal with many of the other priorities that we have.

LW: That date of December 31st, 2002, that's for the old ones, or the old ones and the current one?

MH: That's for everything. Mr. Chair, Matthew Hough again.

LW: So, there is currently no - Lee Webber - there is currently no closure plan for the current site, and you don't propose to have a closure plan for the current site until the end of 2002.

MH: Thank-you, Mr. Chair. No, there isn't, and no, we don't.

LW: Thank-you.

Lee Webber. The existing lagoon and its sludge, do you know how deep the sludge layer is?

MH: Thank-you, Mr. Chair. Matthew Hough. No, I don't. No, we don't, and we will not know until the sewage lagoon is drained.

LW: Lee Webber. Is it possible that the sludge in the lagoon... let me frame this question a little more comprehensively, I hope. The plan to drain the lagoon, leaving only the solid component, the sludge, and then to have the sludge dry. Is that correct?

MH: Thank-you, Mr. Chair. Yes, it is. Matthew Hough again.

LW: Lee Webber. Is it possible that the sludge will not dry within a single summer season?

MH: Thank-you, Mr. Chair, Matthew Hough again. Yes, it is.

LW: Excuse me just a second, Mr. Chair.

Lee Webber again. Okay, let's say that at the end of the summer season, the sludge has not dried completely, and then we're into another winter. How do you propose to remove the sludge if it hasn't dried completely, and where would you remove it to?

MH: Thank-you, Mr. Chair. We won't. We'll fence it and we'll leave it. That was Matthew Hough again, by the way.

LW: Mr. Chairman. Lee Webber, again. I apologise for the delays. Mr. Smith is giving me technical assistance, so it takes us a little bit of time to get our signals in order. Those are our questions for the moment. Thank-you.

TK: Thank-you very much.

JG: Thank-you, Mr. Chairman. My name is Jordan (DeGroot?). I'm here on behalf of DFO Habitat Management. Our concerns - DFO's Habitat Management's concerns - are with respect to deposit of waste into water. Under Section 36 of *The Fisheries Act*, we share responsibility for this with Environment Canada. However, Environment Canada takes the lead. We are keenly interested in improving effluent quality in Kudusee(?) Inlet as soon as possible.

My question to the town is with respect to the commissioning of the new sewage treatment plant. The town seem reluctant to commit to a date on this aspect of their waste management plan, and I want to know why the down is reluctant to commit to a date when, in their own admission of evidence, they suggest that they are going to have the new sewage treatment plant up and running by spring of 2000?

MH: Thank-you, Mr. Chair. That's a fair question. The reason we're not willing to commit to date is very simple. The complexities of the repair to the plant are such that if we commit to a date, we may not meet it. I think it's fair to say - and everybody will see, on the tour today - the difficulties we are facing in the repair of the tanks. It's not a grout-and-patch job. It's a very complex job-creating program that we are endeavouring to pursue, and it's something that we have never done before, and we are taking very carefully so that we get it right.

That was Matthew Hough that just spoke. Sorry, Mr. \_\_\_\_\_.

JG: Thank-you, Mr. Chairman.

TK: Thank-you. Any questions from... Mr. Marcel to the applicant.

MM: Good morning, Mr. Chairman. Thank-you. My name is Marcel Mason m-a-r-c-e-l m-a-s-o-n, I guess I represent me, as opposed to another department or agency.

My question is regarding... my questions are regarding the sewage lagoon dykes or dams. What types of material or waste are they designed to filter?

MH: Thank-you, Mr. Chair. I'd love to be able to give a very technical answer to that. To do that I could bring back, basically, a list of what that lagoon dyke does later in the day, if it's sought after by the Board. The dykes lower the... the dykes improve the effluent quality, is the very simple way to put it. As I say, I'm not going to get into a technical answer to that, but if the Board so desires I would bring that back later.

MM: Marcel Mason again. Mr. Chairman, I would be satisfied with a general type of answer. Chemical, organic?

MH: Once again, Mr. Chair, I'd be a lot more comfortable just pulling my books on that and coming back later in the day to give a proper answer. If I was to get into it now, I'd likely get it wrong.

MM: Marcel Mason again. The town mentioned that this summer, during a period of heavy rain, the surface water was released by a type of mechanism, and then the level of the lagoon was quickly lowered in order to prevent problems with the dams...

[End of Tape 2]

## NUNAVUT WATER BOARD

### **Public Hearing**

#### **Iqaluit Municipal Water License Renewal**

November 23, 2000

Chairperson: Thomas Kudloo

AW = Anne Wilson SP = Unidentified Speaker

[Start of Tape 3 - Side A]

MH: ...release valve, that releases effluent onto the other side of the west dyke.

MM: Marcel Mason again. So, I understand that is a valve is opened and the fluid within the lagoon is drained to the outside of the berms.

MH: Thank-you, Mr. Chair. Yes, it is. That is the limits of the lagoon structure and exactly why we're completing construction on our new sewage treatment plant.

MM: Marcel Mason. In the document Water License Application Supplementary Questionnaire for the Municipalities, on page 7, near the top of the page, in the area of commercial, industrial and/or hazardous waste, the municipality states that there are no source of commercial or industrial liquid waste being discharged or deposited into the waste water treatment system, and I'm wondering how the municipality is able to make that statement, or monitor that.

MH: Thank-you, Mr. Chair. Matthew Hough again. The answer to that is no, we are not aware of any commercial or industrial liquid waste being discharged or deposited to the waste water treatment system, and as far as how we are able to guarantee that, Mr. Chair, we can't. We... any municipality is faced with the danger of some sort of industrial/commercial dumping. We are not aware of that practice going on right now.

MM: Marcel Mason. Mr. Chair, I'm aware of at least one and possibly two organisations within the town who are developing film. I'm wondering if the municipality has checked on where the used developer fluid for at least the one operation that I'm aware of is going. Is it being sent out by the organisation, or is it going into the waste treatment system?

I'm also... from a purely layman's point of view, a non-technical point of view, I look around the town and I see a number of companies, commercial cleaning companies, dry-cleaners, companies that are cleaning office buildings and whatnot, and I would think

that this would definitely into the category - the cleaners, solvents and whatnot that they are using - would definitely fall into the category of commercial or industrial waste.

MH: Thank-you, Mr. Chair. My response includes an opinion, and I think they're all fair points that Mr. Mason is making, but once again I have to submit that we are not aware of any dumping of commercial or industrial solvents as Mr. Mason has submitted. Now, I will take a point from Mr. Mason's statement that these are very good things that we should perhaps be seeking out.

MM: Thank-you, Mr. Chairman. Marcel Mason, again. Where I'm ultimately going with this is that, from my point of view, and not being directly involved with the system at all, I can look around me on a daily basis and see very great potential for commercial and industrial wastes going into the water treatment system. I believe that if the town doesn't see the same thing, then they're not really looking for it.

The potential for the developing fluid, again, is very high. We're all aware that there are people in town that are providing this service, and we now know that this type of material, very possibly, was released in Kudusee Inlet, at least on one occasion, when the town manually lowered the level of the fluid in the lagoon.

MH: Excuse me, Mr. Chair. Will I have an opportunity to respond to these questions that... Matthew Hough again. I believe that the questions from the people are meant to be questions that we have a chance to respond.

TK: Mr. Tilleman?

BT: Yeah, it's Mr. Tilleman, and the answer is you will have a chance to respond. What the interveners should be doing is asking questions, you'll answer them, and then after the site visit we'll come back and they'll get a chance to make all of these points in their own presentation, and then you'll get the same opportunity to question them that they are now taking to question you.

MH?: Okay. Thank-you.

TK: Yes. Proceed.

MM: Thank-you, Mr. Chairman. So, to carry that one step further - Marcel Mason, I'm sorry - to carry that one step further, on the same page of the document, page 7 of 22, the question is, are fish, shellfish and other wildlife harvested in or near the discharge area, and the answer is no.

Now, I readily admit that the acceptable format of where I'm going with this I'm unsure of, being one of the few people who doesn't have a lawyer sitting beside me today. I realise that I'm saying that there is every reasonable possibility that there are hazardous materials going into the sewage lagoon, that we know that the level of the

sewage lagoon was manually lowered, so that leads me to the assumption that there is every reasonable possibility that materials of a hazardous nature were released into the environment, and in that area, just on the other side of that point, there is definite fishing activity going on by residents of the community, so in actual fact, unless the municipality is monitoring this, and unless the municipality is aware of what material is in fact going into the water treatment system, then there is a real possibility that there is discharge in the area where people do harvest fish.

MH: Thank-you, Mr. Chair. Matthew Hough, from the municipality. Yes, Mr. Chair, there is every real possibility that solvents and other substances that are... that will adversely affect the environment are being placed into our lagoon right now. There is every possibility. But once again, I will submit to the Board that we are not aware of such dumping. We do not have heavy industry. We do not have a heavy commercial centre. We have a municipal waste waster treatment system. We are doing everything we possibly can to bring our new sewage treatment plant on-line, and that sewage treatment plant will provide secondary treatment to the waste water that comes into the plant.

MM: Thank-you. Marcel Mason again. The question that the municipality answered within the document, is the municipality aware if there are sources of commercial or industrial liquid waste. The question specifically asks, are there any sources of commercial or industrial liquid waste being discharged or deposited into the waste treatment system. And my question is, if the municipality is not making itself aware of what does go into the system, how can they, in the document, say no, there is nothing going into it?

MH: Thank-you, Mr. Chair. Matthew Hough again. My answer is in the form of a question, and that would be, there is no way we could say yes, and justifiably state what substances were going into the waste water system, because once again, Mr. Chair, we are not aware of any sources of commercial or industrial liquid waste being discharged or deposited to the waste water treatment plant.

MM: Thank-you. Mr. Chairman, Marcel. Again, I can only look at this from the layman's non-technical point of view. However, I think by saying... by giving a categorical "no" to the answer of either question, the municipality is possibly - and I'm sure quite inadvertently - leading the readers of the document to believe that there is some sort of basis from which they can say no.

JT: Mr. Chair, it's John Tidball. If I might just speak to that? I think part of the problem, here, is we're limited by the form the questionnaire, and the form of the questionnaire is such that there's a question asked and it's yes/no, and then if yes, you're required to put information in which would justify why you would say yes, and what Mr. Hough has

now said, I think, three times, is the municipality is not aware of any of those kind of discharges, and when you come to a questionnaire like this, then the natural inclination is to say no, because you can't go on then and say... if you say yes you've got nothing to fill in, in the next box. So, this may be something that the Board wants to consider for the form of the questionnaire. We appreciate Mr. Mason's difficulty with it, but I think we're finding it just as difficult.

TK: Thank-you.

MM: Thank-you, Mr. Chairman. I guess - Marcel Mason, I'm sorry - I guess this is a point that the municipality and myself will just have to disagree on, although I would point out, on page 22 of 22, there is a rather broad section that says Other, which in my opinion could quite easily be used for that sort of thing. I do thank you, and the municipality, for your time.

TK: Thank-you very much Mr. Mason. What we should do now is carry on with the site visit - we are already half an hour late - and then we shall proceed with Item 11 once we get back. Okay?

[break]

TK: Okay, to carry on from where we left off this morning, just before the site visit, is there a representative from the community government and transportation who may be interested in asking the applicant some questions? No questions? Thank-you. Department of Sustainable Development? Do you have any questions? Thank-you. Baffin Health and Social Services, do you have any questions? Thank-you. Okay, are there any members from the floor who may want to ask some questions to the applicant? Okay, do the staff from the Nunavut Water Board -

SP: [inaudible]

TK: Pardon me? Lee Webber, Mr. Lee Webber.

LW: Thank-you. Lee Webber, Justice Canada. There were a couple of things that came up that were noted in the course of this morning's site tour, and DIAND would appreciate an opportunity to put a further couple of questions to the applicant about the site tour, so that the Board... the applicant will have a chance to provide its answers before the entire panel, and the entire panel will have a chance to hear the response on the record, of that is okay.

TK?: Yes.

LW: The questions concern the sewage treatment plant. Mr. Hough was explaining the process that will be used to apply a coating of a concrete product - the specific name escapes me - Shockcrete(?), thank-you, that will be used to apply a coating of Shockcrete

to the holding bins inside the facility, making them waterproof. Now, as I understand what we saw this morning, and what has been explained to us, the difficulties with the construction of the facility aren't just on the inner surface. The problem affects the concrete throughout the width of the layer of concrete. Applying a coat of Shockcrete to the inside of the bins will provide impermeability to one side of the concrete, the inside face of the concrete. What about the outside face of the concrete, or, to put it slightly differently, what about the outside of the entire water treatment structure? Will steps be taken to ensure that water does not seep into the structure?

MH: Mr. Chairman, Matthew Hough. I'm just preparing a quick little diagram to explain this, if you can bear with me for 30 seconds \_\_\_\_\_\_.

Okay. Mr. Chair, Matthew Hough from the municipality. The Shockcrete program, which is the material, what I've shown here is a quick cross-sectional view of the wall that's suggested. This is an outside wall. The question from Mr. Webber is correct, we are planning on placing the Shockcrete on the inside of the structure itself, and what will be done to ensure that no water comes in from the outside, we're having our designers address that particular problem. Now, our greatest concern is the actual passage of fluid straight through the wall itself. Now, that's dangerous because the rebar inside can corrode over a period of time. The first thing that is obvious is that any build-up of snow and ice on the outside of the building will have to be removed on an occasional basis, and also the actual Shockcrete on the inside will of course have to be impermeable - it is - which will ensure there is no passage of fluid through the walls themselves, but... and so there won't be additional material going through. We are hoping that we don't need to go to the full extent of Shockcreting the outside of the building.

The cost for this particular program, when it's all told, is quite considerable. For us to start Shockcreting the outside of the building, we would have to start with the removal of the octoform from all around the tank walls themselves. That would take us a large amount of time, an incredible amount of money, and the designers are starting with the Shockcrete program on the inside.

LW: Lee Webber, again. Mr. Hough, without Shockcreting the external wall of the structure, if I understood your explanation correctly, there you'll be leaving open the possibility of migration of water through the facility wall as far as the inner skin of Shockcrete. Is that correct?

MH: Thank-you, Mr. Chair. Matthew Hough, municipality. Yes, that is correct.

LW: If one has liquid that migrates into the concrete, does one not then set up a situation where one could have a cycle of freezing and thawing within the structure of the wall?

MH: Thank-you, Mr. Chair. Yes, of course.

LW: And isn't there every possibility that that freezing and thawing would weaken the structure of the wall.

MH: Thank-you, Mr. Chair. Yes. I think these are all very obvious situations that could occur with those walls. Matthew Hough again. What we're trying to do is take a very difficult situation and turn it into something that we can us. We don't have unlimited amount of funds for this. Even the bond itself has a limit. The cost of the Shockcrete program is hundreds of thousands of dollars. Our designers are taking all of these elements into consideration when they do their design, and when they come forward with it, these are the things that we're asking them to answer. The firms of (CH2M Goren Storey?) and Dillon Consulting are working on this project. This is a work in progress, just as the solid waste management plan is. This is one of our priority projects to get finished. We want to do it properly. The municipality doesn't want to have a white elephant on its hands that is going to fall down and crumble within a number of years' time. We want to do it right.

So, I think the suggestion that we're not taking things into account... we are, but there will be a limit to what we are actually able to do to make this plant operational, within our means.

LW: Lee Webber. Don't mistake me, Mr. Hough, I'm suggesting you're not taking things into account, I'm not suggesting you're failing to take things into account. And I can certainly sympathise with the dilemma that the town finds itself in, the fact that funds are not unlimited, the fact that neither you nor the municipality as a whole wants to be saddled with a white elephant. As you say, though, the aim is to produce a structure that can be used, and what I'm on about in posing this line of questioning is try to get some assurance for all concerned that that is indeed what you'll have at the end of the day, a structure that can be used, rather than a structure that's going to bleed in two directions and collapse.

Now, another question about the walls... I'll pose this in two parts. The questions are about the strength of the walls. The situation that you start with, where you've got this vertical layer of concrete - of cement, rather - which is not as dense and as uniform as was originally intended, where you've got this vertical layer of cement which, as I understand it, is pock-marked. Correct me in the terminology if it's incorrect, but I don't

think it affects the gist of the question. The vertical layer of concrete is not in the form that was initially anticipated, and this creates the possibility of permeability.

I would... does it not also create a problem in that the wall, as a supporting structure - as opposed to the wall as a barricade - does it not also create the problem that the wall as a supporting structure will be less strong than was anticipated, less strong than is needed?

MH: Thank-you, Mr. Chair. Yes it does. Of course it does. That was the first consideration we had. Whether it was going to be... whether those tanks were able to hold water was quite honestly secondary to the fact of whether they were going to stand up or not. The first investigation we had done was a structural integrity investigation done by CH2M Goren Storey and what they did, they did a cover meter test, which showed how much concrete was covering up the re-bar, and what the position of the re-bar... re-bar, of course, in concrete walls, is what provides the strength. Now, the structural integrity investigation was modelled by... on a computer program, and the results were quite... it did surprise me in the end. The results were that in the present condition, even though they can't hold water - as in they leak - those tanks could support the pressure applied to them if you filled them to the 16-foot mark, which is their operational level, could hold it.

Now, the problem is, as you have so rightly pointed out, that over time, the walls may be compromised if there was seepage of... travel of fluid through the walls. So, to deal with those problems, not only the leaky tank situation but the strength concerns, the Shockcrete program was the one that we actually chose.

Now, the municipality went against the contractor's suggestion. The contractor suggested that we simply place a rubber liner on the inside of the tanks. Their theory was it would ensure that the tanks were water-tight, but our continued concern was to ensure both problems were solved. That pail that I was standing on this morning in the actual treatment plant is a pail of the rubber liner that the contractor brought in, that they were going to apply. We stopped them two days before they did it.

So, we feel we've taken the right steps to ensure that the strength of those tanks will be adequate for the design, and that we will do everything we possibly can to ensure that we don't have the continuous passage of fluid through the walls.

LW: Lee Webber. Another question, Mr. Hough, just so, again, I'm sure I understand the picture, here. When we talk about the strength of the walls, essentially, as I understand it, we're talking about protection against forces of two sorts, pressures of two sorts. One would be the pressure from the inside of the container outwards, that is to say, the pressure of any sewage fluid that is contained within the bin, and is pressing out against

the wall. Second would be the pressure downward from whatever elements of the structure, the room, what-have-you, are sitting on top of the wall. Have both of these pressures been taken into account?

MH: Thank-you, Mr. Chair. Matthew Hough for the town. Yes, of course they have.

LW: No further questions on this point. Thank-you.

TK: Mr. Hough. Any questions from the Nunavut Water Board staff?

BT: Thank-you, Mr. Chairman - Bill Tilleman - and I have a couple questions that might clarify some of the issues, and might help some of the other interveners when they come forward to give their evidence. The first one is that we talked about the dyke failure at the lagoon facility, and that that was in 1997. I heard Mr. Hough this morning say there were failures in '81, '87, '91 and 1997. However, in the written submission it refers to the dyke failing in 1993. Is that a typo?

MH: Thank-you, Mr. Chair. Matthew Hough for the town. Yes. My apologies, that was... you picked up a discrepancy between the two.

BT: Okay. And the... another issue is, you heard questions earlier today on the likely commencement date of the new sewage treatment plant. You had stated you thought in the spring someone asked you whether it is true or not you'd rather not say a date, but from Mr. Webber's questioning on the structural integrity, you would have surely had to talk to an engineer who would have to be involved to certify the plant before it does become fully-commissioned. Do you have, from those discussions, a best judgement, considering everything that you know now, as to when it might be able to be initiated?

MH: Thank-you, Mr. Chair. My counsel has been asking me the same thing. We had the design engineers in from CH2M Goren Storey last week, and together with representatives of Dillon Consulting. We structured a schedule for the repair, and we're also pursuing a full review of all the work that has been done up to now. We're 90% complete at the actual plant. We want to make sure that everything that has been done in that 90% is adequate and to the design. The repair is now scheduled to be completed by the end of February. That's quite a firm schedule that we're sticking to, right now.

Now, when we do our review of the 90%, that's where the, I guess, that's where we don't want to get into setting an absolute date. We expect that completion of the plant will take approximately two months. Approximately the end of April we'll be looking at actually running it.

Having said that, we are not taking anything for granted any more with this particular project. We were left with a very difficult situation by the contractor, and so that's why we're not willing to throw out a date.

[End of Tape 3 - Side A]

[Start of Tape 3 - Side B]

BT: ...advised that this board doesn't have the authority, and there are several areas, even though we've all discussed... you have all discussed some of those, waste collection, recycling, incineration, and probably solid waste management, plus hazardous waste management as well.

This question might be more for the Board's benefit that if the other interveners, when they come forward, might focus on that and just either say we agree or disagree, or if we agree there is a gap, then here is what the Board may or may not do about it, because the suggestion was left there, and then the Board was place on the table, but it would be helpful if we would hear a little bit more about it. Perhaps your counsel can do so in closing, perhaps.

Mr. Webber is so anxious to answer this he wants to do it right now!

LW: Lee Webber, Justice Canada. And Mr. Tilleman, I just wanted to make sure that we had the whole of your list there, the items whose jurisdiction in which was at issue.

BT: Actually, it appears the list is waste collection, recycling, incineration, solid waste management, and hazardous. So, solid, hazardous, incineration, recycling.

LW: Thank-you.

BT: Bill Tilleman again. Also, Mr. Mason had... I think there were two issues that the Board, Mr. Chairman, needed to address. One of them was that he asked the town if they would respond generally to him on the type of filtration that would be provided by the lagoon dam, and I didn't want to interrupt at the time, but it would be helpful if the town does have an answer, at some point today you could provide that answer to him.

SP: Thank-you, Mr. Chair, we do have the answer. We can do that right now.

BT: Oh, good. Let's go ahead and do it then, Mr. Hough.

MH: Thank-you, Mr. Chair. I've got a section to address, and John has also got a section he'll detail as well, but I think we'll answer Mr. Mason's question.

And this comes from a report that was sanctioned by us. It's the one I referred to earlier by Ferguson Simmet Clark submitted in 1998. And it may sound a little bit like a history tale, but at the same time...

In the NWT, a similar rush to treat municipal waste water occurred in the 1970s and 1980s. Lagoons were the technology of choice and remained that way today because

of their low cost and ease of operation. Early lagoon designs were based on the southern standards, meaning they insufficient retention time to provide biological treatment throughout the year. Continuous discharge lagoons were generally only able to provide primary treatment, that is, physical removal of solids, during the winter.

For the municipal sewage lagoon option, this usually meant finding a piece of low-lying land, thus complementing a gravity flow system, and designing the ponds for short-term retention, to allow a measure of physical and biological treatment to occur. Discharge of the liquid would occur through evaporation, seepage, and if necessary, to a natural drainage course.

As the science of environmental assessment and regulation advanced, it was noted that these so-called leaky lagoons created an impact on important ground water sources.

Mr. Chair - Matthew Hough speaking, by the way - I think this little submission - which was written, by the way, by the fellow teaching our utilidor staff, water and waste water management - speaks to why the council of the day chose to pursue a sewage treatment plant option.

So, I'll leave it at that, and pass it to John for his portion.

JT: John Tidball. Mr. Mason, in one of his questions, or several of his questions, was asking Mr. Hough about... recall he took him to the supplementary questionnaire and as to whether there are sources of commercial/industrial sources of hazardous waste discharged to the sewer system. We simply wanted to put before the Board something I wondered about. When we went back to the office we managed to pull it out, and it will probably be obvious to everyone when I read it, but the Municipality of Iqaluit does have a by-law that controls water and waste water matters, and the by-law - it's by-law #200 of the town - the by-law has a provision, reading specifically from Section 403, that's entitled Prevention of Discharge of Harmful Matter. And I won't read it out because it's fairly dry, but essentially it makes it an offence to discharge or deposit anything into a sewer, or to the sewer system - to the sewage system - anything of any type or quantity which may be, or may become, a hazard to persons, animals or property, or which may be harmful to any part of the municipal services system, or which may impair or interfere with the proper operation of any waste water works or treatment process.

Above and beyond that, the next provision goes on to say that the manager, who I think, in Iqaluit, is the Chief Administrative Officer, can also prescribe certain sewage discharge specifications to restrict or prohibit even further.

Those provisions sit there in the general law, so to the extent that there was a concern or a question about the ability of the municipality of Iqaluit to control what goes

into the sewage system, they do have power in their own by-laws to control that. If Mr. Mason, or anyone else, I guess, has any direct information about those kinds of discharges, the municipality would like to know, and if they know about it they can then take action under the by-law.

