

**PUBLIC HEARING OF THE NUNAVUT WATER
BOARD**

ON THE RENEWAL OF LICENCE

N5L4-0087

FOR THE TOWN OF IQALUIT

Iqaluit, Nunavut

September 8th – 9th 1999.

PUBLIC HEARING OF THE NUNAVUT WATER BOARD
ON THE RENEWAL OF LICENCE N5L4-0087 FOR THE TOWN OF IQALUIT

NWB Members and Staff
Bill Tillemann, Legal Counsel NWB

Mathew Hough, Project Co-ordinator, Development Officer
Dennis Bedard, Municipal Engineer
Paul Wiczorek, Superintendent of Public Works
Rob Murray and *Ron Crowley*, Hill Murray and Associates.

Celestine Erkidjuk, Elder

ENFORCEMENT:

Thomas Kudloo (page 3): I would like to emphasize that ARTICLE 13.9.1 of the Nunavut Land Claims Agreement states: *"Where approval of the Nunavut Water Board is required for a water application, the applicant shall not proceed until approval has been granted."* But, enforcement of the water licences must be done by DIAND and the Water Board does not carry out inspection of the water licences that've been approved or issued. The Minister of DIAND designates the inspectors in the manner of consistent with the a MEMORANDUM OF UNDERSTANDING between the Department of Indian Affairs and Northern Affairs and the Nunavut Water Board. By an inspector conducting a regular inspection of the Municipal Inspectors and issues an inspection and compliance report, related to the water licence requirement. Again the board has no role in the enforcement and in any manner related to it, it should be directed to DIAND.

WATER SUPPLY

Denis Bedard (page 8):

Water Treatment Plant present operating capacity of approximately 1296 cubic meters per day. A domestic water storage facility, which stores 2800 cubic meters per day, and it is typically full.

The plant itself, is rather old and requires modernization. The Municipality of Iqaluit has been taking steps to begin modernizing and upgrading the Water Plant.

This year Municipality of Iqaluit will be upgrading several plants and pumps, process pumps in the plant. These pumps are well over 30 years old and are insufficient and very difficult to replace.

But at the end of December, 1999 the pumps will be replaced, producing and reflecting more efficient, in terms of processing water. Along with that project, the Municipality will be constructing a new chlorine handling facility in the plant. This will be done according with the National Building Code in house standards. This mandate has been given to the Consulting Engineers at this time.

Next year, the Municipality plans to begin the design process for the water treatment to fill the.... with the plant being to expand the capacity of the plant in 2001. Expansion of the plant will meet the needs of Municipality over the twenty year design horizon. That will be the goal of the extension.

SOLID WASTE DISPOSAL FACILITY

Denis Bedard (page 9):

This is in respect to the quality of facility, I will give a very brief over view what's the plan for the facility. And Paul *York* to discuss specific operation of the plant still will be at the [?] Site. [?] Site was constructed approximately 1995. It was intended at that time for emergency disposal facility.

If I'd identify a new Site within the Municipality and it also identify a specific means by which we can close out. Being in existence like, as well as too old, the site could have been used by Municipality in the past. Apex dump, and Iqaluit land field site along with the present site will be identified for closer, and the part of this proposal. And those aspects will be covered off in the proposal.

This time I would like to call on Mr. Paul Wieczorek to discuss detailed operation of the [Fall Way..?] Site.

Paul: Good Morning, my name is Paul Wieczorek I am not going to go over some of the stuff that Denis already talked about, which I was going to.

But, however, at present waste is quite good in Town, by means of Parker Truck, there is one piece of equipment that is on site at the facility. It is a wheeled vehicle which is usually [compassionate...?] for the material around on the site. We have two site staff employed there. Their basic job is to keep records of the vehicles that are entering the site, and also to give the directions as to where the material is being placed within the facility.

At present in the industry areas in the facility, there is one for the combustible and non-combustible. Open burning occurred as a means of volume reduction. The burning is carried out approximately from 09:00 a.m. to 03:00 p.m. in the afternoon. It is done on Tuesdays, Wednesdays, Thursdays and Fridays. As the

material is burned, it is placed in the facility in layers of burnable material over the top of that burned material. There is a facility on site at the airport storing the batteries, paint and then the other half of the materials stuff have to be up here. At present site is over to the public five days a week.

If there is any questions, I will take them at this time, thank you.

The last facility, I wanted to briefly talk about before introducing the Mr. Murray, is the Sewage Treatment Facility. At the present time the Municipality employees Sewage Lagoon as mean to this disposing of is sewage waste. This sewage lagoon is being replaced by the construction in addition of a new sewage treatment facility and Mr. Murray will provide you some a details some of that plant in a second.