BT: It's Bill Tilleman, again, with the staff. Thank-you, Mr. Tidball, and it would be actually helpful if we could make a copy of that, and let's file that as an exhibit. You have by-law number... I've forgotten the number again, but it was Section 403.

JT: [inaudible]

BT: Well, the relevant section within the by-law, because it seems that what Mr. Mason did is he did place the town on notice that he's concerned of a photo processing plant, or place, plus two dry-cleaning places, historically which have solvents that are of a concern. So, what I think I heard him say, is the town is on notice. This does exist, you do know about it, you had to have licensed them, and so, you know, kind of where's the question mark on, perhaps, the audit or follow-through on what they are doing with their used fluids.

MH: Thank-you. Mr. Chair. Actually, this is... it's uncanny that this issue has come up in this way. Matthew Hough speaking for the town, again. The Solid Waste Management Plan Steering Committee actually discussed the idea of putting, as part of the business license process, a questionnaire on what substances were going to be used by the business owner, and what the plan was for the disposal of those particular substances.

So, the Steering Committee has already talked about it, and I'm sure that it is open to bring it up again, and I'm half speaking directly to Mr. Mason because he is on that committee.

BT: Thank-you, Mr. Chairman, it's Bill Tilleman again. On the issue of incineration you said that you intended to apply for an incinerator such that it would be in place by November of '01. Given also with the gap in legislation that you're suggesting appears, who did you intend to apply to? Now, apart from funding and those other issues, but for regulatory supervision and authorisation, who would that be?

MH: Thank-you, Mr. Chair. Actually, Mr. Chair, if... in answer to that question, we have been asking, on a number of different occasions, which of the regulatory groups are being interested in being part of that process. We had in the back of our mind that Environment Canada and the Department of Health and Social Services and the Department of Sustainable Development would all be involved in that regulatory process.

We have, throughout the Solid Waste Management Plan, circulated a number of letters questioning what process we needed to follow for each of those groups. So, I

guess, it's an open invitation for us to be informed by all of the groups as to who we should be talking to, and how we are to go about that regulatory regime.

BT: Mr. Chairman, it's Bill Tilleman again. I guess my question.. it's good to be consulted with these good people. I think the question at the end of the day is who signs the permit. And if they are going to then answer this in their presentations, then that would be good.

JT: If I might - it's John Tidball - when I look at it - and I speak directly to Mr. Tilleman - I wonder if the first question isn't is there anybody with the authority to issue a permit or a license. If there isn't, that isn't, respectfully, that isn't the end of the story anyway. It's not as if, just because there isn't a licensing authority, that the municipality or any other applicant would run amok. I've said before perhaps there is a gap in the legislation, maybe there isn't. I'd be very interested to know, from the Department of Sustainable Development, and from Health and Social Services, whether the jurisdiction to do that lies with them.

The interesting thing - and I come from a jurisdiction where everything you want to do with waste management, from putting paper out to the curb in a blue box - is regulated very heavily and has to be done according to licenses and stuff. When you look at the jurisdictional framework in Nunavut, there really isn't very much on the waste management side.

Now, that might be something that the Legislature should deal with or not. My comments earlier were simply meant to address how far the Board can go in this regard to try to jump in and fill that gap, and I guess my problem with it was it's a... well, it's easy to say, you know, we can try go in and try and fill that gap. The problem is that when you look at waste management regimes in the rest of the country, it's a very complicated matter, and a lot of governmental time goes into designing the way these process work, and I'm reluctant to sort of invite the Board to jump in because... if there's a gap, and I think maybe the more logical way to do it is to deal with the Nunavut departments who would have jurisdiction. So, for example, the Department of Sustainable Development has jurisdiction over air emissions. They can regulate what goes into the air. They may not have a licensing power, I don't know - Mr. Eno may be able to tell us some time - but that may be the more logical place to look at for regulating authority.

SP: ...we're looking forward to the comments of the other authorities so they can let us know, and then we can advise the Board on... they'll make up their own mind on whether or not they think they have the authority. It seems to me one option is if they... if there appears to be a gap, and if they so find, they have the ability to also notify, by way of a copy,

their decision to the legislators, the ministers, or whoever, that maybe it exists and it should be cured.

So, my only concern is that the public have raised these issues, and the Board is the Board that's now in front of everybody, to respond in some way.

Mr. Chairman, those are all the questions of the staff. Thank-you.

TK: All the questions you have? Okay, thank-you. Okay, moving on to Item #11. Do you need any further clarification from the Board, there? Do the Board have any further questions? Okay.

Item #11 is presentations by those who have submitted formal interventions. With this particular one, here, the order of presentations by those who have submitted formal interventions will be as follows. First one will be DIAND, DFO and Environment Canada. Second one is Mr. Marcel Mason. Third one will be Community Government and Transportation. Fourth one will be Department of Sustainable Development, and the fifth one will be Baffin Health and Social Services.

If I can call upon DIAND, DFO, and Environment Canada? Of course, you will have be sworn in.

LW: Mr. Chairman, Lee Webber, Justice Canada. If I could have the Board's indulgence, I'd like a few minutes, first of all, to set up, and then on top of that we'd also ask for a few minutes to discuss with... among ourselves these questions of jurisdiction that this gentleman is looking answers to.

TK: Okay. How many minutes do you need? 10-15 minutes?

LW: 15 minutes, please.

TK: 15 minutes. Okay, we'll break for 15 minutes.

[break]

SP: I do.

TK: Thank-you. Thank-you. Would you please proceed, please.

AW: Thank-you, Mr. Chairman. I'm Anne Wilson, I work with Environment Canada, and I would first like to introduce the people at the table, here. Starting on my right we've got Paul Smith, who is with DIAND, Steven Trainor(?), with DIAND, Lee Webber, who is with Justice, appearing on behalf of DIAND, and Jordan DeGroot with DFO.

I think the first thing we'll do is ask Mr. Webber to address, on all our behalves, the questions raised by Mr. Tilleman, and then after that I'll give our joint presentation summary.

TK: Thank-you.

LW: Lee Webber. Just to reiterate something that Anne mentioned in those introductions, and to make it doubly clear, I am here as DIAND's lawyer, no the lawyer for the Department of the Environment or for DFO. On this particular issue of jurisdiction, though, I'll be presenting what are the views of all three departments.

First thing I'd like to say by way of addressing this matter of jurisdiction is that I'm uncomfortable giving blanket one-word yes or no answers to any one of the times to say yes, we have... the Board has jurisdiction on a particular item that has been identified, no it doesn't. I think that given the various possibilities, the various circumstances that can arise, any one of these broad categories have to be looked at in more detail. Things have to be approached on a case-by-case, situation-by-situation basis. One has to ask not whether, for example, the Board has jurisdiction with respect to solid waste management, but to the particular facet, the particular aspect of solid waste management that arises for discussion in the particular case.

That's one general thought that I want to offer up at the outset. Second general thought is that the guiding principle has to be the connection to water. *The Waters Act*, like the *Land Claim Agreement*, in identifying this Board's jurisdiction, speaks about water. We're talking about the use of water, that is, inland waters. We're talking about the deposit of waste into water.

I'd like to read a short passage and a set of submissions that I filed post-hearing in last year's hearing. This is my submissions dated October 25th, 1999, on behalf of DIAND, and it's paragraph 4 in those submissions. I proposed a test, which would assist the Board in determining whether or not it has jurisdiction with respect to any particular activity of phenomenon. At that time we were very much occupied with the question of whether the Board has jurisdiction to regulate burning and airborne emissions, burning at the dump and airborne emissions.

This should be understand... it should be understood what this proposed test is. I'm not pretending that it's the result of a detailed sifting of case law, or for that matter, the sifting of any case law. The Board has a discretion to exercise. The Board has decisions to make, decisions regarding jurisdiction. It needs some sort of guiding principles to structure its discretion, to guide itself in deciding questions of jurisdiction. It's not a matter of just say, 'Well, we'll know we've got jurisdiction... we'll know jurisdiction when we see it.'

So, what I'm offering here - and what I did offer - is what strikes me as a logical and reasonable - and logically sound - test. And now here I'll quote. "In order for regulation of a particular activity or phenomenon to be within the Board's jurisdiction,

three things are required. 1) there has to be a substantial and reasonably direct link between the activity or phenomenon and either the use of waters or the deposit of waste into waters, and 2) in regulating the activity or phenomenon, the Board's objective - that is, what the Board is aiming at - has to be either a controlling of water use, or a controlling of waste deposit into waters, and 3) where either the necessary link or the necessary objective is absent, the Board must decline to regulate the particular activity or phenomenon."

So, I said there are three elements. Essentially there are two. To say that you have jurisdiction you need that reasonably direct link between the activity and waters, either the use of waters or deposit of waste into waters, and in order to have jurisdiction, your objective has to be the controlling of water use, or the controlling of waste deposit into waters. And if either of those elements is lacking, I would suggest that, with respect, that the Board must decline to find that it has jurisdiction.

Now, turning to the specific categories, the specific headings identified by Mr. Tidball and Mr. Tilleman, and subject to what I just said about the general test, first of all, waste collection. Generally speaking, we would take the position no, the Board does not have jurisdiction with respect to the collection of waste.

Incineration, generally speaking, no, but it's important to be specific to identify just which aspect of incineration we're talking about. If we're talking about the technology of incineration, the choice among technologies, no, I don't think the Board does have jurisdiction. If we're talking about some other aspect, for example, the waste from the incinerator and what is done with the waste, yes, this may be something over which the Board does have jurisdiction.

The answer with respect to recycling is very similar. Generally speaking, no, the Board does not have jurisdiction. Such would be our position. However, conceivably there would be some aspect of the recycling exercise, the recycling program, over which the Board have a say, with respect to which the Board would have jurisdiction. For example, what becomes of any residual material left over after the recycling. Is there some sort of effluent that might be released into the environment in the course of the recycling. I say effluent released into the environment. Let me qualify that immediately. I'm talking about a release into the environment which might affect waters, a release into the water, the inland water component of the environment.

I wanted to throw in that qualification because I think it is important to say, to realise, that along the lines that Mr. Tidball mentioned earlier this morning, the Board does not have an all-purpose authority. It's not an all-purpose waste manager, it's not an

all-purpose environmental regulator. It has jurisdiction with respect to waters, inland waters.

Hazardous waste management... as Ms Wilson pointed out this morning, that is a matter or which, in large measure, we do think the Board does have jurisdiction. We think that there are many aspects of hazardous waste management over which the Board can properly exercise authority.

Sorry, I'm trying to decipher my own notes, here. We have to know where the hazardous products are, or it's not possibly to do proper A&R. If any hazardous waste facility is mismanaged in any way, there is a tremendous possibility of migration of hazardous products into the water system.

Solid waste management... sometimes yes, sometimes no. There may be, for example, a question about leachate. If we're thinking in terms of the town's dump, we have to consider possibilities like the flow of water onto and through the site, and again, we have to consider the possibility of leachate. Those are matters that could properly occupy the Board's concern. They're matters over which the Board properly exercises jurisdiction, because they are matters connected with inland waters, they are matters connected with the deposit of waste into inland waters.

Other aspects of solid waste management, other aspects of what goes on at the dump, no, we don't think the Board does - certain other aspects - we don't think the Board does have jurisdiction.

I hope that answer is sufficient for current purposes. As I say, I think that we all have to be careful to look at the individual circumstances under discussion to ask ourselves what particular facet of a situation is up for regulation. And once we have the relevant facts in front of us, then we can say with somewhat more confidence whether, in that particular instance, the Board does or does not have jurisdiction. Thank-you.

BT: Thank-you, Mr. Webber. Just by way of exhibits, how do you want to proceed? Are those slides that are on the board, do they form part of a new package that we haven't seen before, and if so, then we should mark those.

And the second one was, do all the members of the audience have last year's submission that you gave... actually, it's in our public register, isn't it? So, if any members of the audience wanted to see what Mr. Webber is quoting, it's over here on the table. So, we probably don't need to mark that.

But third was, perhaps we should mark your written submission of all three, since we marked the town's. So, if... Mr. Chairman, I propose, then, that Exhibit #7 be the filed written submission that we received from the three federal departments, and would

it be okay, Mr. Webber, if we marked whatever slides you're about to show us as Exhibit #8?

LW: Yes, that would be fine, Mr. Tilleman. Lee Webber speaking.

TK: Thank-you. Anne?

AW: Thank-you, Mr. Chairman. Anne Wilson speaking. To start, I'd like to ask that our written submission be read into the record in its entirety, and now I'll give a summary of it to the Board.

It's a little unusual. It's the first time we've had a joint submission with our three departments, and we've done this because common concerns gave rise... were shared, so gave rise to us working together on this. Our written intervention, which there are copies of on the table, describes the mandate of the individual departments, and because we all have jurisdictions, questions that come from the Board and the audience will be directed to whichever department is appropriate.

I have to remember all of my slides, here!

By way of introduction, we're going to go over the items that are listed, here, water use, sewage disposal, solid waste management, operation and maintenance practices spill contingency planning, environmental monitoring, and abandonment and restoration issues.

Okay, we'll start with the water use. Based on past consumption, we thought the amount should remain at 1.1 million cubic metres per year, and as the proponent already explained in their presentation, that was just a different way of looking at, and they're okay with that.

The capacity of Lake Geraldine should be assessed, along with alternative sources, and we're requesting that the water supply study should include a hydrological assessment of Lake Geraldine as well as identifying potential effects of draw-down on resident fish populations.

We do ask that inspection of the reservoir dam is done at least once during the license term.

TK: Okay, I've been asked to request that you speak louder, because the microphone is barely picking up your voice.

AW: My apologies. Is that better? Thanks. Should I repeat any of that, or just carry on? Carry on? Okay.

Then, moving to waste disposal, with respect to the sewage lagoon. The sewage lagoon will have to be used until the new plant is commissioned, and may be retained for use as a backup facility, and because of concerns with the west dyke, it's recommended

that geotechnical inspections be done annually while it's in use, and of course any necessary repairs done. There's been concerns with seepage of the west dyke, and operating levels have had to be adjusted to accommodate this. I think that's been somewhat addressed by the proponent, and we would be happy to see the inspection and engineering report...

[End of Tape 3]

## NUNAVUT WATER BOARD Public Hearing Iqaluit Municipal Water License Renewal

November 23, 2000

Chairperson: Thomas Kudloo

BT = Bill Tilleman SP = Unidentified Speaker

[Start of Tape 4 - Side A]

AW: ... the plant is expected to be operational in early 2001. The departments jointly recommend transition to the new plant be no later than September 1, 2001. I know the municipality hopes to have it commissioned by spring. That gives a little bit of leeway, but we do encourage a date to be included that is something to work towards. If unavoidable delayed, monthly progress reports could begin in September. The type of reports we have in mind would outline problems, activities, progress, remaining work, and revisions to the target date, just so that all involved will know what the situation is.

And the options for sludge management should be identified, and a plan submitted for approval. The... I'd like to encourage the municipality to provide a short-term plan for their pilot scale, as they called it, and on the long-term plan we'll have to know such things as composition, other storage alternatives, the time needed to compost, if that's the route they go, the possibility of incineration if the new system would accommodate that, and possible end uses of the composted materials.

I'd like to commend the town on the progress made with the Solid Waste Management Planning Study, and we're asking that submission of a final proposal for the new solid waste facility be given within three months of the license issuance. And the reason for that is simply to have the definitive option identified, although from today's discussions it's fairly clear which one that's going to be. We also ask that a contingency plan be submitted for the solid waste disposal, during any interim period, between facilities, if it comes to that. And we would like the opportunity to comment on such a plan. We also ask that an A&R plan for the existing dump be developed as well.

And going to hazardous waste, it's recommended that the town submit a plan for the management of hazardous wastes. Such a plan should include characterisation of the waste stream, and this goes to what Mr. Webber was saying, you have to know what is in your site when it comes to abandonment, for one thing. There should be provision for secure storage at the dump at the site, and identification of handling and final disposal methods.

And it's my impression that management of hazardous waste is not currently very formal. I think further planning is needed, and while this often has to be an at-source initiative by the generators, there's a lot the municipality can do to bring this forward. I'm just thinking of the things that the Yellowknife city has done that have helped, and they would include things like a waste oil collecting tank, a separate area for battery recycling, the acids are neutralised and the rest is shipped out. It's very important to have secure storage for waste solvents so they're not tipping over and causing clean-up problems, and things like household hazardous waste days, and education of the people who are generating the wastes. And I'm sure there are lots more ideas that can come out.

I'd strongly like to encourage that, and the concern I have is that if it isn't convenient to manage hazardous waste, it can either be directly disposed into the environment by irresponsible people who just don't know what else to do with it, or put into the mainstream of municipal waste where it subsequently can leach out from the landfill and enter into surface waters that way, as well. I do feel this is an area of jurisdiction for the Water Board, and would like to see some further action on that.

Okay, with respect to operation and maintenance, the most recent plan approved by the Water Board was in 1995, and the departments recommend that a revised operation and maintenance plan be submitted following issuance of this renewal license. It does sound like the municipality internally has one operating, so hopefully that wouldn't be a hardship. And there is one operational concern that was identified at the sewage lagoon. That is the measurement of the lagoon freeboard. The proper installation of a gauge is needed so that these concerns, with measurement of the level of the lagoon, can be known.

For spill contingency planning, I don't believe there is currently a plan in place, and the departments recommend that the license conditions include the requirement for a revised plan to be submitted for approval within three months, and we ask that annual updates for this plan should be required under the license.

There's a few abandonment and restoration issues. The existing sewage lagoon requires a practical closure plan that should be developed within six months, and implementation on approval. The plan should consider interim remediation measures, such as supernating(?) treatment, run-off quality and sludge management, its potential

use as a back-up facility, long-term dyke stability - and this may be a question of the drying up of the dykes during de-watering - and ways to reduce the lagoon footprint.

And I realise that the final abandonment and restoration plan can't be developed as long as they retain the old system for back-up use. There should be an interim plan, include things like dyke stability, the timing of dyke inspections, and also, perhaps, look at the final configuration. Is the full lagoon, as it sits now, needed for the back-up, or can part of it be remediated? Just things that can be looked at.

We seem to all be in agreement that final abandonment and restoration plans are needed for the old landfill sites, and the appropriate A&R plans with implementation schedules should be submitted by specific dates under the new water license.

With respect to the surveillance network program, we're asking that field measurements be included at the time of taking samples. We'd like to see parameters such as the field pH, sample temperature, and the ambient wind and weather conditions recorded and reported with the results.

We find that the parameters and frequencies as specified in the previous and 1999 water license are acceptable, and I would just like to add with respect to the bio-assay requirements under that license that Environment Canada is available to assist with the bio-assay testing, if we can... we'd be happy to handle the samples for the municipality.

A quality assurance / quality control plan should be submitted under the SMP. We're asking for this within three months of the license issuance. I didn't have a copy of one that had ever been approved, so that would be good to see.

And the requested license term of five years is acceptable. The reason we agreed on this was that five years will bridge the commissioning of two major new facilities and provide a bit of a track record on their effectiveness. And during that time period I would expect that new operational needs will be identified, and that will give enough of a time-frame to know those things.

With that, I would like to thank the Board for the opportunity, on behalf of the federal departments, for letting us participate in the development of a practical and environmentally-responsible renewal license, and at this time we'd be happy to answer any questions which the Board, proponent or audience may have.

- TK: Thank-you. Are there any questions from the applicant to Environment Canada?
- JT: Mr. Chairman, yes, we'll have a few questions. Just give me one second, here.
- TK: Would you please remember to state your name?

JT: Thank-you. It's John Tidball for the municipality of Iqaluit. Ms Wilson, I just want to go through, more or less in the order that you went through. I've got to get myself organised, here.

Ms Wilson, you were here for the presentation this morning, I think. Were you? A condition was suggested by the municipality of Iqaluit with regard to a report on long-term water supply options, and the suggestion was simply that a report by submitted by the end of next year. And I believe what Mr. Hough said was that the municipality would be happy to include things like a hydrological assessment of Lake Geraldine, and those kinds of things. Are you satisfied with what was proposed this morning? I just want to make... I'm trying to understand whether we're all on the same page or not.

AW: Anne Wilson speaking. What I'll have to do with some of these questions is just gain agreement in a minute or less with my colleagues, and then answer, if that's okay.

ST: Steven Trainor, DIAND. Can I just quickly ask... I'm sorry, Mr. Chairman, it's been a long week for us. I would just like to ask for clarification from Mr. Tidball of exactly what section or what issue he means from his presentation this morning, so that we don't sort of waste anyone's time, we can get directly to the answer he seeks.

TK: Thank-you.

JT: Mr. Chairman. I'm on page 5 of your written submission. I don't know where it fits on the overheads, under Water Source and Anticipated Volumes, and you've got a recommendation for including in this study of a study as water license condition, and recommend that it includes certain things. All I'm trying to make sure, Mr. Trainor, is that we're all in agreement, so that the Board doesn't go away thinking that there is some disagreement as between the applicant and the federal party.

AW: Mr. Chairman, Anne Wilson. I'd like to just specify that the long-term water supply study is a separate point from the Lake Geraldine dam and the inspections that we're requesting there. Otherwise we're in agreement that what the municipality proposes is what we are asking for.

JT: Thank-you. I was then going to turn to the Lake Geraldine dam issue. I'm wondering, Ms Wilson, or any of the other members of this panel, if you could perhaps enlighten us as to the concerns that you have with the integrity of the dam. You heard Mr. Hough, this morning, say that from the municipality's point of view, they think it's regularly inspected, that they get advice from their engineers, and as far as they're concerned they don't think there's anything wrong with it. And they're wondering - I guess, we're wondering - what the basis for the concern is. If you could enlighten us on that.

ST: Steven Trainor, DIAND. I guess our main concern is ensuring the integrity of the structure. We do recognise that it's important to have a qualified engineer, either on staff or some third party, to certainly look at and monitor, on occasion, at least once, to have some official point of reference that says the dam is structurally sound, and given the issues that were done in 1997, as in our submission, we did have some concerns about it. We do, however, clarify in our submission on page 5 that if there is some recent work to that effect that has been done, that the Board would accept, then we would be comfortable looking at it and accepting it also, if that is sufficient.

At the same time, we would like to raise a question, since it has been brought up by Mr. Tidball, regarding... he seems to be trying to provide us with some comfort level regarding the monitoring. We do have some issue with regard to that, and I would like to then pass over to Lee Webber if he would describe, briefly, what that issue is, as Mr. Tidball has mentioned and continually mentions the issue of monitoring and their confidence in it.

LW: What Mr. - Lee Webber, Justice Canada - what Mr. Trainor is alluding to is general concern on the part of DIAND, and I think this concern is shared by the other federal government departments represented here today, that confidence be built in the town's performance, and that the Board and all the other interested parties be given reason to have confidence. We can't be confidence, we can't be sure, that suddenly we're going to a new era when we can take at face value the town's assurances that certain things will be done. We want to have a practical way of checking on that performance. We want benchmarks established. If the need arises, if circumstances are such that the town finds, for good and sufficient reason it is unable to meet some deadline, for example, then the town has open to it the option of applying for amendment to the license.

Coming back to, specifically, to the question of the dam inspection, again, it's a matter, as Mr. Trainor has said, of establishing a benchmark, a benchmark established by a qualified engineer, something that will give the Board and all concerned reason to have confidence in the state of affairs, and subsequently in the town's performance.

- TK: There was a gentleman, Mr. Chris Nichols raised his hand. You've got a question or comment to make?
- BH?: Excuse me, if you wouldn't mind waiting until the end, 'til the interveners..? Thank-you.
- TK: Okay. Thank-you. Okay. Are you done? Mr. Tidball.
- JT: Thank-you, Mr. Chairman. Can I just follow-up on that? I guess the difficulty we're having, over here, and I'll be completely blunt about it, the municipality is unaware of

any problems with the dam, and in going back to the transcript from last year, and perhaps the municipality erred in not pursuing this matter further last year, we can't, for the life of us, determine why it is that the federal departments are worried about it, because from the municipality's point of view, there doesn't seem to be anything wrong with the dam. And I guess the question I'd like to ask is whether there's any information that any of you ladies or gentlemen have that could be provided to the municipality to indicate that there's any problem with the dam.

ST: Steven Trainor, DIAND, Mr. Chair. I guess our standpoint is, if we can take the opposite view, is that we have not been provided with the evidence from the municipality itself that says why they are so confident, and that's what we are looking for, and that's why we have, in our statement, here, if they can supply it, that they have in recent past, then certainly we would accept that. We are just looking for that evidence somewhere, in the last couple of years.

JG: I'd like to follow that up. Jordan DeGroot, here. Our department takes a precautionary approach. That means that even if we don't have adequate information, we err on the side of safety, to make sure that the inspection is done, and so we would prefer that the geotechnical inspection be performed.

TK: Thank-you.

BH: Mr. Chair, may I? It's Mr. Hanson, here. The people that read the transcript last year had to figure out who spoke. You mentioned that, Mr. Tidball, at the very beginning of this hearing. Every time anybody speaks, please state for name first. When we're going back and forth, it's so easy to start the conversation. Go through the Chair. The people who read the transcripts have to know who you are. We don't want to keep reminding you. Please state your name.

TK: Thank-you.

JT: It's John Tidball. May I ask one further question on this, and we'll move on. Am I correct, then, that the position of the federal departments is that if you can be provided with whatever there is by way of inspection reports that Mr. Hough referred to today, that you might well be satisfied, and that you might then say that there is no requirement for geotechnical inspection?

ST: Steven Trainor, Mr. Chair. First of all, I will say it is difficult to say completely yes, in the fact that we haven't seen them, and do not know the nature of them, whether they are internal documents done by whether it's the utilidor crew, as suggested, or whether it is an official, as outlined in our intervention, some geotechnical engineer under some standard. And will reiterate that yes, we could possibly consider those, as we've stated in

our intervention, if the recent work is done and supplied to us and we feel there is a significant comfort level in the credibility level of it, then yes we could probably consider it, but we'd have to see it on a case-by-case basis to meet those requirements as set out in our intervention.

JT: Thank-you, Mr. Chair. It's John Tidball. The sewage lagoons, for a moment - and I'm afraid we're going to have the same question, almost - having heard - Ms Wilson, you gave the evidence just now - having heard Mr. Hough this morning, and seen his description of the problem that occurred in 1997, and also his description of the way the dam had been rebuilt, again, I wonder if you could help us with exactly why you think a geotechnical inspection of the dykes ought to be done now, as opposed to, I think as he suggested, later on, once the lagoon is emptied, and a plan has to be developed for its use as a contingency facility.

LW: ...Justice Canada. I just wanted to insert a point of information at this stage. I don't want to take the town by surprise. This morning we had the site visit. One of the places that the bus did not go was the sewage lagoon. However, Mr. Smith took it upon himself to have a look-see at the sewage lagoon, and my thinking was that once we'd had the questions on the intervention I would get Mr. Smith to describe what he had seen at the sewage lagoon.

Now, I think this has a bearing on Mr. Tidball's question, but I don't want to ambush Mr. Tidball, and I want to give the town fair opportunity to reply to what Mr. Smith will have to say. So, what I'm wondering is whether perhaps the best way to proceed might be for Mr. Tidball to leave until later his questions about the sewage lagoon, as the other questions that he has about the intervention, and then have Mr. Smith describe what it was he observed, and then the town could pose its questions about the sewage lagoon. Alternatively, I could have Mr. Smith speak to his observations right now.

JT: I'm happy to take Mr. Webber's suggestion, Mr. Chairman. It's John Tidball.

TK: Thank-you.

LW: So, would you...

[End of Tape 4 - Side A]

[Start of Tape 4 - Side B]

BH?: ...sewage lagoon. When we did go into the sewage treatment plant, when you walked back out the door and you looked east, you looked exactly into the sewage lagoon. It was only from here to the wall away from us. Perhaps nobody really noticed. The wind was not blowing in our faces. But we were extremely close to it, and that was probably a

mistake on our part that we did not take a look at what was coming out, and where it was coming out. Thank-you for bringing that up, Mr. Webber.

LW: Lee Webber, Justice Canada. I'm afraid I don't know the lay of the land as well as the Iqaluit residents do - I'm a Yellowknifer - and so I wasn't aware that the sewage lagoon was right beside us. In any event, Mr. Smith's observations were made at the toe of the lagoon, which I believe would have been at some greater distance from where we stood. Is that correct?

BH: Mr. Chairman, Robert Hanson. Probably from here to the wall, the back wall. It's not very far away. Very close. We just missed it.

LW: Lee Webber. There was certainly no intention on DIAND's part to sneak off and have an observation that nobody else would be able to share.

TK: Thank-you.

JT: Ms Wilson, you repeated something that's on -

BH: Name?

JT: ...page 7 of your written submission. John Tidball. Sorry. You repeated something that's on page 7 of you submissions, and I had the sense that perhaps there was a change in that, and I just want to make sure I understand it. In your written submission you had recommended that the town submit a final proposal for a new waste management facility. I took it from that you said that you may be accepting that that has actually already been done? I'm trying to understand how that fits with what's being proposed now.

AW: Anne Wilson. Is my mike live? Okay, Mr. Chairman, to answer that, the option of the incinerator has not been formally proposed to the Board, to my knowledge, nor the other alternatives for the management of the ash, and so on, so I do request that the plan requested in our intervention be submitted. It doesn't have to be long or elaborate, just identifying definitively the option that the municipality wants to pursue.

JT: Can I put this to you, Ms Wilson. Mr. Hough said this morning, and we've said in the written evidence, that the municipal council of Iqaluit has adopted a plan that would see an incinerator and a new landfill. Is that all you're looking for? Is it a one-line statement in a report that says that's what they're going to do?

AW: Anne Wilson. What I would like to see is a little more detail as to site, timing, horizons that you're looking at as far as, like, a 20-year life span of the incinerator. Just the broad, basic details of it.

JT: Thank-you, Mr. Chairman. It's John Tidball. Perhaps I'll address that in final submissions, then, because I don't think we're going to get any further with the questions.

TK: Mr. Trainor.

ST: Thank-you, Mr. Chair. Steven Trainor. Just an additional point to that. Given the proposal you've said, can the town, with some certainty, guarantee that it has the financing to be able to make those statements and move forward on the statements and provide, once again, the confidence that it will happen?

JT: Can I ask Mr. Hough - it's John Tidball - ask him to speak to that?

MH: Thank-you, Mr. Chairman. I'm glad that Mr. Trainor has posed this question, and as the federal departments are interveners at this point in time, the end of my statement will be actually a question to them.

We operate within our means. We are a very small town. We are a municipality under the governance of our big brother government, the Government of Nunavut, and we depend on them, continuously, for funding. We have no guaranteed funding with respect to this year's budget estimates. Having said that, last year's budget estimates spoke to a portion of money that would get us well on our way to completing this project, and I hope that later, when we hear from... the submission from Community Government and Transportation representative will speak to that at that point in time.

And with that segue, my question to the federal government departments is one based on all your requests of the municipality. Geotechnical investigations of the dam, the lagoon dykes, all of this takes money, it takes time. What we have done with respect to the dam, for instance, is our last inspection was July. It was done by OMM Trault, certified geotechnical engineers. That's who were up there on our behalf. All of this takes money. Do you have any?

LW: Lee Webber, Justice Canada. I would like Mr. Hough whether he's looking for an answer, a serious answer to that question, or was it simply put for rhetorical purposes?

MH: Well, actually, Mr. Chair, outside of this forum, that is actually a very serious question, and I think one may be speaking out of turn, but one I'm sure the Government of Nunavut is putting to the federal government all the time, and one that the municipality of Iqaluit I know is going to be posing to the federal departments. So, this is an issue for outside of this forum, but it is a very serious question.

LW: Lee Webber. I don't want to pre-empt any answer that any of my colleagues here might want to make, but I gather from what Mr. Hough has just responded, that yes, essentially, it is a rhetorical question, and that he doesn't expect federal government officials here today to start drafting budgets or writing cheques.

TK: Mr. Trainor.

ST: Steven Trainor, Mr. Chairman. Thank-you. My point in making that question is not to bring to light the financial issue, and as Mr. Webber correctly pointed out, we don't want to deal with that. My point is to get at, and to assist the Board in establishing what are realistic time-frames and realistic expectations with which we can make a license. That is what I'm trying to do. So, in our intervention, when we've asked for something, it is based on the knowledge we know, and what can we realistically do at this time, not what the potential are - that is always good and we want to look at it - and that's our intervention is based. So, even though we ask for things like a geotechnical inspection of the Geraldine dam, we do provide an opportunity that should you show the Board that you have done this in the recent time, please bring it forward so that it's knowledgeable and it's made aware. That is our goal, here, is to help provide a realistic framework from which the Board can make its assessment.

TK: Thank-you.

JT: Just a few more questions, Mr. Chairman. It's John Tidball. Ms Wilson, I suspect that me may disagree on the hazardous waste issue. I'm wondering if you could help me a little bit with trying to understand what your recommendation is. When you talk about the municipality developing a plan for hazardous waste, are you talking about a plan for hazardous waste that would be generated by the municipality itself, or are you talking about a plan for hazardous waste being generated by others, over which the municipality has, perhaps, limited control? And it it's the latter, can you explain how you think that kind of a plan could be implemented?

AW: Anne Wilson. The type of plan that I would like to see required by the water license is something that the municipality would develop to provide the wherewithal to those people who were generating the hazardous wastes to responsibly manage them. I do believe that is the responsibility of the municipality, because certainly the clean-up for not doing that will fall upon the municipality eventually.

All I can offer in support of that Environment Canada has programs under the Millennium Eco-action program, in sustainable communities, that can provide matching support. So, if community vehicles... like, I understand there is NECC - and I don't know what that stands for - community group that is interested in these types of issues, that funds could be raised to match theirs, and their in-kind efforts.

I don't know if that answers your question. Maybe I'll just see...

JT: Let me try it one other way. I think we're part-way there. I think the question is are you looking for the municipality to create disposal options, or management options, for private individuals? Is that the point? So that the municipality, for example, makes a -

household hazardous waste is a good example - once every so often makes a household hazardous waste facility available so that anybody with old paint can bring it. Is it that kind of thing, where it's purely voluntary on the part of non-governmental agencies?

AW: Anne Wilson. That would be a good start. If the municipality was able to provide the framework, a secure storage area at the landfill site, a tank for waste oil to go into. I don't know that you would restrict it to just the household generators, because it's... wherever it's being generated, the important thing is to prevent it from entering the environment. Just to make sure the options are available, and if there's a user pay, that would address the commercial generators. Just so that all is managed and that you're not going to have the wastes dumped or entering the municipal stream.

JT: One more question on that, Mr. Chairman. It's John Tidball. Ms Wilson, is it possible for you to tell us why you think that that's a municipal responsibility, as opposed to the responsibility of any other level of government?

AW: Anne Wilson. I think it's fairly clear that the residents of a municipality are the source of the wastes that we're talking about right now, and that the problem will become the municipality's if it is not managed. And so that's a fairly basic answer that addresses it.

JT: Mr. Chairman, can I just ask a question? I think it's Ms Wilson, but it may be someone else on the panel. There's been a lot of discussion about closure and then use as a contingency facility of the existing sewage lagoon. You make certain recommendations on page 8 of your written submissions, and I'm just wondering whether you have any comment on the proposal that the municipality made by way of a condition this morning, which is I think along the lines of what you have in mind, and I just want to make sure it sort of tracks your suggestion, so that we're all talking about the same thing again.

I'm referring to the one where it was suggested that the municipality submit, within six months, a plan for the conversion of the lagoon to a back-up facility, and that the plan in also to address long-term maintenance and inspection. Does that fit with what your recommendation is?

AW: Anne Wilson. No, we are fine with that. Thanks.

JT: It's John Tidball again. The last couple of questions have to do with the Surveillance Network Program, and your recommendations on page 9 of your written submission. There is... first of all, there is the suggestion that certain things be done at the time of sampling. I'm wondering if you could help us with the rationale for that?

AW: Anne Wilson. It will often help in the interpretation of the results that come back from the lab. Often the pH will change between the field sampling and the lab sampling, so it's much better to know what it is at the time the sample was taken. It gives a better

picture of the effluent quality. Certain parameters, such as ammonia, are non-toxic at lower pHs and toxic at higher, so that helps us to know that. Also, if you have a wind direction that is bringing... not so much in this case... I was just thinking often you will get mixing from local waters if the wind is blowing... there's a pile-up on land, of the waters, that may be mixing in with your samples. I don't think that's probably the case where we'd sample end-of-pipe here. It's just a tool to help better interpret the data when we get them back from the lab.

JT: Thank-you, Mr. Chairman. It's John Tidball again. Those are my questions.

LW: Lee Webber, Mr. Chairman. What I'd like to do at this point, in the panel is agreeable, is to follow up on what I was talking about a little bit earlier. I'd like to pose a couple of questions to Mr. Smith, about observations that he made earlier today. And then perhaps Mr. Tidball will have follow-up questions of his own.

TK: Please proceed.

LW: Lee Webber. First of all, Mr. Smith, could I ask you to explain... to identify your current position with DIAND, and also your background with respect to water inspection?

PS: Paul Smith. Mr. Chairman, currently I hold the position of Manager of Water Resources for the Department of Northern Affairs for the Nunavut region. My background is that for... from 1992 until 1999 I was a Water Resources Officer.

LW: Lee Webber. And as a Water Resources Officer, did you duties include inspections pursuant to water licenses?

PS: Paul Smith. Yes, that is correct.

LW: Lee Webber. Mr. Smith, following the completion of the group tour this morning, did you, yourself, go to observe a further site, and if so, which site?

PS: Paul Smith. Yes, that is correct. I and Philip Lavalie(?), the Current Water Resources Officer, made a trip out to the west dyke of the sewage treatment... the lagoon, at about five minutes to noon.

LW: Lee Webber. Mr. Smith, could you describe what you observed there, and also identify any conclusions or concerns that you drew or that arose as a result of your observations?

PS: Paul Smith. Following the presentation that the municipality of Iqaluit made this morning, pertaining to maintaining a clear section below the toe of the dam, with that in mind what we observed, or what I observed, was that there was snow completely covering the downslope of that dam, and that it would be impossible to be able to monitor what seepage could be coming through that dam.

LW: Lee Webber. Any further observations, any further concerns arising from the observations, and for that matter, and further thoughts as to the relationship between what you observed and the explanation that Mr. Hough gave this morning?

PS: Paul Smith. I suppose it then relates back to the ability of the town to provide assurance to the regulators that their monitoring program, and their arguments for not requiring a formal inspection... they don't match to what would appear, because of the snow still being there, that they mesh.

LW: Thank-you, Mr. Smith. I'll turn it over to Mr. Tidball. It's Lee Webber speaking.

JT: It's John Tidball. It strikes me that the easiest way to do this, with the Board's indulgence, is just ask Mr. Hough to speak to it. We're hearing this for the first time, and he tells me he has... he's prepared to speak to it, and with your permission I'd like him to do that.

MH: Thank-you, Mr. Chairman. Fair enough. The... I myself wasn't over at the lagoon today. I will be there shortly hereafter the hearing to have a look at the snow and ice build-up. The maintenance program calls for us to keep it clear, it does, and if there's one thing I can say very quickly is that I'll have it clear tomorrow if it is banked up as you say it is. That's part of our maintenance program, that's what we do, that's what we're meant to do.

With respect to everyday occurrences of this type, we have staff who are changed with the responsibility of monitoring these sorts of situations. No question. But if any time, anyone, any regulating agency, spots any of these issues, my door is always open to hear them and to something about them. And I hope that a number of the other regulatory agencies do note that since... and the mayor spoke to a new administration, a new council. We have that, now, and we're working to try and satisfy everybody's needs. There are a lot of needs in this town. One of them is the maintenance of that sewage lagoon. No question. Point taken. It'll be taken care tomorrow.

TK: Any further comments? Mr. Webber?

LW: Lee Webber. I'd just like to point out that I interrupted Mr. Tidball in the line of questioning that he was about to embark upon earlier when he was posing questions apropos of the intervention, so I'd just like to ask Mr. Tidball... to make sure that Mr. Tidball doesn't have any further questions relating to the Government of Canada department's position with respect to the sewage lagoon.

JT: [inaudible]

TK: Thank-you. Okay, we've been keeping our translators going for two hours. Can we please take 15 minutes for their sake, and we'll get back to the subject? Thank-you.

## PCL XL error

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## NUNAVUT WATER BOARD **Public Hearing** Iqaluit Municipal Water License Renewal

November 23, 2000

**Chairperson:** Thomas Kudloo

TK = Thomas KudlooCN = Chris NicholsST = Steve Trainor DF = Dionne Filiatrault BT = Bill Tilleman DS = Doug SitlandJT = John Tidball RE = Robert Eno SH = Susan Hardy

SP = Unidentified Speaker]

[Start of Tape 5 - Side A]

Lee Webber. Subject to answering any questions that anyone else might wish to pose to LW: us, yes, that does conclude the presentation.

TK: Thank-you, Mr. Lee Webber. Mr. Chris Nichols, please.

Good afternoon, Mr. Chair. Chris Nichols, Department of Sustainable Development. CN: My question actually relates to just the evidence that's just been entered. The interveners before us had recommended geotechnical inspections and long-term dyke stability inspections, and I was going to ask by whom they should be carried out, to what standard, and what guidelines? And this is a point of information for the Board. The Canadian Dam Association Guidelines, in 1999, would answer a lot of those questions for you. It's a standard that's being adopted throughout much of Canada, and it may be something that may be want to be looked at from a territory-wide point of view, not just for this component that's before us but also other components in Nunavut.

Would you like to answer those three questions?

Steven Trainor, DIAND. I would like to reiterate that in our intervention of page 5 we do ST: clearly state that the dam should be inspected once during the term of the license... sorry, to quote the actual section, here, we do say that the dam be inspected once during the term of the license, during open and high water conditions, by a qualified geotechnical engineer, following the Canadian Dam Association's dam safety guidelines. I don't see any additional information. I hope that answers the question raised by Chris. It's obviously by a qualified geotechnical engineer, and to the Dam Association guidelines. I don't know how much more we could add to that.

BT?: It would help the audience, I think, and all of us, if we understood that actually the definition of the dam that we're talking about meets the definition of a dam in the guidelines, so perhaps the town could help us... Dionne can explain how "dam" is defined, and I think, to be fair to them, you can say, 'Okay, this meets those standards,' or, 'It does not,' because the threshold is -

CN: Chris Nichols. Dionne, maybe you want to define also dam and dyke, because I think both of them are specified in it.

DF: Thank-you, Mr. Chairman. Dionne Filiatrault. In accordance with the Canadian Dam Association dam safety guidelines, "dam" is defined as a barrier which is constructed for the purpose of enabling the storage or diversion of water, water containing any other substance, fluid waste, or fluid tailings, providing such that such barrier could empound 30,000 cubic metres or more, and is 2.5 metres or more in height. The height is measured vertically to the top of the barrier as follows. 1) from the natural bed of the stream or water course at the downstream toe of the barrier in the case of a barrier across a stream or water course. 2) from the lowest elevation at the outside limit of the barrier in the case of a barrier that is not across a stream or a water course.

BT: Then, Mr. Chairman, the question would be, does Lake Geraldine have 30,000 cubic metres or more of water, and is 2.5 meters or more high from the bottom of the bed.

BH: Name, please?

BT: I'm sorry. I work for the Board, Mr. Hanson. My name is Mr. Tilleman. Sorry.

MH: Yes, Matthew Hough with the municipality. Yes, it does hold more than 30,000 cubic metres, yes, it is higher than 2.5 metres.

TK: Thank-you.

CN: Dionne, did you want to define "dyke"? Sorry, Chris Nichols, Department of Sustainable Development.

DF: Mr. Chairman, Dionne Filiatrault. There is no definition in the guidelines for "dyke". But for dam, it also stipulates that dams are classified as a dam retaining contaminated substances.

CN: Even if it's... so, does that mean that the current sewage lagoon also classifies as a dam under those guidelines?

MH: Matthew Hough with the municipality. With respect to 30,000 cubic metres and 2.5 metres high, we'd have to take a close look at the schematics of the damn to figure out whether it did actually fall under those two criteria. Specifics.

BT: Mr. Chairman, it's Bill Tilleman. But I don't understand that. You just said a minute ago that Lake Geraldine clearly meets both criteria so that it is classified as a dam. And do you still take that position?

MH: Oh, yes, Mr. Chair. For Lake Geraldine, yes, but for the sewage lagoon - I think that was trying to be defined - I would have to a take a better look at it.

TK: Dionne?

DF: Mr. Chairman, Dionne Filiatrault. I can provide some clarification. For the purposes of these guidelines, this definition may be expanded to include dams under 2.5 metres in height, or which can impound less than 30,000 cubic metres, if the consequence of failure would be unacceptable to the public, such as dams with erodable foundation, where a breach could lower the reservoir more than 2.5 metres, and dams retaining contaminated substances.

TK: Thank-you.

CN: Chris Nichols, Department of Sustainable Development. I think that's a matter for the Board's discretion, then, about the tailings dam... sorry, about the sewage lagoon dam.

The next question I guess I have... and I'm not quite clear on this, and maybe the town can answer this. Having recently had an opportunity to look at some of the hazardous... sorry, solid waste management by-laws of the town, it relates to one of Ms Wilson's questions about hazardous household waste round-ups. I think, written into the solid waste management by-laws, there is a stipulation that the town carry out, once a year, a hazardous household waste round-up. I'm not quite sure, but I don't think that's been carried out, at least in the years I've lived here.

MH: Thank-you, Mr. Chair. Just in response to that question. The question should probably be going to the feds, but I'll take it anyway. It has been identified by the Solid Waste Management Steering Committee that we should be doing a better job of these hazardous waste days. Obviously, there are residents in the room who probably don't know that we do actually do this on one day in the summer. A very small news release to the media,

and some word of mouth advertising pulls in some material from different contractors. Having said that, it has already been identified internally that we have to do a better job at it.

CN: Chris Nichols, Department of Sustainable Development. There is an existing by-law?

MH: Mr. Chair, Matthew Hough, with the town, again. It would probably be somewhere embedded in our waste disposal by-law, but I would have to have a look at it, I really would. It's just been a matter of practice that the town has made an attempt at doing this, but has not done a very job, and internally we've recognised that, and we're going to do something about it.

CN: Thank-you. That concludes my questions. Thanks.

TK: Thank-you, Mr. Nichols. Are there any questions from Community Government and Transportation to the joint interveners? Yes, sir?

DS: Thank-you, Mr. Chair. Doug Sitland. Not necessarily a question from Community Government and Transportation. I'm just a little confused as to why we're referring to these 1999 guidelines and not some other guidelines, or the National Building Code of Canada, or whatever. Are these guidelines paramount law, or are there other guidelines that are more appropriate? I guess I'm just wondering why these particular guidelines are so important. If someone could answer?

TK: Mr. Tilleman.

BT: One of the advantages of sitting on the Board is they don't have to answer questions, but I'd be happy to give it a try for you. If there's something that's more relevant than safety guidelines in Canada, produced by the Canadian Dam Association, then let us know. I mean, the advantage of having a hearing like this is we can have everyone in the room at one time, and they can say, 'Yes, this is relevant evidence, because this is the best thing that we have.' It doesn't mean that it's a law enacted by Parliament, but it certainly is a guide, and if you, Mr. Sitland, or anyone else doesn't think that it's relevant, then you need to tell us why. Or, if you think it's been superseded, then you need to tell us by what.

TK: Thank-you, Mr. Tilleman. Mr. Chris Nichols?

LW: Excuse me, Mr. Chair. Lee Webber, Justice Canada. Just before -

CN?: Excuse me, Mr. Webber, (I think the Chair acknowledged me?).

LW: Well, I think I can answer.

CN: Chris Nichols, Department of Sustainable Development. If I might add to what Mr. Tilleman has been saying about the Canadian Dam Safety Guidelines, they have been developed by a group of qualified geotechnical and civil engineers, across Canada, who deal with dam and dam safety as part of their jobs and mandates within certain governments. Several jurisdictions in Canada have moved to adopt these guidelines as the standard for dam safety inspections. Several jurisdictions are moving toward adopting it as legislation. I am not aware of any other such documents that guide dam safety in Canada. Thank-you.

TK: Thank-you, Mr. Nichols. Mr. Lee Webber.