The Sewage Treatment Plant, I guess yesterday has been constructed. Jason 2, the existing lagoon, the main reason for locating it at that site, will it allow us to process the effluent which presently exists in the lagoon?. Which means we will be able to proceed with a plan for treating the effluent and closing out that site. The Sewage Treatment Facility is expected to be completed at the end of December 1999 at which time it will be in full operation. Mr. Murray operates the facility for the period of three months, at which time they will work out the bugs in the plant as well as finalize the training of Municipal staff in the operational plant.

For this time, I would like to call upon Mr. Rod Murray to provide you a little bit more detail on these treatment facility.

Mr. Chairman: Before Mr. Murray carries on, may I remind everyone please, to state your name for the record, when you are asking questions or making comments, thank you.

Rod Murray: We are lead engineers and general contractor on a large Waste Water Treatment Plant projected adjacent to the existing lagoon. This project started in the summer of 1998, after the Water Board issued intentions to increase of requirement for the water quality in the discharge from the treatment facility. So, very quickly, I am going over a large project and a lot of issues. Number one is water quality. The Treatment Plant has been build is the state of the art. Many, many years research and development have gone into this combination of technologies includes screening to remove the garbage in a organics. Includes biological treatment to reduce the biological contamination of the water and that includes micro filters, which is going to not only disinfect, but to reduce all of the suspended solid down to very, very low level. Sludge will be generated by the facility and that sludge will be dewatered in a press. And ultimately composted in conjunction with solid waste management plant. So, that the water quality will be very, very good, it actually approaches drinking water quality and the [?] will be composted down to material that is safe for human contact, safe for application on the land. It can actually be used

in conjunction with solid waste management. In terms of covering, layering with other solid waste or local municipal green up type projects.

I put two joints in front of you, one shows a floor plan. This one here shows the floor plan, roughly fifty by one hundred building. We visited this site yesterday, it's concrete tanks 50 X 100 with a building on top. As you can see there is a double or triple redundancy that everything is build there. There are actually two full treatment processes, each one by itself is capable treating the entire flow and also all mechanical and electrical elements have double or triple redundancy. That includes a generator, a back up power and includes computers to monitor and run the process. Also notify the municipal staff and central monitoring office of any type of various conditions which would cause concern.

The project as we discussed began in the summer, the design began in the summer of 1998. And project construction started in May of this year.

All of the mechanical, electrical civil structural work will be completed by December. And in December we will start the plant, operated in parallel with a existing lagoon. The lagoon still will be on operation while we bring the plant up to full operation, the biological process will take two to three months.

The Municipal staff will operate and monitor the facility under the comprehensive operations monitoring of replacement program developed between us and Municipality. Which fully complies with the Water Board requirement for monthly testing as well as recommended by last a testing by Environment of Canada.

And I said the plant will meet or exceed in any of parameters that are contemplated for the new water board permit.

As I have said the Lead Engineers, we are part of a large team of Engineers that includes mechanical, electrical civil structure engineers, as well as soil bail[sic?] engineers which are designing the program from monitoring bail[sic?] solids.

We are available for questions. We have full set of plants and specifications for the plant here. For anyone from the Board or general has any questions, that concludes my presentation. Thank you Mr. Chairman, Vice-Chairman and member of the Board.

Mr. Chairman: Are there any questions or comments address to the Interveners by the Board, Town of Iqaluit? Are there Interveners or other parties.

Robert Hanson: Robert Hanson here, the Vice-Chair. There will be opportunity to ask questions later. We have to have this entered as evidence. We are just getting ready the information now back to us. When the presentation is made it

becomes ... it has to go to us as an exhibit. This will be the public exhibit #1. Then we will need it again. The questions can be asked any time. It will be very informal. We have a certain rules that we have to follow. If you haven't given your presentation materials please do now.

10. Questioning of the Town of Iqaluit by Board Members. Interveners and other Parties;

Mr. Chairman: I will now, invite those respected interested to speak, please come forward!

Mr. Ste-Robert?: Mr. Elmer? is really finding it fast and heavy, so just give him a minute before, we call on intervenor.

Mr. Chairman: Margaret please, have you got a question or comment?

Margaret Keast: From Fisheries and Ocean. I guess a question, have you got established which one should be stored, for this bi-product?

Denis Bedard: Yes, that's produced from the future sewage facility, Margaret, it will be stored. Ultimately at the site the new comprehensive study will include things among other things and an area for composting, okay? In fact what we will be doing this week is we are reviewing a brief proposal by Bob Murray to compost this material. We've been told that composting of the material produced the solid waste site, must be composted a minimum of 6 months in the North. And so, we must look at the facility that will contain at minimum that amount of that material.

11. Questioning of the Interveners by Board Members, the Town of Iqaluit, other Interveners and other Parties

FEMALE: I don't know, maybe Bob Murray, I guess on the case by case basis, as far as knowing what the composition of this, but I guess you'll have to wait, you have treatment to go through or do you have an idea from your.... What the composition of this budge will be?

Mr. Murray: That is a good question, it's a really out of my area, expertise exact details of composting process. I will explain what I understand.