LW: Just a question. Lee Webber. I can't pretend to have any familiarity with the dam safety guidelines, but we had a little bit of discussion a couple of minutes ago about what the exact definitions of dam and dyke were, and whether the Lake Geraldine reservoir dam fit within the definition of dam, whether the definitions would apply to the sewage lagoon. I just really toss out the question, for everybody's consideration, whether much turns on the question, on the issue of whether one or the other of these structures fits within the Guidelines' definition. If the Board decides that Lake Geraldine dam shall be inspected in accordance with these guidelines, it seems to me that we go to the guidelines and have a look at what they say about inspections standards, and we don't have to terribly concern ourselves... concern ourselves terribly much with whether this structure that the Board wants inspected fits within the Guidelines' definition of dam. Thank-you

.TK: Thank-you, Mr. Webber. Are there any other questions? Are there questions from Baffin Health and Social Services to the joint...? Thank-you. Are there any questions from Mr. Marcel Mason to the joint intervention? Thank-you. Are there any questions from Nunavut Water Board resource people? Thank-you. Dionne?

BT: Mr. Chairman, but we're... yes, sir, Bill Tilleman, and the only question is whether or not it would be helpful to have the Trault report that you referred to earlier filed with the Board, because that report might actually help answer a lot of questions that the federal

panel have, and if it was done this year, it would be relevant. And so that can be Exhibit #10 if the town agreed. Is it #9?

TK: Mr. Hough.

MH: Mr. Chairman, Matthew Hough, with the town. Two days ago John and I were organising to receive from OMM Trault a full report of not only the work that was done in the project but the subsequent inspections and what was found and what was not found, and their approval of the structure is it exits right now. We asked for that from them a couple of days ago. It was short notice, unfortunately. We were trying to have a pre-emptive strike for this question, because we knew that it was coming. If the Board is so willing to indulge us a few more days, we can definitely submit this, at a later date, to everybody who is interested.

TK: Thank-you.

BT: Bill Tilleman. That's a good idea. The only question... it should be filed within the hearing itself, or else the hearing doesn't close. So, the question is when you close the hearing, and that would include the exhibits and all the evidence. But let's maybe save that to the end of the day, and I'll just make a mental note. We'll raise it again at the closing, and then we'll see where we are.

Thank-you, Mr. Chairman. I don't think the staff have any other questions.

TK: Thank-you. So, have you concluded your presentation?

LW: Lee Webber. Yes, we have, Mr. Chairman. Thank-you.

TK: Thank-you very much. Next presentation will be done by Community Government and Transportation. Before we proceed we will have legal counsel swear you in.

JT: State you name for the record, and spell you last name.

DS: Doug Sitland, d-o-u-g s-i-t-l-a-n-d.

JT: And do you swear that the evidence you are about to give is the truth, the whole truth and nothing but the truth, so help you God?

DS: Yes, I do.

TK: Thank-you.

SH: With the Board's permission, my name is Susan Hardy. I am legal counsel for the Government of Nunavut, and in this proceeding, I'm providing legal service to the

Department of Community Government and Transportation, and also to the Department of Health.

What I've been asked to do by these clients is to provide a brief introduction about the powers that the Government of Nunavut exercises that the Board is required to consider, here, the reason why the particular people are before you that you're going to be seeing today.

First of all, under the *Nunavut Act*, the Government of Nunavut generally has legislative authority given to it, which includes making legislation that deals with municipal and local institutions within the Territory of Nunavut. This is one of the ways that we're very different from Canada, where they have a national agenda.

The specific ways that the Government of Nunavut can legislate is that they can adopt legislation that licenses activity in Nunavut. They can impose fees for licenses, or taxation requirements, that create a revenue from activity in Nunavut that relates to a municipal or local purpose within the territory. The Government of Nunavut can expend funds for territorial purpose through passing legislation to authorise that, and they can also pass legislation about any local or municipal activity that imposes a fine or penalty or punishment in relation to forbidden activity.

The Government of Nunavut also has the authority to delegate to municipalities and to other authorised bodies those same powers that I just described, and the main vehicle for that is the *Cities, Towns and Villages Act*, which happens to be within Mr. Sitland's sphere of authority.

When that happens, then the Government of Nunavut has a role of oversight and dialogue with the municipality with regard to how they carry out those mandates, and what by-laws they issue and what the requirements of those would be.

Specifically, the departments that I'm working with have asked me to give an overview of the legislation that they're responsible for, and this would be in very broad strokes. I can't give you every detail of every tiny mandate, but there's specific existing departmental mandates that were inherited from the Government of the North West Territories through the legislation that Nunavut inherited when it was created.

In Nunavut we also have to always keep in mind the impact of the Land Claim on how the existing legislation is implemented and exercised. Sometimes there are things very differently here than what you would think, because the Land Claim requires it.

So, what Mr. Sitland's department, Community Government and Transportation, is responsible for covers issues such as zoning and planning, which would relate to the siting of any of the facilities that have been discussed here. They would be the government party that you would have a dialogue with about the lease. They have the oversight, as I mentioned, of the *Cities, Towns and Villages Act*, and the by-laws issued under that act flow through CGT in the process of being approved at the upper-most level.

Incidental to this conversation, Community Government and Transportation also deals with fire prevention and with the *Transportation of Dangerous Goods Act*.

So, those are all mandates that the municipality would want to keep in mind in any activity. In some cases, when the municipality is, for example, proposing an incinerator, but we are not sure yet of the site, there's some concern that there would be issue arise that I wouldn't have mentioned here, but certainly there's generally an authority that deals with that, depending on how things work out.

Instead of coming back to these issues, I'm also going to deal with the mandate of the Department of Health, and some incidental issues. The mandate of the Department of Health is principally set out in the *Public Health Act* as it relates to this proceeding, and there are three specifically-applicable regulations, the general sanitation regulations and the public sewerage systems regulations both specifically require Public Health approval before facilities are operating, or are implemented. The public's water supply regulations also apply.

Now, things like site choices, again, can raise new regulatory concerns. For example, there may be a concern, depending on site choices, that relates to a site that has an impact on an area that has archeological or cultural importance, just for example. That's the kind of thing I'm talking about that we can't predict until we have more details. If that were to occur, then the Department of Culture, Language, Elders and Youth would come in, and one of those land claim authorities would be invoked. It's

kind of a dual authority split between the Inuit Heritage Trust and Nunavut Planning Commission. So, you can see that there's an impact, there, with the Land Claim.

Similarly, Mr. Sitland, when he's dealing with planning, works with the Nunavut Planning Commission as well, so there's some overlap there.

The Department of Sustainable Development, obviously, has the environmental protection mandate, and they'll deal with the specifics of that. But there are other permissions and authorities that would be required that the Board wouldn't necessarily cross over with, for example, Finance and Administration has the *Public Utilities Act*, and Safety and Workers' Compensation, and those kinds of things.

So, those things the municipality can deal with on their own. My purpose here was simply to give you a context in which to understand the people that you'll see from the Government of Nunavut. Mr. Sitland has the main relationship with the municipality, planning, those kind of concerns. Miss Segal, who you'll see later, is the Representative of Health, and so she's dealing with that legislation, and the Sustainable Development people, they have environmental protection as their principal interest.

DS: Thank-you, Mr. Chairman. Doug Sitland. Just for clarity, I thought I would go through my intervention to perhaps clear up any questions that the Board may have, and maybe... so that everyone understands by thinking when I was writing this.

My number one item, there, was the long-term viability of Lake Geraldine. I refer to an RCBL - Reid, Carruthers and Partners Limited - report, which I believe is already in the public record. And what I understand from Mr. Hough this morning, it's not necessarily the town's intention to establish new water sources, but to investigate the long-term viability of the existing facilities, and plan for their improvement, and that's fine with me.

The next item is the integrity of Lake Geraldine dam. Again, I echo the town's comments in that I am personally unaware of any problems associated with the dam. To see an OMM Trault report indicating this I think is reasonable, and as part of any good operations and maintenance plan, I think there should be general inspections of that dam, and I think they would occur annually, but I think that's a... Mr. Hough had mentioned it, it's his intention to come up with what I term life-cycle management operations, and I

think that would form part of that. So, again, I'm happy with what the town is proposing there.

The third item is on sewage disposal. I don't want to talk about jurisdiction or things like that, but I'm confident that the town is proceeding on the right tracks with getting the sewage treatment plant operational. The effluent that is supposed to come out of this plant should meet and far exceed, in fact, the effluent criteria that were established in the previous license, and I believe that Mr. Hough did show the waters from last year.

So, again, we're happy with the way this is proceeding. It would have been nice to have it operational, but I don't think it's worthwhile to establish artificial deadlines, say February... well, February 31st would be a little difficult... February 28th, 2001 the plant must be operational. They have to seed this plant, and there's a lot of things that still have to go into getting the plant operational.

The existing solid waste disposal facility... there's been numerous improvements with the way this thing has been operated and maintained. I know that others still have concerns about open burning, but again, to echo the town's comments, it's a necessary evil at this time. And I guess my concern is we're working towards establishing... or, the town is working towards establishing a new method to manage its solid waste, and to impose additional or more strict criteria on the town at this time may sort of put additional pressures on them.

Again, the new solid waste disposal facility, Town Council has voted to go with the incinerator plus, I believe, an engineered landfill option. There is a Council motion to that effect, I believe, and they're doing at it as fast as they can. They're in the process of establishing siting for this, and we are in dialogue on those matters.

Again, in terms of who approves it, I think we'll agree that we all think this is a good idea, and maybe it should be a condition that perhaps the town has to seek approval for whatever they're doing. I don't think that's a problem, and I don't want to get into an argument about who actually approves it, but maybe a review - a design review or a peer review type thing - maybe is the best way to approach that. I'm not too sure.

The next item I had was the closure, abandonment and restoration of existing sites. Again, the town alluded to the number of different sites in the town. Some of them

are municipal responsibilities, and they are recommending that they be given to December 31, 2002, and I have no problem with that.

Again, I would like to see a plan to use the existing sewage lagoon as a back-up facility, but again, I think the town needs some time to do all the things that they have to do.

My last point, there, and perhaps the most important point in my letter, in echoing the Mayor's opening comments this morning, the town is growing rapidly, and the town has a lot of things that it has to address. And a lot of those things require capital dollars, and the town's main source of those capital dollars is the Department of Community Government and Transportation.

We are in the process - in fact, the entire government is in the process - of developing a multi-year capital construction plan, or a five-year capital plan, which addresses not only the needs of Iqaluit but every other community in Nunavut. The problem is that there's only a fixed amount of money, and it's difficult to juggle priorities. So say, for example, the Board were to order the municipality to build an incinerator by October 31st, 2001. That would then mean that they would need the \$6 million or whatever it is by October 31st, 2001, and that would mean that my department would be forced to find a way to fund that, and what that in turn means is that other communities - because it is not currently in the plan - other communities would have to lose out on other projects. So, say, for example, you were to go to Pengertong(?) and order them to build a sewage lagoon by October 31st, 2001, that again is a big snowball effect.

I guess what I'm trying to say is that we're in the process of developing this fiveyear plan. It will be made public in the very near future, so that everyone will understand the difficulties that the Government of Nunavut is having in meeting all capital needs, not just Community Government and Transportation, but health and education, and sustainable development, all of them, and I would urge the Board to perhaps take this into consideration when they are requesting the town to undertake certain activities. My last point was on the term of the license, and although I did recommend a three-year term, I'm perfectly open... I'm open to suggestions and willing to compromise. I do not believe that a one-year term is reasonable. It doesn't offer the town the ability...

[End of Tape 5 - Side A]

[Start of Tape 5 - Side B]

- BT: ...Bill Tilleman, and thank-you. We should file, then, your written submission... he has that as #9, but I'm not sure if that's right. Dam Safety Guidelines were #8... is that right, or were they #9? Okay, so I'll have to change this. Let me just pose to the Chair, #7 was... Exhibit #7 was the letter dated November 7th from DIAND, DFO and Environment, so your submission was #7. What was #8? Slides. So then, Mr. Chairman, #10 would be the written submission of CG&T. Thank-you, Mr. Chairman.
- TK: Thank-you, Mr. Tilleman. Okay, does the applicant have questions to the Community Government and Transportation? Do the joint interveners, DIAND, DFO and Environment Canada have questions? Mr. Webber?
- LW: Lee Webber. Thank-you, Mr. Chairman. Mr. Sitland, I'd just like to ask you a couple of questions to better understand the significance of this five-year plan. First of all, is there some sort of target date for the release of the plan?
- DS: Thank-you, Mr. Chairman. Doug Sitland. Yes, Mr. Webber, I believe that in the current sitting of the Nunavut Legislature, through our various standing committees, these are being reviewed. I'm under the impression that my department is before a standing committee tomorrow afternoon, and then I believe after that it becomes a public document. However, don't... I'm not entirely certain.
- LW: But, to summarise, then, you're hopeful Lee Webber to summarise you're hopeful it might be a public document within the next few days. I realise that you express some uncertainty as the procedure.
- DS: Yes, thank-you, Mr. Chairman, Doug Sitland. Yes, I believe after... if it does become a public document after standing committee, I believe that within the next day or two it should be.

LW: Lee Webber. Mr. Sitland, this plan... I don't want to press you to reveal matters that may be confidential, but if you can, tell us will this plan set out precise allocations, so many dollars for such-and-such a community, or even so many dollars for such-and-such an item within a particular community? Or will it speak in less specific terms? I'm wondering just how much guidance it's going to give for purposes of a proceeding like this.

DS: Thank-you, Mr. Chairman. Doug Sitland. The difficulty with the five-year plan is it shows the government's plan for five years right now. It doesn't show the government's plan for five years yesterday. It will show individual projects with individual budget amounts, but that can change tomorrow, or it can change a year from now to respond to individual departments' needs, or to respond to the priorities of the government. So say, for example, the government of Nunavut says it wants to build 10,000 housing units, and they make that announcement in a year, then that obviously have an impact on the five-year program that will have been released a year prior. So, it shows projects, and it shows budget amounts for those projects.

Another example is it doesn't show contingencies or emergencies. If, for example, say, Iqaluit builds their sewage treatment plant, and it's running, and all of a sudden it fails, well, our department and the community would have to respond to that failure, and that's not included in the capital plan.

I hope that answers the question.

LW: Yes, thank-you Mr. Sitland. Lee Webber. Thank-you, Mr. Sitland.

Another question... I guess, if the town found itself with a shortage of the necessary dollars from the Government of Nunavut it could also apply for an amendment of any concerned license condition, but in the first instance, would the insertion in the license of a condition requiring, for example, the commissioning of the sewage treatment plant by a particular date, would that, in the first instance, not create a certain pressure on the Government of Nunavut to in fact provide an allocation of moneys for that item in its five-year plan? Or perhaps, for that matter, in an amendment to its five-year plan?

DS: Thank-you, Mr. Chairman. Doug Sitland. I guess my response to that... yes, it would put pressure on departments, and particularly my department, to respond to that, but there are other equally urgent items. For example, we've all heard talk about a road to Manitoba. Is that a priority for the Government of Nunavut and the people of Nunavut. That's a billion dollar venture, and I'm not too sure where that funding comes from. There's emergencies that happen. And also, I think, it also takes away from the MLA's and the Legislature's authority to establish priorities for the government.

LW: Those are my questions. Thank-you, Mr. Sitland.

TK: Thank-you, Mr. Webber. Are there any questions from Department of Sustainable Development? Thank-you. Are there are any questions from Baffin Health and Social Services? Thank-you. Is there any question from Mr. Marcel Mason? Thank-you. Are there any further questions from the floor to the interveners? No. Are there any questions from the Water Board Staff? Dionne?

DF: Thank-you, Mr. Chairman. Dionne Filiatrault. The town, in their presentation this morning, committed to certain plans and certain studies and having certain facilities operational, in some very vague time-frames, spring of next year, and whatnot. Does the capital plan that you refer to, are they going to be able to meet the commitments that they have suggested, and have they been considered in the proposed capital plan?

DS: Thank-you, Mr. Chairman. Doug Sitland. The capital plan... no, it does not. The simple answer is no, and I can't really speak to that. I can speak to what is in this year's 2000/2001 main estimates. There is sufficient fund to necessarily complete the sewage treatment plant, but that is the only project. There is also funding to undertake some of the studies associated with solid waste management, which the town is also undertaking. That's it.

TK: Thank-you.

DS: Excuse me, Mr. Chairman. All of these are also subject to approval, all of these studies that the town is planning, and all that. So, I hope that's clear.

TK: Thank-you. Are there any further questions from the Nunavut Water Board staff? Thank-you.

Thank-you very much. Next intervener who submitted formal interventions is the Department of Sustainable Development. Mr. Tilleman.

BT: My name is -

TK: You've got to be sworn in first.

JT: State your name for the record and spell your last name.

CN: Chris Nichols, c-h-r-i-s n-i-c-h-o-l-s.

JT: Do you swear that the evidence you are about to give is the truth, the whole truth, and nothing but the truth, so help you God?

CN: I do.

JT: Thank-you very much. Please spell your name for the record.

RE: Robert Eno, r-o-b-e-r-t, last name spelled e-n-o.

JT: Do you swear that the evidence you are about to give is the truth, the whole truth and nothing but the truth, so help you God.

RE: So help me, God. I swear.

TK: Thank-you. You may proceed.

RE: My name is Robert Eno. I am the Hazardous Substances Specialist with the Department of Sustainable Development, Government of Nunavut. I am... I was going to try to give you a very condensed version of my presentation. I'm still going to attempt to do that. I'm going to stick over some of the things that I don't want to get bogged down in.

We, the Department of Sustainable... rather, the Environment Protection Service of the Department of Sustainable Development derives its regulatory authority from the *Environmental Protection Act*, which essentially says that you should not discharge a contaminate into the environment. The Act applies to the whole of Nunavut. However, by convention and by practice, in agreement with other regulator agencies, our jurisdiction encompasses those lands that fall within Commissioners' lands, and fall under the definition of Commissioners' lands.

The exception to this - and I didn't put it down in my written submission, for which I apologise, so I hope that for the record this will be included in my submission - the exception to the *Environmental Protection Act*, it does not apply to those activities which have been licenses or approved by another territorial or federal government.

That's the story in a nutshell. If anybody wants to sit down with me and talk about the nitty-gritty details of the *Environmental Protection Act*, I'll be happy to talk to people about it.

We have the following comments to offer with regard to the municipality of Iqaluit's current application for the water license. I'm not going to get into the long-term water supply because it's not within our jurisdiction to comment on it, and I think it's already been commented enough sufficiently. I'm not going to get into the dam issue, because I think, again, that's been discussed ad infinitum, and I don't think I have anything to add to it. In any case, I'm not a qualified engineer.

In terms of the new sewage treatment plant, we support the municipality in their efforts to install a modern sewage treatment system. We do, however, request that the water license include a condition that requires the municipality of Iqaluit to submit a status report to the Nunavut Water Board before the system goes on-line, outlining the reasons for the modifications and repairs that have been made to the system.

In my intervention I had also indicated that we wanted to know how these modifications would affect the integrity of the treatment system. I believe that Mr. Hough has already addressed that. Nevertheless, it would be helpful to have it written down in a submission to the Nunavut Water Board, just for the record.

We also agree with the municipality of Iqaluit that nothing is to be gained by imposing artificial deadlines. I'm pretty-much convinced that they are doing the best that they can to get this thing on-line, and I would rather see a thorough job than a rushed job.

I will leave it up to the Nunavut Water Board to come up with a deadline. I'm not going to recommend a deadline at all. All I recommend is that you be reasonable with the town of Iqaluit, and try to work with them to allow them to be able to meet realistic demands.

The disposal of sewage treatment sludge is an area that still concerns we, and the municipal officials may correct me if I'm wrong, but I don't believe they're intending to conduct pilot scale treatment of the sewage sludge. I'm gathering by their submission that they are just going to try and go ahead and compost it in the dump. That would be the short-term plan.

I've worked on a lot of bioremediation projects, and bioremediation is just another fancy word for composting. I've worked on many of them. I've worked on them at DEW line sites, I've worked on a project myself, which I initiated, at Hull Beach, and I can tell you that it's not straightforward, and before we even embark on bioremediation projects, or composting projects, we actually went and did pilot scale projects. And when I say pilot scale, I'm talking about something as simple as getting a bucket of sludge and testing it out in the lab and seeing what treatment options are available and what's going to work and what's not going to work, and under varying conditions.

So, I still urge the town... or, rather, the municipality of Iqaluit to conduct a pilot scale experiment, rather than to just go ahead and start composting sludge in the landfill site, because nobody knows how that's going to work, and I don't believe the town has a back-up plan if the short-term plan doesn't work. So, I think the time to start thinking about that is right now, not when they're confronted with the problem.

In terms of the integrity of the lagoon dykes, in my submission I indicated that if the municipality of Iqaluit could provide compelling reasons as to why they should not monitor... rather, have the integrity of their sewage lagoon dykes tested, then I'm willing to listen. I believe Mr. Hough provided what appears to be reasonable evidence, and my only response to that is that if we get it signed off and stamped by an engineer, then our department would accept that.

In terms of the abandonment and restoration of the sewage lagoon, not much to add to it. We had earlier made the suggestion... rather, last year we had made the suggestion that the sewage lagoon be kept in place as a back-up system in case the new system breaks down. And they're doing this. We do believe that when they drain the lagoon - and they've already indicated that when they drain the lagoon they're going to look at the integrity of the dyke and make sure that everything is in place, and it will be an effective back-up system - so I haven't got anything else to add to that.

We're getting into a contentious issue, now, and that's the issue of solid waste. And I believe at the pre-hearing we all agreed that we weren't going to get bogged down or discuss jurisdictional or regulatory matters. And I'm going to mention one aspect of this, because Mr. Tidball made a comment about... I believe you said he does not

recognise the Nunavut Water Board's jurisdiction over solid waste management. I just want to put it on record the Department of Sustainable Development disagrees, and I'm going to leave it at that. Like I say, we don't want to get bogged down in jurisdictional issues, it was agreed that we wouldn't. I just want to indicate that we disagree with the municipality of Iqaluit's contention that the Nunavut Water Board does not have jurisdiction over this particular activity.

Having said that, with regard to the status of the new solid waste disposal facilities, we support the municipality of Iqaluit's goal of installing a municipal waste incinerator. We further recommend - and again, perhaps, I'm going to go off on a segue - Mr. Tidball mentioned something about we cannot put recycling and such things in a water license. Some of these suggestions I'm making are suggestions only. They are not intended to be put in the water license as law. If anything, you might want to put it in the water license as a goal, as an objective, but not necessarily something that they must comply with, something that they should strive for. And I don't know whether that's possible or not, but I believe that at water license hearings that I attended many years ago, they were talking about trying to meet certain parameters with respect to sewage lagoon discharges. I believe that one of the technical advisory committee members suggested that instead of putting them down as law that they be put down as objectives. I'm not suggesting that that be the case for the sewage lagoon, I'm just using that as a general example of perhaps the Water Board could put certain objectives that the town should strive for in the water license.

Back to the solid waste disposal facilities. As I said before, we recommended the municipality of Iqaluit consider incorporating a heat recovery system into the incinerator. It would make the incinerator far more cost-effective in terms of fuel consumption. Our comments with respect to the incinerator should not be interpreted as a blanket approval of the town of Iqaluit's long-term plan, because we haven't seen any details of this plan. We know that they intend to get an incinerator. That's about all we know. I don't know where it's going to be situated, and I don't know what kind of technology they're going to be using. We'll reserve comment on that until we actually see the plan.

We would like to see a plan, and it's in my written submission. We recommend that the water license include a condition that requires the municipality to submit the long-term waste management plan by May 1st, 2001. We do advise that the Nunavut Water Board exercise some flexibility. That is a target date for us. There might be some extenuating circumstances whereby the municipality cannot meet that demand. However, we would like to see some definite time-lines for the construction of this new long-term solid waste facility.

We also further recommend that the municipality of Iqaluit provide regular updates to the Nunavut Water Board, which I assume will be distributed to all the interveners and the people... the regulatory agencies in question. We'd like to see regular updates on where they are in the long-term plan.

With respect to the contingency plan, we applaud the municipality for considering the idea of a contingency plan. It shows forethought, somebody's thinking. It's nice to see. My biggest concern with this is that the current temporary site was supposed to be a temporary site. I believe it was established well over five years ago. It was supposed to have been a short-term plan. Nothing happened. It's still there. The temporary site is more of a... it extended well past the five-year deadline, and we never did see a long-term plan.

I don't bring this up to try and bring up skeletons in people's closets, or playing old records, as a friend of mine used to say, but I just want to express this concern that we want to make sure that if the municipality of Iqaluit is unable to execute their long-term plan, and they must go back to a contingency plan, that this contingency plan doesn't end up being another long-term plan as the current temporary site has been.

With respect to the operations at the current site, open garbage fires, probably best described as an open wound in this town, they have been a source of aggravation for the public. I received numerous phone calls from the public all summer long about open burning.

I recognise that the town has not got a lot of... they haven't got any options available to them. They have to open burn, otherwise the site's going to fill up, and they'll probably be faced with a worse problem than the dump smoke irritant, which none

of us like, but it's something we have to live with until we come up with something better.

We do, however, believe that this problem could have been avoided through better planning. Last year, I remember, at this time, I said I'm looking around me and I'm seeing an entirely different set of faces, now, in regulatory bodies, in the municipality. The only one I recognise is Mr. Hanson and a few people in the Board. We've been through this time and again, and we really would like to see an end to open burning.

For the time being, we recommend the water license direct the municipality to be extremely diligent in monitoring short-term and long-term weather conditions and wind patters before lighting garbage fires. If the conditions become such that smoke drifts into the community, steps should be taken immediately to extinguish the fire, if that is at all practicable.

As a matter of point, the municipality has indicated that open garbage fires achieve an 85% volume reduction. This is 5% below that which is achievable from most state-of-the art incinerators, which I find hard to believe. It's not really... I mean, this is not really relevant to the hearings, I'm just making a point that we disagree with this contention of an 85% volume reduction through open garbage fires.

With regard to hazardous wastes - these are suggestions only - we would like to reiterate a suggestion, or repeat a suggestion we made last year, and which Mr. Mason alluded to earlier in his presentation. We believe that there are a lot of fugitive discharges of hazardous wastes in this community, either intentional or unintentional, and to be honest, I don't think it's reasonable to expect that the municipality of Iqaluit can monitor each and every one, because I could go out of my house right now, I could take a 45 gallon drum of waste oil, and I could dump it down my drain, and nobody would ever know, unless the sewage pump-out guys were closely monitoring what was coming out of my tank.

However, when it comes to businesses, it's a different animal. The municipality issues business licenses, and it is within their best interests to ensure that before issuing a business license they determine what kind of effluent this business is going to be

discharging into the environment, what kind of waste they're going to be generating. I could name a few examples, but I don't want to start centring out businesses here in town as an example, or for special attention, but the municipality would do well to make sure that before they issue a business license that they find out what kind of waste that that business is going to generate.

Under certain circumstances, the proponent should be prepared... or, rather, the business should be prepared to share with the municipality the cost of managing any waste generated by their business, or assume the total burden, depending on what the waste is. It is our department's contention that the proper management of any waste, especially hazardous waste, is part of the cost of doing business. So, in other words, I don't put the entire responsibility in the municipality of Iqaluit's shoulders for managing hazardous waste. I believe, when it comes to businesses, industry should be helping out, as well. It should be assuming some of the burden.

In terms of household hazardous waste, I agree with the statement that Ms Wilson made earlier, Ms Wilson of Environment Canada. The people in town, citizens, have to have a means by which they can dispose of their hazardous wastes. And I believe it's incumbent upon the municipality to provide a vehicle for this. I believe that there are precedents in other parts of Canada. Most municipalities look after that, now. Most municipalities have waste exchange programs. Municipalities, because of the way they're set up, they're the agencies that are best capable of conducting this sort of activity.

Now, having said that, Environment Protection Service is quite willing to assist the municipality. And in fact, if you look in the newspaper this Friday you will see an RFP that our department has issued for the development of a generic plan for the management of hazardous wastes at the municipal level. What we're hoping to do is to produce a document, produce a how-to manual, in other words, that will assist municipal officials and municipal workers to deal with hazardous wastes, manage them properly right from cradle to grave, from the time they come in the fence area to the time they're either shipped out or neutralised and disposed of.

We try to be as proactive as possible. I try to make sure that when I tell people what they can't do I can give them options. So, in this sense, our department is trying to give the municipality some options.

So, I'm hoping this generic plan... I'm hoping that we come up with a decent plan, and something that be used by the municipality.

In terms of recycling, I'm not going to comment too much on that. I believe that the Solid Waste Management Committee is already pursuing this option, and I encourage the town to assist the Committee, in whatever way they can, to look at recycling options.

Disposal of fuel-contaminated materials is something else I wanted to cover, and again this is a suggesting. There are a lot of fuel spills on town, and right now, if you're a private home owner, and you have a tank overturn, you usually end up with probably 50 or 60 cubic yards of contaminated soil, and I've seen it happen before here in town. And if you haven't got a big business with... you know, if you haven't got a lot of money, you might as well just throw a match in your house and get on the plane, because it's going to cost you a fortune. Because, right now, there's no place to put that contaminated soil. You've got to deal with it yourself, and I can tell you that it's very, very expensive.

What I would suggest is that the municipality look into some means by which people can dispose of contaminated soil. And again, as I said with hazardous waste, the municipality does not need to take on the burden themselves. This is something that can be a joint effort between all levels of government and industry in town.

Our department actually produced... or, rather, we contracted out an engineering firm to produce some generic plans for setting up a site to deal with fuel-contaminated soil, and if the municipality is interested in seeing those plans, and discussing them with us, we'd be happy to pass the information along to them.

In terms of the closure of the waste disposal sites, I haven't really got much to say. I'll probably have more to say when I see the plans and find out exactly what is going to be done with these sites, and when. I think, right now, I would rather see the municipality focus their attention on the immediate problems, the sewage treatment plant and getting a decent long-term solid waste management plan in place.

The suggested time-span... I guess we're being the bad guys. We are recommending a two-year term, for the simple reason that there are two major issues which have yet to be resolved, and that is the sewage treatment system, and the solid waste management facility. We believe it's in the... the public interest would be better served by issuing a two-year license, because as near as I can reckon, this is the only forum available to the public to have any input into the manner in which the municipality operates their infrastructure. So, I believe a two-year license is warranted. I'm sure a lot of people will disagree with me, and it's not set in stone, I'm not going to go home and cry if that doesn't happen, but again, my reasons being that I think the public interest is better served, because this is the only time the public has a chance to have any say in what's going on, and it also means that the municipality has to be extra diligent in how they conduct themselves, because they're answerable to the Board, to the public who attend this meeting.

And this is going to be over, I promise! I have general comments to make, which I'm going to read verbatim, because I can't really condense it any better than this. The municipality of Iqaluit appears to be operating under tremendous pressure. Parts of its infrastructure are in disarray. It almost seems like they haven't caught up with their status as a capital city. It would be very convenient to assign the blame to the municipality for this situation. However, this would not be fair. All three levels of government should have anticipated, when Iqaluit was designated a the capital of Nunavut, that there would be a large influx of people over a very short period of time.

[End of Tape 5]

## NUNAVUT WATER BOARD

## Public Hearing

## Iqaluit Municipal Water License Renewal

November 23, 2000

Chairperson: Thomas Kudloo

MM = Marcel Mason BT = Bill Tilleman WM = William Mackenzie

SP = Unidentified Speaker]

[Start of Tape 6 - Side A]

RE: ...to office buildings. There's office buildings popping up all over town. Every one of those office buildings has a pipe going in, and a pipe going out, and every one of those office buildings produces garbage, and all of these people that have come into town produce waste. It seems like nobody has thought about this, or at least nobody gave it any serious thought. There's a lot of money around for buildings and such, but there doesn't seem to be any money around for sewage and solid waste management.

I believe that it's time to start focusing on, as I said in my submission, the more mundane and sometimes odious matters relating to the operation of a community, and that is the proper management of water, sewage and solid waste. And I believe it is incumbent upon all levels of government to take these issues into serious consideration, and allocate resources accordingly.

And finally, just so I'm not the big heavy, I do take heart, in looking at the new council, the mayor and the council, many of whom I've known for many years, and whose integrity, in my opinion, are beyond question. I've also had success in working with some of the senior municipal officials. They seem cooperative, seem to want to do the right thing, and I don't think I'm going to have a problem working with them, and I hope that we can all work together and try and resolve these issues.

And that concludes my submission. Thank-you.

TK: Thank-you, Mr. Eno.

CN: Chris Nichols, Department of Sustainable Development. I don't have anything to add to Rob's intervention. Thanks.

TK: Thank-you, Mr. Nichols. Are there any questions from the applicant?

JT: Mr. Chairman, it's John Tidball. Just actually one question, but before I get to the question I want to preface something and respond to something Mr. Eno said. To the extent, this morning, I was talking about jurisdiction, I may have lumped him in with others, and I... and I probably shouldn't have done that. Respectfully, I think the way Mr. Eno has put it is the way I would put it, that a lot of what he's suggested are very good suggestions, and the municipality takes the suggestions very seriously, and many of them, as Mr. Hough has said, they're looking into. The narrower issue that I was speaking to was whether or not the Board has any power to get into regulating them, and he and I may disagree on that, but I certainly appreciate the suggestions, and the municipality does, as well.

The one question I had for Mr. Eno has to do with the pilot project for composting sewage sludge, and I'm just trying to understand how that would happen, in your mind, Mr. Eno. As I understand it, what will happen is the new plant, God willing, will open next spring, let's say, and fairly soon thereafter will start producing sludge, at which point something has to be done with it. How... and I took your point to be that you thought a pilot project should happen some time before that. I'm just wondering how you think that should happen, given that sludge won't be produced until after the plant is operating.

RE: Robert Eno, speaking, Sustainable Development. Without getting too prescriptive, because your situation is unique, if that were me, if I were the person in charge of this operation, I'd go to the lagoon - or send one of my workers [laughter] - I would scoop out several bucket loads - I don't mean heavy equipment bucket loads - but I would out some bucket loads of sludge. I would contract out an engineering firm that specialises in this sort of thing, and I would have them conduct pilot-scale projects in the lab.

I'll give you an example. When we conducted a bioremediation experiment in Hull Beach, we were dealing with fuel-contaminated sludge from a pond. The first thing we did was we set out some test plots on site, in situ, and we added varying amounts of nutrients to each of these, and varying amounts of nutrients to each of these, and varying amount of oxygen and aeration. At the same time, we took some samples back, and they were tested in the lab, in test tubes, on shaker tables, over the winter, under varying conditions, under warm weather conditions, cold weather conditions, varying amounts of nutrients. And from that we attempted to come up with a method by which we could remediate the site, which we did.

Now, I don't want to get into the nitty-gritty of the report. If you really want to see the Hull Beach report I'll be happy to provide it to you. In fact, I presented a paper

on this project several years ago, in Edmonton. I'll be happy to provide you with a copy of the paper, but this is the sort of thing that I would be looking at. But first off, what you need to do is to find yourself a qualified firm, and engineering firm - and I think most engineering firms nowadays are capable of handling this - and ask their advice. And it's like that they might suggest the same thing.

Thank-you, Mr. Chairman.

TK: Thank-you, Mr. Eno. Are there any questions from the joint interveners, DIAND, DFO and Environment Canada? Thank-you. Are there any questions from Community Government and Transportation? Thank-you. Are there any questions from Baffin Health and Social Services? Thank-you. Are there any questions from Mr. Marcel Mason? Thank-you. Are there any questions from the floor? I don't see any. Are there any questions from the Nunavut Water Board Staff? Dionne.

DF: Thank-you, Mr. Chairman. Dionne Filiatrault. You alluded, in your presentation, to inspections of the dykes and the dam, and Chris spoke earlier in that regard with the Dam Safety Guidelines. I just want to confirm, does Department of Sustainable Development feel that the definition in the guideline for dam is applicable in this case?

CN: Chris Nichols, Department of Sustainable Development. I think, in my experience that I've gained in the consulting industry, the geotechnical consulting industry, and my experience again with Sustainable Development over the years, I think that yes, that the definition as outlined in the Canadian Dam Safety Guidelines does apply to both.

TK: Thank-you. Thank-you Mr. Eno, Mr. Nichols. Thank-you. Let's take a ten-minute break, okay?

[break]

SH: ...to health at his point, so I'll deal with it first.

In terms of the supply of Lake Geraldine and the water treatment plant itself, so far Health applauds the changes that the municipality of Iqaluit has done in the past year, in terms of improving the plant, and we have very little problems at all with the water quality, or the water cachment area, in terms of safety of the supply for the public.

As noted in other submissions, the town is looking at long-term supplies, and we'll be very interested to see the results of those studies.

In terms of the sewage treatment and disposal system, again, this is a very important municipal infrastructure system that can affect the health of the population quite significantly, and the present lagoon system, although it's old and outdated, and really needs to be replaced, looks like it may serve as a back-up for the new plant once it's operational. Now, the only concern I have with that is that if they're going to use that

site as a back-up, something that was mentioned this morning, fencing the site in case they have sludge laying there for a while, personally I think that - and from my department's point of view - that should be done anyway. You don't want people falling into sewage. And I know that's happened in the past, here, people driving into it.

So, I would like to see, as part of their plan to... and I didn't actually put that in my submission, but if they're intending to use that site as a back-up site, or use it in terms of anything like that, to get the site fenced to keep people out of it when there are hazardous materials in there. Plus, it is still then a concern for the Water Board, since anything that goes in there may actually get out to contaminate water. So, the maintenance of that site for emergency purposes I think has to be at least the inspection on the yearly basis to maintain integrity, and I believe the municipality has stated that they will be doing so.

In regards to new sewage system, what I've read about the plan for the system looks good. The one concern, as with Sustainable, is the composting of the sludge. And considering that composting, to be effective, requires aeration and warmer temperatures in the sludge for it to be effective, and aerobic rather than anaerobic, which would mean less smell as opposed to more smell, and more effective at getting rid of hazardous microbial growth, hazardous bacteria, virus, etc., I'm not sure that the plan they have now will achieve either the aeration necessary, or the temperatures necessary for effective composting. And I would like to see more information on that prior to the municipality using it.

Other than that, I would just consider that they're not actually treating the sludge, they're just piling up for... at the dump, as any other garbage would be piled there, and nothing happening to it.

I think the plan for the sludge was that something would be done with it so that it wasn't just piled in the dump, and I don't think that their idea on composting, at this point, with the information I have, has much merit.

In terms of solid waste management, I am very concerned about the present site and its lifespan, and the plans to get new sites in place. We haven't seen any plans that the Water Board could assess for effects of waste into water from new sites, because we don't know where they're going. We know we're looking at an incinerator and a type of landfill, but we don't know what type, or if it's going to be engineered, if there's going to be liners, if there's going to be effluent... I mean, leachate collection, or anything like that.

Until those questions are answered, I'm not sure that the Water Board can actually license or even speak to licensing that sort of new plan. We just don't have the information.

I believe that the municipality needs to also provide, when they do have plans for that, complete, revised operation manuals for those sites to deal with water flow over, through, leachate from any new landfill site.

I don't think that the incinerator is something that's going to be a concern of the Water Board at this point. Having said that, I also think that it will be a great improvement over what they have out there right now.

The other concern I have with the solid waste management is the contingency plan. The town was suggesting having a contingency plan for, I believe it was the end of August, to be submitted. That gives us almost no time to review it, and review its ability to meet requirements, or for them to implement it in terms of the expected end of life for the old site in October of 2001.

For that reason I think we need to see that plan much earlier than the town has suggested, probably at the beginning of the new construction season next year, June... end of June, maybe, would be the latest I would want to see a contingency plan for us to evaluate. I don't know about anyone else, but I like having at least a month to two months to evaluate a plan of that type.

And again, I think that that plan will be of significant concern to the Water Board due to where the town has indicated the expansion of the present site will be, in terms of how will it, or will it, affect water around the site. For that reason, I don't think that we can really address waste management issues at this time.

There's one further issue that wasn't in my submission, and that was the hazardous waste issue. Now, it was stated by the town they didn't believe the Water Board had any jurisdiction over that. I am of the exact opposite opinion. Hazardous waste in a community, if it's not... if there's nowhere to dispose of it, can get into any water system, including our drinking water system, depending on who takes it here. For that reason, and because under the general sanitation regulations of the Public Health Act, the municipality is actually required to provide waste disposal for the community. I think at least the public, the household hazardous waste, there must be a plan and a provision for the collection and proper storage and disposal of that waste. In terms of commercial and industrial waste, that is a different situation, where that is the responsibility of the businesses, but in terms of the public, the household hazardous wastes, the fuel oil, the oil from boats, from ski-doos, the batteries, the town has to have

a plan for that, and a plan that takes into account the protection of the environment of the town and the water supplies and water courses around here. So I believe that is directly in the Board's jurisdiction for that.

Finally the Department of Health recommends that the license duration be limited to a period not exceeding three years, and the reason for that is we're at a critical stage in the infrastructure development of Iqaluit. As you all know, our waste disposal site is at the end of its life. Water, although okay, we're not sure of its long-term capability, and sewage, again, that is a big concern. Without adequate infrastructure, there's risk to the whole community in terms of if the infrastructure system breaks down, the health of the community could very well be significantly affected.

And this sort of breakdown in infrastructure leads to the exact reason the Board was formed, to use... to deal with the impact on water use, and the deposition of waste into water. I can't stress strongly enough the fact that we can't allow it to go five years. We don't have that time luxury any more. We're right at the end of the life of the dump, we're... the sewage system we expect to be operational soon, hopefully, and the water system the town's already planning, they've already identified that as a concern. So I think that within three years they should have a very good idea of any changes they'll have to make in terms of the water. They'll also have to had established a new waste disposal system, a new sewage disposal system should be up and running, and there may even, hopefully, be a year's worth of data collected on how they're operating.

In terms of the... going farther, longer than that, I would be seriously concerned that given a longer period before we come back to review wouldn't serve anyone's interest, that at that point the town should have had enough time to get these new programs in place, and get information on what needs to be done next. Or nothing. Who knows? The water may turn out to be perfectly fine for the next 20 years. But if not, at least we'll... by that time they'll have the information to bring back to the Board, and have a much better chance of having a complete water license submission that covers all areas for a longer-term license at that point, hopefully.

In terms of... I'll just speak quickly to the application for approvals, or for systems. Under the Public Water Supply Regulation, Public Service Supply Regulations, approvals are required from Health before any changes can be made, at all. So, I expect the town will be submitting any proposed changes as soon as they know what changes they're proposing. And although, under the general sanitation regulation, there is no specific requirement for approval, because of the concern that Health has over waste disposal and protection of the community, any plans in terms of operation of new sites,

planning of new sites, and siting of new waste disposal sites, it would be prudent to have Health review them before they're implemented, simply because under the regulations, if we see something that we consider a... or the Chief Medical Health Officer considers a threat to public health, it could end up stopping it in its tracks, and we don't want that to happen, we want these things to proceed with the minimum of disruption.

The pace of change in this community has been huge. When I got here about three years ago, it was much smaller, and much slower-paced, in terms of my first six months here. Since that time, I'm having trouble believing how quickly Iqaluit's changing, how many new faces I'm seeing, how many new buildings, how much of a stress it is on all the systems. And for the protection of the health, I think that the systems of sewage water and waste have to be priorities, and I believe that your Board has a significant part to play in ensuring that Iqaluit has what's needed for the next 20 years.

Thank-you for your time, and I'd be open to answering any questions that anyone has.

- TK: Thank-you. Are there any questions from the applicant for Baffin Health and Social services?
- JT: John Tidball, Mr. Chair. No, we have no questions. Thank-you.
- TK: Thank-you. Are there any questions from the joint interveners, DIAND, DFO and Environment Canada? Thank-you. Are there any questions from Community Government and Transportation? Thank-you. Are there any questions from Mr. Marcel Mason? Thank-you. Are there any questions from the floor? Thank-you. Are there any questions from the Water Board Staff?
- BT: A real small one. \_\_\_\_\_ at the beginning. It's Bill Tilleman. You filed as Exhibit #12 the Health and Social Services written submission, which is this one here, dated November 7th. Was there another exhibit that we need to know about?
- SH: Yes. Susan Hardy, Mr. Chair. The other exhibit I just wanted to refer to was that Sustainable had filed a letter, and I don't believe that was entered as an exhibit during their submission.
- SP: That one's marked as #11, so we have no questions, Mr. Chairman. We'll mark those accordingly.
- TK: Okay. Thank-you very much. Okay, we'll take a break and come back at 7:00. Mr. Mason will be making his presentation. Thank-you, and we'll see you back here at 7 o'clock tonight.

[break]

TK: ...we left off, if I can call upon Mr. Marcel Mason, intervener.

JT: Thank-you, Mr. Mason. Can you please spell you name for the record?

MM: My name is Marcel Mason, m-a-r-c-e-l, last name m-a-s-o-n.

JT: Do you affirm that the evidence that you are about to give is the truth, the whole truth, and nothing but the truth? Do you so affirm?

MM: I do.

JT: Thank-you.

MM: As I said, my name is Marcel Mason. First off, I would like to thank the Board for allowing me to reschedule this, as well as the other interveners who didn't mind getting bumped up. Unfortunately, a couple of the overheads that I wanted to show tonight were not delivered to me when they were supposed to have been. That is the reason for the delay.

My presentation is fairly short, and it's of a non-technical nature. It's based primarily on observations over the time that I have lived here, and the period since we last had a hearing.

As other interveners have said, the municipality has made quite a bit of progress over the last year, and I think they should be commended for that. They've started a process that will hopefully address some what I feel are very serious issues, and in working with Mr. Butler as a member of the Solid Waste Management Steering Committee, and Matthew Hough, who is also involved with the committee, things look hopeful. I've also known the new mayor, John Matthews, for quite a number of years, and what I know about John also makes me hopeful.

The fact is, though, that the progress that has been made has been made largely on paper, and we don't have a lot of progress that we can actually reach out and touch. A little over a year ago many of us sat in this same room and, if my recollections are correct - and I'm definitely willing to be corrected on it if I'm wrong - the municipality discussed a new sewage treatment plant that would probably be on-line by February. We're now looking at potentially February a year after that.

In the last application that the municipality made to the Water Board for a water license, they addressed a few issues. They stated the public concerns were smoke and debris from open burning. Those concerns remain. I do have a couple of overheads that I'll be showing at the end, which are related to this, but a little over a year ago the municipality said they would address this issue by further restricting the hours of burning, and more segregation of waste prior to burning. Unfortunately, Mr. Chairman, this does not appear to have happened.

The municipality continues to pollute the environment, and I use the definitions of contaminant that are contained in the Nunavut statutes which we inherited from the Government of the North West Territories - to my understand there's been no change in those - contaminant being defined as any solid, liquid, gas, odour, heat, sound or vibration, or any combination of them, the release of which into the environment causes or contributes to the impairment of the quality of the environment, causes harm or material discomfort to any person, or adversely affects or impairs the health and safety of any person, or renders the environment unfit for use by any plant or animal life, or by any person.

In the same Act, the environment is further defined as the components of earth within the territories, and includes all air, land, water, snow and ice.

I would, at this point, like to address an item that you brought up, that you asked, if I understood correctly, the interveners to comment on, which was whether or not the Water Board had a role to play in solid waste management, or if that was within their mandate. I believe, Mr. Chairman, that because we the actions of the municipality that do contaminate our living environment, their actions or inactions that do pollute our environment, and we do not see any of the other agencies involved in this, apparently, doing anything, that many people of the public - myself included - look to the Water Board to do something about this, as this is really the only public and open forum we have for bringing those concerns forward.

So, possibly it is just a perception that the Water Board does have authority in this area. Possibly it's a reality. I mention that possibly it's a reality because in the water license application, specifically in the supplementary questionnaire from municipalities, solid waste disposal is specifically... or, gets a specific section of the document. It doesn't say solid waste disposal...

[End of Tape 6 - Side A]

[Start of Tape 6 - Side B]

MM: ...as their legal counsel said this morning, said we do not believe this is within the mandate of the Water Board, and left that section blank.

I note, also, that the other interveners have also, regardless of what their counsel's stance may or may not be on this issue, have also seen these forms before, both the federal level and the territorial governments, levels of government, have seen these forms before, have seen these headings in there, have seen the questions that are asked, and unless they have contacted the Board directly, which I don't know if they have or not,

they have let it stand in the application, as opposed to saying you should not be asking these questions, it's not within your mandate.

So, I think there really is some agreement, at least on some level, that this potentially is part of the role of the Water Board. And as I say, from a public perspective, from the perspective of just a resident of the community, because we do not see other regulator agencies stepping in and taking action, we look to the Water Board to possibly do this, to fill this void that has been left by the other agencies. Whether we should do that or not, I guess, is up to the legal minds that will discuss this further.

As part of the written intervention that I submitted to the Board, I ask for a couple of things, restrictions on burning, specifically, that said that no burning at any time of the year when the wind direction could cause smoke from the landfill to move into the community. I believe I asked for this a little over a year ago, as well, at the proceedings then. And no burning between the dates of April 15th and the 1st of October when the wind direction could cause smoke from the landfill to move over the causeway area, the north 40 recreational area, or the Sylvia Grennel Park area.

Me reasons for this type of request are the contaminants generated by the municipal open burn are toxic, specifically, plastics when burnt in low temperature create some very toxic materials. A report that was on CBC radio last month, by a worker from the United Nations, I might add, specifically mentioned the dioxins and ferrins that were being created during open burning. We also know that there are certain stabilisers - things that make plastic stiff - used, one of them being cadmium, which is... in the periodic table it's a heavy element, and it can cause serious health problems.

Unfortunately, these issues were not addressed in the last license. I certainly hope that they are addressed in this particular license.

With regard to the abandonment and restoration of previous used municipal sites, again we see... right now we see a commitment, or a stated commitment on the part of the municipality to, within a year or so, develop plans, I believe, for abandonment and restoration of the previously used landfills. We still see, across the inlet, the old landfill that was used prior to this one, located on the side of a hill, with refuse exposed on the side of the hill, and water running through it directly into the ocean. Now, I realise that the oceans are the responsibility of the federal level of the department and not the Water Board, but it is a problem.

The issue of enforcement is still a matter of concern, at least to me. This was a topic that was discussed at fairly great length at the last Water Board hearing, and I don't know if indeed any resolution was arrived at after that process or not. From outward

appearances, I don't think it was. We still have many of the same processes taking place, many of the same problems are still in place, and it remains that nothing happens, at least to outward appearances. So, that issue, it would seem, still requires some sort of resolution.

The... I mentioned to Rob Eno after his presentation that if he was the bad guy then I was the really bad guy, because he said two years would be a reasonable length of time, and I say that two years is probably one year too long. I say that because over the one-year period since the last hearing, a little over... more than one year, concrete progress, something that we can touch, hasn't taken place. I remember, at the last meetings, different people from the town sitting there saying, 'Things are going to be different now. We've got our act together. We're moving forward.' And to some degree, as I say, on paper, there has been movement forward, but nothing that we can look at and say, 'Yes, this is concrete, physical progress.'

That issue, coupled with the issue of enforcement, which as I stated in the written intervention, that until the issue of enforcement is really straightened out so that the public of Nunavut knows who is responsible for exactly what, then possibly it would be a mistake for the Water Board to issue any license in excess of one year, at least until such time as that issue is settled.

Just before... sort a quick summary of the written intervention, just before I conclude this by popping up a couple of overheads, I would like to address a comment this morning by Mr. Tidball, legal counsel for the municipality, who mentioned by-law... and I believe it was number 200, which makes the discharge of harmful materials against municipal regulation. I wasn't aware that that by-law existed. I'm quite happy that it does. However, a statement was made along the lines that if an individual saw something along those lines happening, that possibly they should report it to the municipality, which I completely agree with. However, the municipality has a number of other by-laws, traffic by-laws, for example, and in traffic by-laws they have people who are out there every day of the week just making sure that I, personally, am following the regulations. They have by-law officers who are making sure that I follow the regulation of coming to a full and complete stop at every stop sign, that I have a seatbelt, that I have a driver's license, that my registration and insurance is in the vehicle with me.

If there is a by-law... or, as there is a by-law in place, I guess the question that I would have to ask is why is this by-law not enforced as the traffic by-law is?

At this point, I'd like to quickly toss up a couple of overheads, which would show the Water Board members and staff who don't live here on a regular basis some of the items I'm talking about, and maybe give a little bit of explanation about them, if that is okay.

Can I take this with me? Thank-you.

I never thought I'd be in front of an audience with a mike in my hand!

Well, they didn't do a really good job on this one! This is a picture that was taken on the 22nd day of August, this year. The picture is rather dim. This is actually a sea-lift vessel. This is the town, and this is a cloud of smoke that's hanging over the town. This cloud of smoke covered the town area, covered the Tundra Valley subdivision, the airport, as I remember. I was standing up on a hill when I took a picture of this, and due to the colour of the smoke you actually had difficulty making out the airport terminal building. And this cloud of smoke extended both ways, both east and west. Definitely over inland waters. Any chemicals or particles that were coming out of that smoke were not only falling on the tidal flats to be picked up the next time the tide came in, but they were falling on the river, the fresh water on the other side, and very potentially in our drinking water source.

Maybe if I move it up a little bit... this image was taken on the same day. The red spot here is the fire, whatever was burning that day. Normally the smoke that we see coming off the landfill is sort of a smoky grey colour, like this, which to my understanding is normal household refuse they generally burn like that. What we see here is a large cloud of black smoke generated, I assume - and quite frankly this is only an assumption - by something of a far different nature than what we would generally throw away from our house. It was mixed in with the... you see the smoke coming - both types of smoke - coming from the same area, which leads me to believe that the sorting at the landfill is either extremely minimal or not done at all.

Mr. Chairman, this one... I didn't put a date on this one, so actually I'm not sure of the actual date of it. This was a fire at the municipal landfill where the fire department was called out to help do something about a burn that was out of control and producing, again, some extremely black smoke. You can see that we're getting into an area... this is part of the dump that is not normally burnt. I guess that's the soak end of the dump, where vehicles, tires, appliances, and whatnot go. We seem to be fairly close to that area of the dump. There's a lot of tires here, and that would been a very serious matter, if the tires had decided to go as well.

This is, Mr. Chairman, the last image. It's an image taken with a digital camera. It's taken from the south end, with the camera pointing up this way. In behind the smoke you would see - if you could see through the smoke - you would see the sewage lagoon,

some of the buildings that are across the way on the west 40. This image is to basically tie the problem of pollutants into water. Again, I know, as it has been said a multiple times, it's only fresh water that the Water Board is concerned with. However, the smoke from that particular fire fell on the ice, the ice melted, the contaminants were in the water.

Those images, Mr. Chairman, which I'll be giving to your staff - I have copies of them at home - if anybody's interested they're also freely available on the Internet. I've posted them on my personal web site in case anyone else is interested in grabbing copies of them and printing them out. But they also illustrate, possibly, why members of the public such as myself look to the Water Board to try and address this issue. This is something that our agencies in town see, but apparently don't do anything about.

Again, as I mentioned in my written submission, I would not fell comfortable with giving the municipality a multi-year water license until we have a little bit more of a track record from the new administration, and from the new mayor in council. Thank-you.

- TK: Are there any questions from the applicant to Mr. Mason? Thank-you. Are there any questions from the joint interveners, DIAND, DFO and Environment Canada for Mr. Mason? Thank-you. Are there any questions for Mr. Mason from Community Government and Transportation? Are there any questions from Baffin Health and Social Services for Mr. Mason? Thank-you. Are there any questions from the floor to be addressed to Mr. Mason? Are there any questions from the Nunavut Water Board staff for Mr. Mason? Thank-you. Mr. Tilleman.
- BT: And it is, on the exhibits, we will file and mark them as #13, Mr. Mason's presentation as #14, Mr. Mason's slides \_\_\_\_\_\_\_, and related to that \_\_\_\_\_\_ stated it. So, #13 would be Mr. Mason's written presentation, Exhibit #13, and Exhibit #14 would be Mr. Mason's slides, and we'll mark them accordingly. And also related to that would be, do you have a date for the pictures? I know that you mentioned that two of the slides, at least, were taken on the same date. Do you remember when that was, or is that on your web site?
- MM: Actually, that is... sorry, Marcel Mason. Actually, Mr. Chairman, I believe the dates for those photos are in fact on the web site, the address of which I would be more than happy to provide to the staff. They could mark the entire web site as an exhibit.
- BT: And it is...? So, Mr. Chairman, it would be helpful if we knew the address, because other people in the audience may want to look it up and pull the photos off.

MM: Marcel Mason, Mr. Chairman. The address of the web site is www.nunanet.com, followed by a forward slash, a tilde - which is the little squiggly that you will find up in the top left-hand corner of your keyboard. "Squiggly" is geek-speak, highly technical in nature, which flies in the face of my non-technical presentation, I guess! A tilde, mason, m-m-a-s-o-n.

TK: Thank-you. Mr. Robert Eno, do you have a question for Mr. Mason? Thank-you. Any further questions from the Water Board? Thank-you, Mr. Mason.

We have one individual who advised the Chairperson that he wished to speak. If Mr. Mackenzie is around, please? Would you please come up?

JT: Please state your name for the record, and spell your name.

WM: William A.M.G Mackenzie, m-a-c-k-e-n-z-i-e.

JT: Do you swear that the evidence you are about to give is the truth, the whole truth, and nothing but the truth, so help you God?

WM: I do.

JT: Thank-you.

TK: Thank-you. Mr. Mackenzie, please proceed with your presentation.

WM: Well, there's nothing written. I find this exercise, the part given by the municipality of Iqaluit, not to really represent the people of this town. There's been no consultation with this community, with the shareholders of the municipality, the taxpayers, and other people. This document is the creation of the staff of the municipality. I would have thought that the new council would at least have called a meeting to get the input from the citizens of this community in regard to this very important matter.

The... you're aware, I'm sure, that there's a real boondoggle gone on with this whole process of our water license, garbage disposal, sewage treatment, etc., and unfortunately, the municipality of Iqaluit has not included the community in these discussions. The people who pay for the system, the shareholders of the municipal corporation, the taxpayers, have never been consulted, and whatever decision that you people come to will have a big... reflect on the community and the people that own property in this town.

The municipality asks for the right to take so many litres of water out of the lake, Lake Geraldine. I believe there's been some problems, maybe with the dam, or the berms of that lake. In the fall of '99 there were certain measures taken by the municipality. They were hauling fill up there for some reason, and there was a lot of water in that small river coming out from the dam.

I think that there should be a study made on the dam site, and the berms to anchor the ends of the dam, to make sure that this facility is adequate to meet the needs of the community. As you may or may not know, the lake, Geraldine, the dam has been raised twice since it has been built. Across the middle of that lake there's a spine of rock which precludes getting at all the water in the lake, and it was recommended many years ago, I believe in 1970, when they started having water pumped down the hill to serve the community, that this spine of rock be taken out, and that would give a larger access to all of the lake. The municipality has never continued that, or done anything on that recommendation. So, I believe there was ideas to trench, or to get at other water that flows into that lake.

In Mr. Hough's presentation, he mentioned that - and that was the municipality of Iqaluit - that they had certain responsibilities re. the dump sites in Iqaluit. Well, I've been here 36 years, and during that time the municipality of Iqaluit, or the settlement, as it was back then, used the dump at the Grennel River for domestic garbage, the north 40 was used for metals, building material, etc. It used to be burnt quite regularly, and the Apex Hill dump site.

The community has the responsibility for doing something that dump in the north 40. It was used as a domestic garbage dump throughout the years, and after the dump in Apex was closed - which was likely in 1977 or '78, and before what was called the Honey Bucket Hill, which was across from the community was opened as a dump - the dump on the north 40 was used. The dump that we now use, or as it is now called, the waste facility, was supposed to be able to contain any draining of effluent or contaminants into our water supply, the lake, Frobisher Bay, was a proposal given by the Government of the North West Territories. The community... it was given to the community for their permission to go ahead with it, and the community said no. It was turned down, on a public vote, because at that time the Government of the North West Territories, and the municipality, were not facing the whole picture in reference to the disposal of garbage. The burnable garbage, the community was in favour of an incinerator. We got the \$500,000 dump, which actually turned out to cost \$630,000.

We have now ventured into building a sewage disposal system. This system... this has never been consulted with the taxpayers, or the people of the community. This was the brainchild of the administration of this community, had no input at all from the people. There are certain problem with this site. The municipality was made aware of this early enough to do something about it. They did nothing. I talked to the city of Powell River this afternoon, a community in British Columbia, where they have a

system, as we are here, this seaweed system. Their system is up and running. It works barely, and is extremely expensive to operate. And if the municipality of Iqaluit be given a license to operate that thing, it will bankrupt this community. It's like buying a Bentley when you need a Ford. It's an expensive... and actually the people in British Columbia don't think it would work very good here in our cold temperatures.

[End of Tape 6]

## NUNAVUT WATER BOARD Public Hearing Iqaluit Municipal Water License Renewal

November 23, 2000

Chairperson: Thomas Kudloo

[TK = Thomas KudlooWM = William MackenzieBT = Bill TillemanMM = Marcel MasonRE = Robert EnoDS = Doug SitlandLW = Lee WebberJT = John TidballPS = Paul Smith

AW = Anne Wilson SP = Unidentified Speaker]

[Start of Tape 7 - Side A]

WM: The shareholders the municipal corporation, the taxpayers, have not been consulting. I think it would be wrong for you people to grant the municipality of Iqaluit a license until you can be sure that the citizens of this community are not going to be stuck with a white elephant. And that's what we're getting right now. I think, before a license is given that they can draw more water from Lake Geraldine there should be steps taken to ensure that that dam and the berms on each side of it are safe. The municipality of Iqaluit has totally disregarded the citizens, and wishes of the citizens.

We did have a back-up supply of water in this town. In 1970, when we became a hamlet, Lake Catherine was designated as our back-up water supply. Lake Catherine is a small lake on the road to nowhere, known sometimes as (Terry \_\_\_\_ Trail?), where there's now a new development. The municipality of Iqaluit has cut a channel to force run-off water into this body of water, and they're now draining the drainage system from this new development on the road to nowhere into that lake. So, I would doubt if that water is any good, now, for human consumption.

It has been used by the town of Iqaluit. In the early 70s we had trouble with the pipeline coming down from the plant, there, the water treatment centre, and that water was used. The tanker trucks went up there and were able to load their trucks. Now we have no back-up water supply.

The municipality of Iqaluit also contaminates the Apex Creek. They have a program of procuring sand from the end of the road to nowhere. They're working far too close to the Apex River, so every spring, during run-off, this... large volumes of sand comes down that river, and the whole end of Kochesy(?) Inlet, which is next... adjacent to

Apex, is now silted up. And in the 36 years I've been here, there's been a tremendous change in that.

The municipality of Iqaluit has also changed the waterway on the north 40. Now, originally, the north 40 area, the river, those two creeks, they split. One went along the north side of the hill, and was diverted around the sack building base, along the front of the building and down into the bay. The other part of that creek went along the back of the community, down through the town, and into the bay. When the Americans built the sack building, they put a dam across the top end of that valley, and diverted the water away from running across the runway. In the mid-60s, unfortunately, somebody cut that dam, realised they had made a mistake, and deepened that river that the water would run through the back of the community. In the last couple of years the municipality of Iqaluit has allowed for the excavation of fill to such a degree that the river now no longer runs along the back of the community at certain times of the year, not all the time, but at certain times of the year this river does not run along the back of the community it used to. It now comes through that north 40 dump. And that north 40 dump, let me assure you, is very highly contaminated. There's asbestos, there's DDT, and all sorts of other chemicals. For years the effluent from the dry cleaning plant was dumped there willynilly, and now, because they've deepened the... and trenched out so much at the back end of that dump, the creek runs through that, picks up whatever contaminates is there, and runs through into the bay. But when it runs into the bay, it runs through the community, so if any children or anybody else is playing around it... and it is a matter for the Water Board.

I urge you, gentlemen, not to grant this license until the municipality of Iqaluit can show that they are responsible to the citizens of this community. This whole affair with the sewage system is a farce. But it's not too late. It could be changed.

Thank-you very much.

TK: Thank-you, Mr. Mackenzie. Are there any questions? Are there any questions from the joint interveners, DIAND, DFO and Environment Canada for Mr. Mackenzie? Thank-you. Are there any questions from the Community Government and Transportation to be addressed to Mr. Mackenzie? Thank-you. Are there any questions from the Department of Sustainable Development? Thank-you. Any questions from Baffin Health and Social Services? Thank-you. Mr. Marcel?

MM: Marcel Mason, Mr. Chairman. Thank-you. Not necessarily questions, just clarifications for information that is fairly new to me, or is new to me. I would just like to confirm that

the dump site last used prior to the facility we have now was used for honey bags from the community?

WM: The site across from the community, yes. That last site was used for honey buckets first, and then it was, after... in fact, we did have one more dump that nobody ever mentions, because it was actually cleaned up - it was quite a miracle - and it was across from the tank number whatever it is, the Shell Oil... Imperial Oil tank near the causeway. All the sand was removed from that site, it was used as a dump, the community rose up in alarm and demanded, and the council at that time did clean it up. And after that they started dumping the domestic garbage in the site across from the community, which we used to know as Honey Bucket Hill.

MM: Thank-you.

WM: You're welcome.

TK: Thank-you. Are there any further questions for Mr. Mackenzie from the floor? Are there any questions to be addressed to Mr. Mackenzie from the Nunavut Water Board staff? Thank-you. Okay, thank-you, Mr. Mackenzie.

WM: Thank-you kindly, sir.

TK: Okay, we will now adjourn this hearing until tomorrow morning at 9 o'clock.

Mr. Tilleman?

BT: That's a good idea, and I'm just assuming that there would be no one else in the audience that wanted to make a presentation, though as I look around it looks like everyone who's here right now has already presented, so that would mean, then, sir, that it brings us to the point, tomorrow morning, where we begin, that we are in the closing arguments portion of this hearing.

TK: Thank-you. And for everyone's information, here, we decided that Mr. Lootie Toomasie will not participate in the decision-making on issuance of a license because he has missed the evidence, verbal evidence, written evidence, because of his illness. That's for everyone's information.

Okay, there's some fresh coffee there if you want to stick around, but we'll start again... we will reconvene tomorrow morning at 9 o'clock, and we will have our final closing statements, final closing statement by the town of Iqaluit, closing remarks from the Chairman of the Nunavut Water Board, termination of the hearing by the Chairperson, and closing prayer. We'll do that tomorrow morning at 9 o'clock.

Thank-you, and we'll see you in the morning.

[End of Tape 7 - Side A]

[Start of Tape 7 - Side B]

TK: We shall reconvene.

Before we get into final closing statements of the interveners and other parties, are there any final comments to be made? Mr. Mason.

MM: Marcel Mason. Thank-you, Mr. Chairman. I've just been asked by Mr. Webber to clarify one thing about some of the images that were shown last night. A couple of them don't have dates. To my recollection, Mr. Chairman, all the images were taken within the last year, possibly 18 months.

TK: Thank-you, Mr. Mason. Mr. Robert Eno?

RE: Robert Eno, Department of Sustainable Development. There was a point I forgot to make yesterday. I believe Mr. Tidball was asking about permits and licenses. Our department currently does not have any mechanism in place for the issuance of permits of licenses with regard to incinerators, or anything else, for that matter. We do have provisions under our Environmental Protection Act to set up such a system, but we haven't set one up yet. That's one of the luxury items.

The other point I wanted to make was to reiterate that, in terms of permitting and licensing, our department is operating under the premise that the Nunavut Water Board has jurisdiction over solid waste management, so I just want to reiterate that. And I don't know, is this the proper forum to ask questions of the town, or...?

TK: No.

RE: No? Okay. Thank-you.

TK: Thank-you. Any other comments? Mr. Sitland.

DS: Thank-you, Mr. Chairman. I was just going to say - Doug Sitland - my colleague from Justice isn't here, but I'll talk to her and perhaps she can make the comment. Thank-you.

TK: Thank-you. Mr. Webber?

LW: Lee Webber, Justice Canada. Mr. Chairman, one of the points that came up yesterday afternoon was a report - I believe it was a report, and I believe it was referred to as the Trault Report - which, while I'm not quite sure what it involves, and what it's state of preparation is, I understand that it's a report that the town has had prepared, and that it relates to the condition of the dykes. We left hanging the issue of whether that would be submitted.

JT: Thank-you. It's John Tidball. Thank-you, Mr. Webber, for raising that. Perhaps it would help to clarify. If you'll recall what Mr. Hough told the Board yesterday, OMM Trault is a consulting engineering company that was responsible for supervising the raising of the dam in 1997, and since that time they have inspected the dam on several

occasions. After each of those inspections, as I understand it, a very brief report was filed, really just... almost in a cryptic form, just advising the town that the dam was fine. What Mr. Hough has asked OMM Trault to do with is to come up with a report that sort of covers what they've done over the last two or three yeas, and speaks in a more complete sense to what the condition of the dam is. At the moment we don't have that from OMM Trault, and I think it would be wrong to say that a report exists and we could give it a number at the moment.

What I was going to do in my final remarks was to suggest the wording of a condition that might deal with that, and give us reasonable time to make sure that OMM Trault can get that done. At the moment Mr. Hough has sort of asked them to do it as a favour. They haven't really even been retained to do it in the sense that they have a budget or anything, they were just going to fire off a quick letter. We think it would be better if they took a little time and prepared something that was more complete, so I'm going to suggest a condition for that when it comes to my turn this morning.

TK: Thank-you.

LW: Lee Webber. Thank-you for that clarification, Mr. Tidball. We would be in support of the idea of having a condition requiring the town to submit that report. It is... it sounds as though it will be very relevant material, and I believe that the federal departments, together probably with all the other interested parties here today, would like the opportunity to review and comment on the report. Thank-you.

TK: Thank-you. Mr. Tilleman?

BT: Thank-you, Mr. Chairman. Just talking about exhibits, we have a couple of exhibits we hadn't filed but did discuss yesterday. One was the municipal by-law #200, we think, and we propose that it be marked as Exhibit #15. And also, in the event that there might have been something that was referred to but not specifically marked, as long as it was in the public registry, we should mark down the public registry as Exhibit #16, which are those written documents that have been filed with the Board in the course of the hearing, so we propose to mark the registry as #16, and that will be the catch-all for anything else.

And those are my comments. I take it just from the last exchange, Mr. Chairman, that probably the audience would all be in favour of having the condition imposed that required the submission of that Trault Report through the Board to the parties as soon as it's available, but perhaps we could just ask any other parties if they object to that or not. We're assuming they agree because they didn't say anything, but maybe you should just ask them. Thank-you, sir.

TK: Thank-you, Mr. Tilleman. Mr. Sitland.

DS: Thank-you, Mr. Chairman. Doug Sitland. Yesterday, during questioning, Mr. Webber had asked me whether the five-year capital plan becomes a public document after Standing Committee. The answer to that I did say was yes, but I've since found out the answer is no, it does not become a public document until around February, when the Legislature discusses the main estimates. So, I apologise for that, and just wanted to set the record straight. Thank-you.

TK: Thank-you, Mr. Sitland. Mr. Webber?

LW: Lee Webber. I'd just like to ask Mr. Tilleman for a point of clarification. In making the public record an exhibit, will that public record include not just the material submitted in the run up to this hearing, but also material from last year and from the run up to and the period following last year's hearing?

BT: Thank-you, Mr. Chairman. It's Bill Tilleman, and the answer is yes, the public registry includes, as I understand it, all of the written materials filed with this Board regarding the application for the town of Iqaluit's water license facilities.

LW: Thank-you.

TK: Thank-you. Thank-you. Are there any other questions? It appears not. We are now at final closing statements of the interveners and other parties. If I can call the joint interveners, DIAND, DFO and Environment Canada to make their final closing statements, please.

PS: Thank-you, Mr. Chairman. My name is Paul Smith. I'm the Manager of Water Resources for the Department of Indian Affairs and Northern Development in the Nunavut Office. I will be making the closing statement on behalf of the federal interveners.

As a re-cap to our presentation made at the outset of this public hearing, the federal departments recommend a five-year license which will allow the time of Iqaluit sufficient time to accomplish the following objectives. To have addressed the potable water supply, future demand, and the integrity of the existing Lake Geraldine Dam. Number two, to have in place a properly decommissioned lagoon, and a functioning sewage treatment plant. Number three, to have in place a long-term waste management facility with a hazardous waste management plan, and land farming area for contaminated soil, and to have abandoned and reclaimed the existing municipal waste disposal site. Number four, to have initiated reclamation work at the old west 40 and Apex dump sites, which will be accomplished by the re-submission of updated abandonment and reclamation plans.

Shortly after the issuance of a license, the town will have to prepare an updated operation and maintenance plan, or plans, for the current waste disposal facilities, and to submit a spill contingency plan. We also would suggest that an S&P similar to that proposed in the 1999 license.

The federal departments stand ready to participate in a timely and thorough review of all proposed submissions with the view that during the term of this license the town of Iqaluit will have made the most significant advances to waste disposal techniques in the history of this community.

I would also like to take a moment to speak on behalf of DIAND. Over the last few days, several well thought out written and oral submissions have been given to the Board in regards to this meeting. These submissions, as a collection of evidence, we feel will allow the Board to make a fair and balanced license for the town of Iqaluit.

Having listened to the presenters and the town, one overriding issue emerges from the discussion, namely trust and confidence in the town, whether it be the town assuring the Board that it has a strategy, or individual citizens noting to the Board that they have heard this position before. DIAND does have confidence in the town to achieve their desired results. We, however, believe that this trust can only truly be measured in the town's ability to meet guidelines, targets and/or goals as set out by a Water Board license. This is not an easy task, as the Board must take a fair and balanced approach while still recognising that key targets need to be set. I might add that there are processes in place which would allow for amendments to the license should the town recognise that they might not meet a deadline.

Overall, the next five years is a key time for the town of Iqaluit. We recognise, as several interveners pointed out, that Iqaluit will be transitioning from an old - perhaps even antiquated - infrastructure to a more modern system to keep up with the growth of the town. Clear plans and strategies need to be in place during this transition period to make and communicate to everyone - and regulators - how events and activities will unfold and be managed.

In addition, a year or two of operation in the modern system will allow the Water Board to have a better understanding of the town's management of the systems.

With the transition of responsibilities from the NWT to Nunavut, we, in the Nunavut Regional Office, look forward to working with the Board on issues such as the Iqaluit water license. With respect to the inspection and enforcement of licenses issued by the Nunavut Water Board, DIAND will want to work very closely with the Board and the licensee on a day to day basis.

With this recognition, it is our hope that the Board will choose to involve our office and any other agency in the final stages of license development, or to review any proposed draft licenses, to ensure that our role, which is to enforce the work of the Board, can be fulfilled. [Inuktitut] Thank-you.

TK: Thank-you, Mr. Smith.

LW: Lee Webber. I would reiterate at this point that in making this submissions I'm speaking purely on behalf of the Department of Indian Affairs and Northern Development.

I'd like to touch on three themes. First of all, balance. Second of all, validity of the license. And thirdly, enforceability of the license.

Balance to begin with. The tow has apparently made honest efforts to move ahead in the areas of water management, water and waste management. It appears that they may be on the right track, and it appears that they may have the will to stay on the right track to put the necessary systems and practices in place. That is one side of the story, and it should be given its due.

There is another side, though, and attention must be paid to that side of the story, as well. There is not a proven record of positive achievement on the part of the town. We have not yet seen accomplishments. We have not yet seen the intentions converted into solid, accomplished performance. So, on the one hand, let's welcome the movement in the right direction, the movement that the town has shown. Let's welcome the indications that they've given in the last day or two, indications of intention and of planning. On the other hand, let's make sure that he license contains conditions which enable us to keep tabs on the town's performance from this point forward. Let's make sure that we have conditions which will ensure that the town is accountable throughout the term of the license.

Now, the town has said - with a certain amount of repetition - first of all that they have plans, they are doing planning, secondly that they are short of cash. Here, too, we'd like to argue for balance. It's good to see that the town has plans, has ideas for water and waste management, and certainly there is reason to believe - there is good reason to believe - that there are limits an the funding that's available to the town. In no way should these matters be disregarded. But again, it is necessary to strike a balance. Plans to complete a water treatment plant are not the same thing as an actual commissioned water treatment plant. Cash is certainly not available in endless supply, but the lack of funds cannot be an answer to every concern.

The idea of balance also has a bearing on how for the Board should go in the conditions that it sets. If it's true that the Board should not simply back away from

imposing conditions, it is also true that it should not go too far in imposing conditions. Yes, certainly the Board should set conditions that will ensure the town keeps moving, and that will allow everybody concerned to hold the town accountable, but at the same time I would urge the Board to shy away from overloading the license with conditions, and I would urge the Board to make sure that the performance expectations built into the license are expectations that can reasonably be met.

Now, we - that is to say, DIAND - believe that the conditions which we have proposed are consistent with this idea of striking a balance, and would serve to achieve the proper balance.

The second theme that I wanted to touch on was the issue of validity of the license, and the validity of any and all portions of the license. Under this heading, what I have in mind is, at least primarily, the question of jurisdiction, or perhaps I should say the questions of jurisdiction that we've spoken to in the last day or two. In considering whether the Board does or does not have jurisdiction with respect to some particular matter, my starting point is the test which I set out in my submissions of October 25th, 1999, and which I read into the record. Both of two things must be present in order for the Board to regulate a particular activity or phenomenon. First, there must be a substantial link, and a reasonably direct link between the activity or phenomenon and the deposit of waste into inland waters. Deposit of waste or the use of water, but I think that when we talk about these issues of jurisdiction, generally we're addressing the waste deposit side of the equation.

So, first there must be this substantial, reasonably direct link. Secondly, the Board's true objective, what the Board is actually aiming at, has to be a controlling of waste deposit into waters. If what the Board would be really trying to control is the smell from burning, or the inhalation of noxious substances or fumes from the burning, or the substances in the air landing on skin, or the unsightliness of the dump burning, if what the Board is really after is the controlling of any of these things, then the Board should not rely on some incidental effect on waters, some merely incidental effect on waters. The Board shouldn't rely on the idea that there might be some incidental effect on waters as a rationale for stepping in and posing conditions.

Now let me clarify my position here. I do not take the categorical position that the Board cannot regulate burning. What I say is that in order for the Board to have a legal basis for regulating burning, the test that I've set out, this two-part test, has to be met. There has to be a link, there has to be a genuine objective of regulating the deposit

of waste into water. Also, there has to be good solid evidence to support a finding that this link exists.

There have been references, both orally, in the last couple of days, and before that in one or two of the written interventions, to the environment. And it has been noted in these comments, in these interventions, and for that matter, elsewhere, that water is only one part of the environment. The water includes water, it includes other components, the various components are inter-related. No doubt at all that that is the case. The various components of the environment are inter-related. However, this Board has jurisdiction with respect to only one component of the environment. The parties to the Land Claim Agreement, and Parliament, decided, for better or for worse, that they would parcel out jurisdiction over the environment, and that no single body would deal with all components of the environment or with all matters relating to the environment. I say for better or for worse, but I think that there is a certain wisdom in that approach.

The parties to the Land Claim Agreement and Parliament gave this Board jurisdiction with respect of inland waters only. No matter what other statutes might say about the environment as a totality, and no matter how other statutes might define environment, the statutes that govern the Nunavut Water Board speak in narrower terms.

I think it's fair to say that everybody in the room had a lot of sympathy for the comments of Mr. Mason and Mr. Mackenzie. However, at the end of the day, we all have to recognise the fact that this Board is the only one of these organisations with authority in respect of the environment, and that this Board has authority with respect to certain environmental matters only.

The Land Claim Agreement and the *Waters Act* don't give the Board some sort of residual power with respect to the environment. In other words, it doesn't have the power to step in and fill gaps in environmental regulation where gaps exist, or where they're simply perceived to exist. Nor does the Board have the power to back-stop other regulatory authorities, in other words, to step in and do the jobs of others where somebody feels those others are not doing their jobs.

The fact that the town is in front of the Board, or the town is in front of the Board on an environmental matter, doesn't mean that the Board can assume jurisdiction on all of the town's activities in relation to all components of the environment. I want to reiterate something I said a moment ago in discussing the link and the objective. That is that there has to be good, solid evidence to support a finding that the link exists. It cannot simply be presumed, that is to say, the link between whatever act or phenomenon the Board is contemplating regulating and the deposit of waste into waters.

Also, even if it might be possible to argue that the Board can regulate burning, that it's legally possible for the Board to regulate burning, I would urge the Board to turn its mind to a further question, which is whether the Board should do so. A lot will depend on just what particular conditions concerning burning the Board might be thinking of. There will be questions as to whether anything that the Board might impose would be the best use of the town's funds, especially if an incinerator is in... the building of an incinerator is expected to occur in the near future. Perhaps it would be best to focus on getting an alternative to burning up and running.

It's also worth pointing out, since DIAND is the enforcement authority, that, certainly if it's a matter of monitoring air emissions, DIAND currently has no experience in that area.

The issue of jurisdiction isn't just an intellectual matter. It's not just a question of wanting things in nice, little, legalistic, lawyerly boxes. And here I come to my final theme, which is enforceability.

It's fine to urge that the Board should do something, that somebody should do something, and the Board is here in Iqaluit today, it's the one that's in front of the people, and therefore the Board should do something, about one environmental problem or another in the town. However, if the Board take the plunge and does something where it has no authority to do so, then when the Board does something, it will really be engaging in an empty exercise. It will be an empty exercise because the license condition which the Board imposes but lacks the authority to impose is a license condition that will not be enforceable, and which will therefore create difficulty and uncertainty for all concerned. It won't advance anything.

Finally, apart from the legality of enforcement, I'd urge the Board to consider practical aspects of enforcement, the fact that there is only so much manpower available for enforcement, that that manpower has to cover off several licenses in several parts of the territory, and that in other ways there is a limit to what any enforcement authority can be expected to do.

So, having touched on that last point of enforcement, I'll bring us back to the question of balance. We want conditions in the license that will enable the Board, and will enable DIAND as the enforcement authority, to keep the Board accountable. At the same time, we think that the conditions should be reasonable and should be reasonably enforceable. Thank-you.

TK: Thank-you, Mr. Webber. Mr. Smith. For the record, does the Department of Fisheries and Oceans wish to make a final comment?

- AW: Anne Wilson, Environment Canada. Our comments were included in Mr. Smith's presentation. Thank-you.
- TK: Thank-you. I spotted an Elder here, and I wish to recognise him. Celestine Ekejut(?) is present, resident of Iqaluit. Final closing statements from the Community Government and Transportation?
- DS: Thank-you, Mr. Chairman. Doug Sitland. I just wanted to make some very brief closing comments to the Board, and I think they've been echoed by my colleagues from DIAND and the federal government. I believe the town is on the right track, but again, I think the town and indeed our department need time to respond to the changes, and the requirements of the town. A recent focus of the department is in the development of environmentally-sustainable infrastructure, and with the recent announcement by the federal government of Canada, the Nunavut Infrastructure Program which has not been signed yet we look forward to working with our colleagues in DIAND and indeed the Treasury Board to implement more environmentally-sustainable infrastructure across all of Nunavut, but again, this will take time.

We want to work with communities and our federal partners, and the institutes of public government, in improving the situation for water treatment, solid waste management and sewage disposal. And I think it's important to remember that it will take time to implement these improvements, not only for Igaluit but for all of Nunavut.

So, I'd urge you to take that into consideration, and again, echoing possibly the comments from Mr. Webber, there's a need for balance. Thank-you.

- TK: Thank-you, Mr. Sitland. Final closing remarks from Department of Sustainable Development?
- RE: Robert Eno, Sustainable Development. I'm going to try to be brief, which is difficult for me sometimes. My closing one-two punch was in my general comments of my written submission. I'm not going to go over that again.

There was an issue that was brought up by...

[End of Tape 7]

## NUNAVUT WATER BOARD Public Hearing Iqaluit Municipal Water License Renewal

November 24, 2000

Chairperson: Thomas Kudloo

SP = Unidentified Speaker]

[Start of Tape 8 - Side A]

RE: ...around town for the last year. I did not specifically discuss it in my written submission, I alluded to it, but I didn't specifically discuss it because I don't generally like to give rumours too much credence, because I haven't seen any basis in fact to support them. However, after Mr. Mackenzie's presentation yesterday, I urge the town to address this issue, either refute it or just to support their case, because the rumours are going around town, and I don't think it serves any useful purpose to ignore it. It should be addressed.

In terms of hazardous waste management, as I said yesterday the Department of Sustainable Development is quite willing to assist the town with this. However, gentlemen, the town has to take the lead on this. I can't do their job for them. If they want my assistance I'm quite willing to help, but they have to take the lead on this, and I will do everything I can to assist them. That's what I get paid the big bucks for. [laughter]

I also want to reiterate that the town should be carefully screening the business licenses that come in, that the town should not expect to assume the entire burden for management of hazardous waste. The businesses should be sharing in the cost of this, and again... I mean, one of the things I could suggest is to set up a meeting with business, industry, government, municipality, see if we can work something out, because I think it needs to be addressed, and thus far it hasn't been.

In terms of... and again, we weren't supposed to bring up the issue of jurisdiction, but it's come up again and again, so I'm going to comment on it. I feel that I have every right to do so. In terms of jurisdiction, Mr. Webber brought up some very valid and compelling points to support his argument. However, Mr. Mason yesterday also brought up a valid point that I agree with, and solid waste management is part of the water license. It's included in the water license. If the Nunavut Water Board does not have

jurisdiction over this, then take it out. In the meantime I suggest... I don't know whether you folks have the power to do that, but I suggest that you approach the minister - your minister - and advise him that there could be a regulator vacuum. We need to solve this. This issue has come up time and again. Every year it comes up, and we've yet to resolve it, and it's an argument that we've making for years, and I think it's time to do something about it. So, if you have jurisdiction over solid waste management, then keep it in the license. If you don't, take it out, and there won't be any more arguments about it.

Finally, as I said yesterday, the Department of Sustainable Development, and me personally, has every faith in the new town council. Like I said, I know some of these people, I've know for quite a while, and I know that their honour and integrity are beyond question. However, I've not seen anything in the presentations to change my mind about advising for a two-year license. I know they have the best of intentions, but we need a mechanism to keep everybody honest, and I said yesterday, this is the only forum that allows the public a chance to comment. So, I maintain that the... or, rather, I advise the Water Board to issue a two-year license. I think that will give the town ample time to get something together, at least get the two major issues together, and that is the establishment of the sewage treatment plant, and of the management of the long-term solid waste management facility. And I think after two years something should be in place, or something should be moving. We should see some evidence of some activity in that regard, and then we can take it from there.

And thank-you very much, that's all I have to say.

TK: Thank-you, Mr. Eno. I call upon Baffin Health and Social Services for their final closing remarks.

BS: Thank-you, Mr. Chairman. My name's Bonnie Segal and I represent Health.

For my final remarks, I would just like to reiterate that we really don't know, in any detail, a lot of the steps that are going on at present, let alone anything about future plans of the town. So, it's difficult to comment on how conditions should be put in the water license to control these present and future activities. We have a lack of information on funding, where new sites are going and what sort of technologies are going to be used there, and what are the concerns that these new sites, or even the closing of old sites will bring up in he future.

So, there is a need for all parties to have a fair chance to evaluate all of the material that will be produced in support of plans and actions that are going to be coming up in the next couple of years.

This is one of the only established forums for the general public to have their concerns voiced and recorded, so I urge no longer than a three-year license. In fairness to the public and the interveners, they really need the opportunity to be heard on these matters, and in the interest of public health, I don't think it's a good idea to have projects completed before we've had a fair chance to completely review, and the public to have a chance to comment.

So, the ones that are going on and we have some information on right now should be done in the next three years. The ones that are still in the early planning stages, by the end of two to three years they should have more concrete information to bring to the Board and to the public for comment, and to the interveners.

So, in fairness to everyone, I would urge that you keep the license confined to three years, and any conditions you put on the license deal with issues that we have concrete information on, or the request for more information as it becomes available.

Thank-you for your time, and I'll be available to anyone who has any questions in terms of what my role is, at any time. Thank-you.

TK: Thank-you. I call upon Mr. Marcel Mason for final closing remarks, please.

MM: Marcel Mason. Thank-you, Mr. Chairman. I'd like to preface my remarks with a vote of confidence for the new mayor. I believe Mr. Matthews has every intention of doing everything that he can to make sure that the town moves forward on these matters. The same with Mr. Butler. However, having said that, I believe that the one word I'd use to describe what's happened over the last year, and indeed over the last couple of days, here, is uncertainty.

We are uncertain, based on the municipality's previous actions - or inactions, as the case may be - if conditions are imposed they will be followed. We are uncertain as to if the plans the towns has made will be followed through on. Indeed, Mr. Chairman, because of the way the territorial budgeting process works, we're even uncertain if there will be adequate funds to allow the town to follow through on its plans, regardless of their will to do so.

We are, from a public perspective, anyway, uncertain as to who has jurisdiction over what. We are, in many cases, uncertain who has enforcement ability, and over what. There's a great deal of uncertainty here.

Because of that, my submission asks for a one-year license. If a multi-year license, a five-year license that the town has asked for, is granted, and any of the uncertainty factors kick into gear, then where is the public? If a five-year license is imposed, and there are a number of conditions attached to the license, and the

municipality does not abide by those conditions, or, as in the case of a couple of conditions imposed in the last license, does not see the necessity of following through on those conditions, where is the public?

And if we are uncertain as to who has jurisdiction over what, and who has enforcement authority over what, then we really are tied up in a little ball with nowhere to go.

As I said, I have every confidence in the new administration. I have every confidence in the new council. But there are some very, very high levels of uncertainty surrounding everything. And because of that, I would urge a short-term license. A one-year period of time will give the municipality time to get the sewage treatment plant in gear, as well as get some initial data from it as to how effective it is. One year from now, if the municipal plan is followed, then we will be probably able to go for a new incinerator.

Thank-you.

TK: Thank-you, Mr. Mason. I shall call upon Mr. William Mackenzie for final closing remarks. Thank-you. Let's take a fifteen-minute break, here, before I call upon the town of Iqaluit for their final closing remarks.

[break]

TK: ...Iqaluit to make their final closing statement.

JM: Thank-you, Mr. Chair. John Matthews, Mayor of Iqaluit. I will have a few closing remarks before I turn it to Mr. Tidball. I'd like to thank everyone who participated -

TK: Mr. Matthews, the mike is not working.

JM: Thank-you, Mr. Chair. John Matthews, Mayor of Iqaluit. I'd like to thank the participants, I'd like to thank the interveners for the well thought out presentations that have been provided, the administration of the Water Board, and the Water Board members themselves.

When I made my introductory remarks, I referred to the reasonableness of our presentation, and I think that's been shown, and I think it's been appreciated by everyone here that the town is trying to be as reasonable as possible. The town has made a commitment to clean up, and we'll continue to perform in light of that commitment.

We are trying to involve the community as much as possible. From the community level we go to committee level, and then it finally reaches council. So, any decisions that are made are well thought out, and have as much public input as possible.

I think it's fair to say that the harshest critics are usually ourselves, and I think in the presentations the interveners who have suggested that we be limited to a one-year license are from ourselves. They are residents who are speaking on their own. And we very much respect what they say, we very much listen to what they say, but I think it's necessary to share with the Board that these issues, although very, very important, are not the only issues facing the community. We just went through an election, we listened to the people, what issues are important. As has been noted, the community is growing, the problem of homelessness is very acute, and we just have many other problems. The problems we're facing now that have been presented by our residents are very real, but they are not our only problems, and we want to make that point to the Board.

We are requesting a five-year license, with reasonable conditions. To prepare for anything shorter than that takes the time of our administration, takes the time of council, and costs money.

We want to meet the priorities that the people in the community have addressed, and in order to meet those priorities we are requesting that you do give us a five-year license so that we can balance one priority against another.

Thank-you very much for your time.

TK: Thank-you, Mr. Matthews. Please proceed, Mr. Tidball.

JT: Thank-you, Mr. Chairman. It's John Tidball. I think I only have to do this once, and that'll be it.

There are three parts to my final comments to the Board. I first wanted to start with some general comments. Secondly I want to briefly go through the issues one at a time, and canvas with you where we are on them, because I think what I'm going to suggest to you is that we're actually all very close on most of the issues, and there really isn't a whole lot that's outstanding before you, in terms of things in dispute. And thirdly - and this will be the dullest part of it, I assure you - I'd like to go through conditions that we have discussed throughout the hearing, and sort of wrap that up for you.

So, first of all, on general comments. What I'd like to say to the Board is that I would like you to have regard to five specific things, and to a certain extent the mayor has spoken to the first one, and let me just repeat that we'd like the Board to have regard to Iqaluit's willingness to work in cooperation with the Board and other government departments towards reasonable conditions of the license.

Secondly - and again, I'll echo the mayor's remarks that he's just made - we'd like the Board to have regard to the phenomenal pressures that Iqaluit is facing right now, especially in the area of public works. The mayor has spoken to other things that are priorities of the community, but even on the public works side, there are - as you have heard - substantial pressures to get things done. There is the new sewage treatment plant

that Mr. Hough told you yesterday occupies... I forget how he put it, but I think he wishes he had time for other things beyond it. There is the matter of a whole new waste disposal system, and there is looming on the horizon the possibility that new water supplies will have to be located for the community.

I can tell you, Mr. Chairman and members of the Board, in my experience.. and I never really did introduce myself, but I do work like this, primarily in Ontario, for municipalities across the province, and I can tell you even from a much larger municipality, urban municipality in Ontario, those three challenges alone, over a short period of time, would strain an administration to the breaking point.

The third thing I'd like you to have regard to is the fact that Iqaluit has finite resources. It's obvious, I think, without saying it, that there is only so much money that can be raised from taxpayers to pay for any of the priorities of the community, and that the remainder has to come from other levels of government, and I very much appreciated Mr. Sitland's remarks to try to put that into perspective from the territorial government's point of view. The territorial government also has other priorities, and all of those have to be balanced.

The fourth thing I'd like you to have regard to, and I'm going to echo, to a certain extent, Mr. Webber's comments. Again, I appreciated his comments, and for the most part I agree with them, that the Board cannot turn itself into more than it is simply because other government departments either haven't chosen to exercise authority that they legitimately have, or that there is a gap, so to speak, in the legislative framework, and there's a need to fill it. Your jurisdiction, as Mr. Webber has suggested to you, comes from the Land Claims agreement, and it is over the use of water and the disposal of waste into water. I agree with Mr. Webber's suggestion to you about the... I think it's actually a two-part test, and I'm not going to repeat any of it.

I would point out to you, when you're considering this notion of who has the ability to regulate and who doesn't, that you may want to have regard to some of the territorial statutes. In particular, there were two regulations, or three regulations, I think, that Miss Segal mentioned to you, and you may want to have regard to them if you're concerned about the ability of some other government department to regulate. It's clear to me that under the public sewerage systems regulations and the public water supply regulations, there is a fairly broad jurisdiction vested in the Department of Health and Social Services, Baffin, to deal with much of what we've been discussing, certainly on the water and sewage side.

The waste side is an interesting... it's an interesting problem and I've already made comments to you on it, and I'm not going to talk generally on it. I'll come to specific issues a little bit later.

I would also refer to you, and I greatly appreciate Mr. Eno's remarks first thing this morning, where he dealt with the powers of the Department of Sustainable Development under the *Nunavut Environmental Protection Act*. He said something I was going to point out to you, that... in fact if you want to look at it, it's in Section 10.1 of the Act, the Department of Sustainable Development actually does have licensing powers, and if you go a little bit further and go to the back of the Act and look at the powers that the territorial cabinet has to make regulations, you can see that they can make specific regulations with respect to what I would term waste management. They can make specific regulations on licensing anything or everything.

And I guess I remind you of that simply to echo the point that the jurisdiction is there. There is another department that has the ability to use it, and I appreciate very much Mr. Eno's remarks that they consider it to be a luxury and they haven't got around to establishing it yet, but I guess I would echo Mr. Webber's comments and urge the Board not to sort of jump in, when it seems clear to me there isn't jurisdiction to do certain things.

The fifth thing that I wanted you to have regard to, and this is almost a corollary point to the last one, is that if the Board chooses to stretch its jurisdiction, I think it should have careful regard to any precedence it sets. The Board regulates municipalities across Nunavut, and it would be perfectly reasonable for citizens of any other community, should the Board decide to go, perhaps, than it might ought to in some areas, and impose conditions on the capital city, it would be perfectly reasonable for citizens of other communities to expect the Board to do the same thing in their communities. And I say that purely for the purpose of saying this is not just an issue of the capital city of Nunavut, and things that apply here. It should apply equally across the territory.

Now, I want to move, then, to the second main area, which has to do with issues, and I'll preface it simply by saying our approach, as you've heard the mayor say, is to try to, to the best we can, to resolve issues, to be reasonable, and to try to meet parties halfway. And as a result, I don't believe that there are a lot of issue that are really outstanding. They are outstanding in the sense that the Board has to determine them, but as amongst the parties there aren't. The first one is the best example of that. The first issue that was identified for the Board was the issue of long-term water supply. You have heard Mr. Hough describe what the municipality plans to do. There doesn't seem to

be any disagreement amongst any of the parties about that, and there seems to be an agreement with a condition that would require Iqaluit to do a study on long-term options, and as part of that study to include some of the things that were contemplated in the condition last year, and that was the suggestion of the federal government. Iqaluit has no difficulty with that. And I'm going to come back to all of this when I go through conditions, but when we come to that I hope that's all covered off.

The second issue is the integrity and the stability of the Lake Geraldine dam. This is a tricky issue, and it will require some... it may require some judgement on the Board's part. I liken it to something of a chicken and egg issue, and in retrospect, I guess, the municipality regrets not getting into this issue more deeply last year, because obviously that was the place to have dealt with it. We have the odd situation where, from the municipality's point of view, they don't think there's anything wrong with the dam. They have advice from their engineers that there's nothing wrong with the dam, and those engineers have been inspecting it since 1997, and so it sits here with no idea of what the concern is. The concern dates back to last year. I haven't yet heard any real rationale for why there is a concern about the dam, and so we're stuck with, do you believe the glass is half full or the glass is half empty?

The suggestion that I would make is, if we can, to try to meet that concern halfway. As I said this morning, OMM Trault has been asked to prepare a report. What we're going to suggest is that, rather than require the town to undertake a formal geotechnical inspection and report, which, is I understand it, is a bigger something, requires drilling and the like, and a fair commitment of resources, rather than requiring that we'd like to suggest that the Board require the municipality to submit an engineer's report - and we can tell you right now that would be coming from OMM Trault - that simply talks about the condition of the dam based on the information that has been assembled. We're perfectly happy to make that report available to all parties, and we'll see where we go from there.

Further - you may recall that Mr. Hough addressed this - the municipality intends to, in any event, address what I think he called life-cycle inspection and maintenance issues as part of the long-term study that I talked about a minute ago, on water supply. That's going to be essential to asses the viability of Lake Geraldine for additional water supplies in the future.

And one final thing, and just to remind you of it, because it is in the evidence, if you have any residual concern, there is also the fact that, as I understand it, the government of Nunavut is investigating the feasibility of a new hospital, directly

downstream from the dam, if I can put it that way, and as part of that there is a risk assessment on-going on that. And part of that risk assessment has to be an assessment of the structural capability of the dam, because obviously the biggest risk inherent in putting a hospital there would be problems with the dam. So, if the Board needs any other assurance, I simply remind you that that is sitting.

The next issue is the new sewage treatment plant. You've heard Mr. Hough's evidence on that, and you've had a chance to see it for yourself. I think the only outstanding issue is whether there'd be anything gained by imposing a deadline requiring the municipality to have it open in any particular period of time, and I'm going to suggest to you very strongly that I can't see than anything could be gained by that. I'm sure the Board must appreciate by now that the municipality has every incentive to open the plant as soon as it's ready. It wants to do that, you've heard from Mr. Hough on that point. But at the same time, the Board has no recognise that a certain amount of this is out of the municipality's control, and there are complex construction issues to be faced, and Mr. Hough described some of them. At the moment, the schedule is that the repairs will be completed by February, and then the expectation is that it will take about two more months to get the plant ready. I'm not sure what can be gained by establishing a date and requiring the municipality come forward and, say, to amend it if they can't meet it.

At the same time, we have no difficulty, as I think we said earlier, of adopting Mr. Eno's suggestion for a status report to the Board. It seems a reasonable thing. Frankly, we think it makes more sense to file a status report fairly shortly after the plant opens, so that the Board can be advised that the plant is open. And frankly, we don't see any particular reason to have to repeat Mr. Hough's evidence from yesterday, which is all the reasons why the repairs were necessary, and what they do or don't do to the long-term integrity of the plant.

The next issue is the disposal of the sludge from the new treatment plant. It seems to me that there's a consensus among all the parties that there is a need for both a short-term plan and the long-term plan. In my view, Mr. Hough has described the short-term plan for you, and I'm not going to go into it, I'm not going to repeat the evidence here. You've heard it.

We agree that there are issues about the ability to compost in an Arctic environment. That seems obvious. We have some concerns with the practicality of Mr. Eno's suggestion, yesterday, about going in and scooping a bucket of sludge off the bottom of the lagoon to do a pilot project, and we think, as a practical matter, given the timing, we'll probably be able to get sludge from the new plant before we could do that

anyway, and I would urge you to simply accept the evidence that Mr. Hough has given, to allow the municipality to adopt the short-term plan that they described, and we don't really see that there's any compelling logic to have a condition dealing with the short-term plan. They will deal with it as they can.

The long-term plan... clearly Iqaluit needs some time to develop one. They need some time to do it, and I think the only issue has to do with timing. Assuming they can get going on everything next spring and summer, they'll need the summer, at least, to evaluate the composting project, just to see if it works. They'll also be... they also need some time to consider whether or not the new incinerator will be capable of dealing with the sludge - that's a fairly common technique in other incinerators - and in our submission it's reasonable to require that kind of report by the end of next year, that is, December 31st of 2001.

The next issue on the sewage treatment side is the integrity of the lagoon dykes. This is, I guess, a similar issue to the dam at Lake Geraldine, except for the fact that there is a history of some failures. We tried very hard to give you the evidence about those failures. Clearly there were some significant failures back in the 80s, and right up to '91. As Mr. Hough told you, since that time, the dykes are about twice the size that they were before. The problem that occurred in 1997, and I guess we all understand, in retrospect, how it might have appeared to the parties and the Board last year that that was sort of a structural integrity problem, we hope Mr. Hough has explained that to you and you now understand the nature of that issue, and understand that it's really not a structural problem.

Having said that, there's a practical issue, here. The three federal departments are suggesting annual inspections of the lagoon... sorry, of the dykes.

[End of Tape 8 - Side A] [Start of Tape 8 - Side B]

JT: ...lagoon to a back-up facility. You've heard Mr. Hough's evidence on that, and I'm not going to repeat it, but suffice it to say that here are issues about the integrity of the dykes once you empty them, once you empty the lagoon, and that issue has to be investigated fully and scientifically. The municipality intends to do that, and as a result of that, we have suggested a condition, and I'll come back to that a little bit later.

Finally, with respect to lagoon closure, we don't think there's any issues here that are left in dispute, and simply suggest that, as I've just suggested, that Iqaluit be required to submit a plan for converting the lagoon, and that that's the place to address the stability issues.

Now, finally, we come to the solid waste side of things. The first issue had to do with the status of the new disposal facilities. You've heard Mr. Hough's evidence on that point. You've heard that Iqaluit has adopted a plan, that town council has passed a resolution to implement a new waste disposal system that incorporates an incinerator and new landfill. There are a number of submissions to you, notably by the three federal interveners and the Department of Sustainable Development, that as I understand it seek to have that plan submitted again, and frankly I have difficulty understanding the rationale for it. You've heard the evidence, you know that the town has resolved to do that. I frankly cannot see the logic behind filing a one- or two-page document that repeats that and says, 'Yes, here's the town's final plan.'

Iqaluit, as you know, will have to apply to you for an amendment, or I guess an... I don't know whether it would be an amendment to this license, or a new license - I'm not sure how that would play out - for a new landfill, when they get to the point where they have gone through the siting exercise and have designed it. We, I guess, sympathise with Miss Segal's concerns about lack of detail, and I guess, given the length of time that these processes take, some impatience is natural. It will come, and it will come hopefully sooner than later, and it satisfy everyone. Mr. Hough told you, consultants are currently working on this, that a report I think is anticipated by Christmas, and at the appropriate time, I assume in the year 2001, an application will be made to the Board for a license for a new landfill.

You've also heard - and I guess there is some issues on this, and I don't really want to canvas the same ground as Mr. Webber went through on jurisdiction - but adopting the approach he urged you to take, I think it is relatively... I think it should be relatively settled that the Board would not have jurisdiction over the construction of a new incinerator. I agree with Mr. Webber - and I think he said it yesterday - that the Board might well have jurisdiction over the disposal of ash. I agree with that, because that obviously leads to the possibility of discharge to water, but as far as I can see, that matter will be wrapped up in the application for a new landfill anyway.

And it would appear, we believe, from the evidence that you've heard from the Department of Health and Social Services, that here is some approval authority there, and as I've suggested to you already this morning, should the Department of Sustainable Development wish to take the step to implement the luxury, I think, as Mr. Eno called it, it could easily have jurisdiction over the whole thing, if it wanted it.

The second issue on waste management is the contingency plan. There seems to be a consensus that a contingency plan should be submitted if it appears that the current site will be full before the new facilities are ready. Again, you've heard Mr. Hough say that he dearly would like to avoid that contingency, but if it happens, it happens. He has described for you the current thinking about what that plan will be.

It appears to me that the only real issue is timing. In a proposed condition that we put before you, we suggested August 31st. If I read Mr. Eno's submission correctly, he is suggesting that it be submitted six months before closure. If we go to the October date that Mr. Hough is predicting for the site being full, that would imply submission in May. The federal departments are suggesting submission within six months of the issuance of the license, which I assume would be June, and I believe Miss Segal, she was... she wasn't precise, but I think she ended up saying no later than the end of June. She's nodding, I think that's what she said. So, you have kind of an array of dates.

I'd like to suggest to you that to properly investigate the feasibility of the extension, it should be relatively obvious to you that Iqaluit is going to need the summer months to deal with studying the site. Until the frost goes out of the ground and they can get at the site, they really can't properly evaluate the ability to do that small eastern extension of the site, and that's why we suggested August 31st in the first place, and I just urge you to adopt that as the date for submission of contingency plan.

The next issue has to do with operations at the current site, and the only issue appears to be burning. We are very reluctant to get into that jurisdictional issue again, and again I would echo Mr. Webber's comments to you, and I would just like you to consider the practical side of things and consider the evidence that you've heard. I think there's a consensus - and I'm not going to speak for Mr. Mason, he may be the one exception to this - that open burning at the landfill is a necessary evil.

I would urge you to consider some evidence you heard from Mr. Hough yesterday that it's not a simple matter to simply turn off burning, if the town were to do that. It raises very serious issues with respect to Transport Canada's interests in the airport. I can tell you without dipping into the area of giving evidence that where I come from it is a major concern, and Transport Canada intervenes in proceedings such as these, usually, to make their position known about locating food waste or putrescible landfill sites close to airports, and I can tell you with some certainty that this, the location of this in relation to the airport is one that I know from personal experience Transport Canada would take a serious issue with, and I'd urge you to think about that when you're thinking about the idea of imposing conditions about burning.

And finally, I think the evidence you've heard before, you, and despite Mr. Mason's belief, I think he told you that he didn't have any knowledge, or something

like that, that the town burns less often. That's what Mr. Hough told you, and the evidence before you is they no longer burn on Mondays. And I think you have evidence, because you're at the site, that there is segregation of waste going on, and I think Mr. Mason suggested that that wasn't happening.

Now, turning briefly to Mr. Eno, we certainly appreciate the sentiment behind Mr. Eno's suggestion that fire should be extinguished immediately if smoke blows into town. In the written evidence that we provided, we tried to deal with that issue. It wasn't deal with, as much, perhaps, by Mr. Hough in oral evidence yesterday, but there is a significant problem with simply turning off the fire, and I think it's... the Board has to understand the practicalities of it. It just... it's just not that easy, and as Mr. Hough said in the written evidence, sometimes the wind shifts and it's not called for, it just happens, and smoke blows into town. I guess if the town thought it was possible to simply turn off the fire, it would do so. It isn't.

And frankly, I think the Board might want to carefully consider the idea of simply calling the fire department to extinguish it in light of I think one of the pictures of Mr. Mason's, which as I could see showed vast pools of water flowing in and around the waste. I'm not sure that that's necessarily... I'm not sure whether it makes any sense to combat one evil with another one, and in fact, from your point of view, it brings it directly into line with what you're supposed to be doing, which is to deal with the discharge of things into water. And it would strike me that by throwing thousands of gallons of water onto a burning pile, I don't think you have to be a rocket scientist to figure out that there's going to be water to deal with. So, I'd ask you to consider that carefully.

I'd also ask you to consider the merits of Mr. Mason's suggestions. I appreciate the source of them, and the first one seems innocent enough, and frankly the town would do that... does that anyway. If the wind is blowing in a direction that's towards town they don't start the burn. His second condition causes me significant concern, however, and if you look at, I think you should ask yourself whether the effect of that condition wouldn't be to effectively ban burning between the 15th of April and the 1st of October. If you look at the various directions he's proposing, and add that to no burning when it's towards the town, I'm not sure that there are any conditions under which the town could burn.

That's all I have say about that, and the Board will have to consider what it wishes to do about burning.

A new issue emerged since the pre-hearing, and I wanted to deal with that, and that has to do with the management of hazardous wastes. Two parties have raised the issue. Department of Sustainable Development raised it, and I want to say again, and reiterate something I said yesterday, that we certainly appreciate Mr. Eno's suggestions, and in fact you heard Mr. Hough say that the idea of using the business license process to get at that issue is something that's being actively looked at right now. I don't take Mr. Eno's suggestions as being that the Board should attach conditions like that. I think he's trying to be helpful, and we appreciate it. And certainly, from the point of the view of the municipality of Iqaluit, of course, to the extent that it is able to do so, and can deal with hazardous waste generated in the community, it makes sense for it to do so.

Turning, then, to the suggestion made by the three federal departments, as I understand it what's being requested is a condition requiring Iqaluit to develop a plan for the management of hazardous waste. Mr. Chairman, I want to be very clear about this. We have difficulty with the notion that the Board can regulate with respect to hazardous waste that might find its way to landfill and then to, therefore, into water, by way of ground or surface water. We have no difficulty with that at all. That's clearly within your jurisdiction. And I have no difficulty, and I will be suggesting to you when I get to the last part of what I have to say, a condition, I think, that is a reasonable condition, that simply requires Iqaluit to take reasonable steps to prevent that from happening. That seems reasonably to me, and it seems to be right directly within what the Board should be doing.

My difficulty is with the specific suggestion that is being made, that Iqaluit be charged as... we'll call it the third level of government, for the moment, with coming up for a plan for hazardous waste management within its municipal boundaries. I'll talk about myself for a second again, but what I spend an awful lot of my time on is this issue. I deal with hazardous waste daily, in my practice, and I can tell you that other jurisdictions in this country devote considerable resources and very large staffs to dealing with this issue.

And if I can take one example - I was mentioning to Miss Wilson yesterday about this - in Ontario, even to ask the question, 'What is hazardous waste?' requires a six-page explanation in the regulation, because there are inclusions and exclusions, and unfortunately, I guess, it requires people like me who are trained in the law to interpret for other people. It is a huge and complicated area. It is generally considered to be a matter of provincial jurisdiction, and if the government of Nunavut wishes to establish a regime to manage hazardous waste in the territory, that may well be something that they

should do, but I would urge you very strongly not to sort of take the next step into becoming that regulatory authority and turning yourself into the Legislature and trying to draft within a water license a regulatory environment for the management of hazardous waste. It's reasonable to expect the town to do what it can to keep hazardous things out of its landfill. It's not reasonable to ask the town to become the regulatory agency for hazardous waste.

The next issue, and it's actually the last one, although there's another issue we'll come to in a second, is closure of the old sites. There doesn't seem to be an issue here. There seems to be a consensus that closure plans are needed for the current site, and other sites for which Iqaluit has responsibility. We've suggested a time-frame of December 31st, 2002, and that's simply to give Mr. Hough and his staff a chance to catch their breath and do some of the things that are... it's not that these things aren't a priority, it's just that there are other more pressing priorities. That's the logic behind that, and the municipality is certainly prepared to do that.

The final issue I wanted to speak to has to deal with the term of the license. I'll echo the mayor's comments on that, and I'll try not to repeat any of it. We have applied for five years. We believe that's a reasonable period of time to allow a number of things to happen. Over that five-year period, you've heard Mr. Hough say that it's anticipated that the municipality may need new water sources within five years. That roughly would coincide, then, with the next renewal process for a license, if you're inclined to grant a license for five years. It allows a reasonable period of time to get at running the new sewage treatment plant, seeing how it runs, dealing with the sludge issue, all of that, and it also gives you a reasonable period of time to deal with the solid waste issue and getting new facilities up and running, and hopefully it also allows time to get at the closure, the proper closure, of all of these other landfills.

I wanted to also say something briefly, just in reply to Mr. Mason's comments, now, about the rationale for a one-year license, and I'd urge you very strongly to think seriously before you do that. The problem with a one-year license, respectfully, is that it's not really a year. From the municipality's point of view, it has to start thinking about putting together a new application halfway through the year, and what you end up with, unfortunately, if you do that, is next summer the municipality trying to put together an application right when they're in the middle of everything, commissioning the new sewage treatment plant just up and going, other requirements of this license won't even be triggered yet. It could well be right in the middle of the process for trying to establish

new waste disposal facilities. I just think, when you think about that, one year is really only six months, and I'd suggest to you very strongly that it just doesn't work.

Now, finally, I'd like to turn to the area of conditions, and I'm going to try not to repeat myself very much, here. But this is... and this is the boring part, so I apologise in advance.

I would like to use, sort of as the template for this, the conditions from last year, and make some... most of the suggestions we've already made, and I just want to summarise them for you. There are a couple of small ones, and I'm hoping the staff will just take notes of this, and then we'll... so I think some of them are not terribly difficult to understand.

In the general conditions - and I'll just do them in order - which is Part B of the license, there is a requirement for an annual report. You may recall that there was an issue raised in a letter that the town wrote to the Board in February of last year, when they were... had some difficulty with some of the conditions that had to do with things in the annual report. And if you could just make a note, if it's possible, that in that part of condition 1 that's number H and I, if there could be simply a reference to where you're looking for capital projections and things like that, that it's in reference to water use or waste disposal. That particular provision was read, I think logically, by the municipality as saying the Board wanted to see all of the town's capital projections, and I'm not sure that's what you intended, and if you could correct that I would appreciate it.

Again, in Part B, General Conditions, if you could just make a note, there's a necessity to do something with conditions 5 and 6, that deal with the Surveillance Network Program. It actually deals with posting signs. Signs are posted, and if you could convert that to a condition just requiring maintenance of the signs. I'm using this just because this is my opportunity to do it.

When we get to Part C, Conditions Applying to the Use of Water, just to summarise the town's position, we would ask you to delete current conditions 5, 6 and 7, and replace them with, now, two conditions. We had an exhibit file, I think it's Exhibit #6, which are the new conditions. The first one is a condition that would require Iqaluit to submit to the Board, by December 31st, 2001, a report on long-term water supply options. The second one I'd like to suggest to you now, and I'll just read what I'm going to suggest, deals with the OMM Trault report, and I would suggest wording something along the following lines, that "The licensee shall submit to the Board," and we just picked arbitrarily by February 28th, just to give 60 days for Trault to do this, "by February 28th, 2001, a report prepared by a qualified engineer on the condition of the

Lake Geraldine reservoir dam that deals with..." We're hoping that that's exactly what OMM Trault will deliver, and will hope that that will satisfy the parties, and will certainly circulate that.

Coming, then, to Part D, Conditions Applying to Waste Disposal into Water, the first condition in Exhibit #6 that we had proposed is we intended that to be a replacement for condition 1 in Part D of the existing license, and it would say simply that, "The licensee shall direct all piped and pump-out sewage to the sewage treatment plant as soon as the plant is operational. Until the plant is operational, all sewage shall be disposed of in the sewage lagoon." That sentence is actually in the license right now. And then the third sentence would be, "The licensee shall submit a status report to the Board within seven days of the plant becoming operational." And I won't repeat the logic for any of that, because I've gone through all of it.

We would... a very small point, but with respect to condition 4 in Part D, that's the condition that requires a freeboard limit of 1 meter. To reflect that fact that the lagoon is to be converted to some other use, we were... let me see what I was going to suggest... if you could just add the words, in front of that, "Until the new sewage treatment plant is operational," to reflect that that's a condition that only applies during the sort of operating life of the current lagoon.

We would also propose that the Board delete conditions 6 and 7, that deals with the report of the geotechnical engineer, and we'll come back to that in a minute, and also delete condition 9 that has to do with sludge, and condition... oh, sorry, just leave that for a moment, and condition 9, and that you replace them with the two conditions that we suggested in condition 7, one, that the licensee shall submit to the Board by no later than December 31st, 2001, a long-term sludge management plan, and the next one is that the licensee shall submit to the Board within six months of the new plant becoming operational a plan for the conversion of the lagoon to a contingency back-up facility for short-term storage and treatment of sewage. The plan shall address long-term maintenance and inspection of the lagoon dykes, and as part of that, as you've heard from Mr. Hough, it is expected that geotechnical issues, or structural stability issues, will have to be addressed.

I'm still in Part D of last year's license, but sort of turning to the waste management side of it, we'd like to respectfully suggest that condition 10 could stay where it is, but that the Board delete conditions 11, 12 and 13. Condition 11 deals with the submission of the plan, which has been submitted. Conditions 12 and 13 are something we haven't talked very much about, but have to do with an investigative

monitoring program to try to address issues of contaminants from burning ending up in the water. Without trying to rehash all of the jurisdictional debate, again, I think as a practical matter the plan is that the site is going to be closed by some time next year, and there will a new site operating. It just doesn't seem practical to us to require that kind of an expenditure of resources to do that when we're kind of moving on at this point in time.

And in place of those conditions, we are suggesting... I think the fourth condition under Conditions Applying to Waste Disposal into Water on Exhibit #6, that if new solid waste disposal facilities will not be operational by the time that the landfill site is at capacity, the licensee shall submit to the Board by no later than August 31st, 2001, a contingency plan for the interim period.

Moving, then on, we have no submissions with respect to the Part E conditions, we're fine with those. The Part F conditions dealing with construction, and that, in fact, would... Parts E and F would deal with requiring the municipality to make an application for a new landfill.

Part G deals with conditions applying to operation and maintenance, and we'd like to make a suggestion for the Board's consideration. You've heard the evidence that there are in fact operation and maintenance manuals for all of the facilities. You've also heard the evidence, I think, from Miss Segal that she, in fact, reviews them, and at least with respect to sewage and water, has to approve them anyway. And on the waste management side it seems clear that she wants to do the same thing, and that perhaps Mr. Eno has a role, as well. And we're wondering whether it wouldn't be more efficient and logical to take the conditions in Part G and convert them to two basic conditions, one which would require the licensee to operate and maintain all of the facilities in accordance with operation and maintenance manuals approved by the relevant departments of the Government of Nunavut, and that will leave them to sort out who that is. It's clear it's Health and Social Services, and it may well be Mr. Eno.

And then the second condition, which is probably the same or similar to one that's already there, that the licensee is required to review, and amend as needed, the O&M manuals on an annual basis, and simply advise the Board in the annual report if they've made any changes. That seems to me to be a more logical and efficient way to approach this, when you've got legislative... sorry, departments of the government of Nunavut that already doing a similar function, here, in reviewing and approving the manuals.

Part H, Conditions Applying to Spill Contingency Planning, we have no difficulty with those conditions staying as they are.

And then, finally, Part I, Conditions Applying to Abandonment and Restoration, we would suggest replacing those conditions with the one simple condition that is the last one in the document that's marked as Exhibit #7, that the licensee shall, by no later than December 31st, 2002, submit to the Board closure plans for all closed waste disposal sites for which it is responsible.

And I'm hoping that that's the end of the boring part. Those are my submissions on conditions. I think those are all my submissions. I wanted to thank the Board. For someone who comes from a long way away, I very much appreciate the kindness and the courtesy that the Board has shown me, and I've very much enjoyed appearing before you.

TK: ...Mr. Tidball. Let's take a fifteen-minute break before the Board make their closing remarks.

[break]

TK: Thank-you. In closing, the Nunavut Water Board would firstly like to thank the interpreters for the wonderful job they did. I, myself, I speak Inuktitut and English very fluently, but I know for a fact that I could not do their job. Simultaneous translation is very difficult and stressful. Thank-you very much for the interpreters.

Once again, I wish to state that your comments, concerns and recommendations are important, and that the Nunavut Water Board will consider them when we are making our decision. Regarding the matter of jurisdiction, the Board would like to state that the current license is, and whatever conditions are in the new license, will be within the Board's jurisdiction. Furthermore, the licenses that the Water Board issues are final and binding, subject to the judicial review by the federal courts of Canada.

After we adjourn this hearing, the Water Board will meet to review the written and oral evidence presented during the hearing process. We expect to make a final and binding decision as soon as possible.

The hearing is adjourned. Please stand up for the closing prayer. And I would ask Lootie Toomasie to say the closing prayer, please.

[End of Tape 8]