Part of our design team are includes soil and bi-solid experts. Generally the organic and the inner organic. Components of municipal sludge are very standard, plus all of the Municipality that will be over. I think that one unknown is metal contents are generally on it's way into the waste water through the water sewage, and a water distribution's system. And that is

typically the metal, copper or cobalt metal in the water distribution system. So, we really have small water distribution system, so we don't suspect. All of the evidence and other facilities that we work don't suggest any likelihood of iron metals. Like you say, the few unknown parameters we'll have to look at when we start producing the sludge.

Chairman: Thank you, Mr. Vice-Chairman has a comment to make?

Vice-Chairman: In a matter of exhibit the Board proposed for the public registry is filed and mark as Exhibit 1. The maps and drawings can be filed and marked as Exhibit #2. Are there any objections? They become ours.

Mr. M....: Does the Town has any other material that now should be marked as exhibits to the board? I guess one thing is there any construction of drawings that we I guess as a board do not even have yet? Is there a copy of the construction drawings of the building you are presently building out there which we don't even have? Is there any other material which we should have and have this marked? Dionne did you want to make comments?

Dionne Filiatrault: We have not seen the drawings for the actual design plans for the current sewage treatment plant that is already being constructed and I know that we have received some inquiries from other regulators to where this information is. Those design drawing and the design plans for that plant should be filed with the board.

Denis Bedard: We would certainly provide the design drawings. I know that the procuring water licence we had submitted, there's preliminary sets of drawings but we will provide the final set of design drawings and specifications to the board.

Mr. Chairman: Thank you, lets take a five minute break.

Mr. Chairman: Are there any questions from the Nunavut Water Board Staff members?

Dionne Filiatrault:: Before I get into some very heavy stuff, the new sewage treatment plant, we did discuss some details yesterday but I'd like to get some of that information into the record today. With respect to the quantities of sludge and the composition of the sludge, that's the first aspect. The actual disposal options for the sludge you did say earlier, you were considering composting but there's also the option to incinerate and maybe you could discuss with some of that. I'll start with that and I have some more questions along those same lines.

Robert Hanson: Anyone who comes before the board, please address the board only. Do not address the public, you're here to talk us. Thank you.

Chairman: Proceed.

Rob Murray: This treatment facility is going to produce very clean water. The by product is going to be the biological sludge in the quantity of typically 2 cubic metres of de-watered sludge per day. Of course that's an estimate because it really depends on the number of people that are in town and the general loading on the facility. It's not a black and white number that we can give you right now. It's an estimate. Sludge is going to start out as a liquid at 2% solid by weight. After the de-watering process the water gets squeezed out of it. That happens in the plant and it gets brought up a dryness of 25% solids by-weight. And that's going to look to you and I soil. There's a storage bin inside the plant that can store 2 to 3 days of de-watered sludge in the plant and that bin is attached to the back of a truck that going to transport that periodically to the composting location. The de-watered sludge is quite a dry material, it won't have leachate. And it really can be stored anywhere as long as it's covered and doesn't get wet from rain. It will naturally compost itself if left and we're currently in the process of with the soil scientist on our design team of looking at all the parameters required to interface with the solid waste management plan the town is developing. So, cakes can be stored, they can be composted, they can be incinerated and the impact on the environment can be completely mitigated or eliminated just by proper handling and storage.

Dionne Filiatrault:: With the disposal of the sludge at the solid waste sight, conceivably, the solid waste is very limited in space as it is right now. If this new June plan is going to be up and running by the end of December, you're not going have a new site identified for solid waste management. Where specifically has there been a site identified within the existing solid waste site for the disposal of the sludge materials and also on that same line given that the sludge are de-watered we also discussed yesterday the possibility of airborne contaminants and how is that going to be addressed?

Rob Murray: Two separate questions and two separate answers. Number one, as designers and builders of the waste water treatment plant, we're responsible for design construction, start-up training and a period of monitoring the process. Our design team is coming up with solid waste management bio-solids management, strategy and operational program and all the parameters for a site. There's an interface there where it becomes the responsibility of the town to decide where this happens and to actually execute the operational plan. I think the question of where bio-solids are going to go starting in the year 2000 is really best answered by the municipal staff. The second question, one of airborne contaminants, I'm going to answered the question to the best of my ability, it's not my area of expertise but the de-watered sewage sludge is a soil-like consistency and it's in the area of 70-80% water so we're talking about a moist soil-like product which won't typically have any air-borne debris at all. Now of course that depends on many many factors, it has to be managed and operated properly, kept at the right moisture content for composting and it has

to be covered if you don't want moisture content to be affected by the rain. Of course it depends on how hard the wind blows as well. But under all the parameters we know in the north and all the issues that we know about the sludge and other composting operations that we've studied in northern climates, we don't expect any airborne contaminants at all.

Chairperson: Thank you, any other questions.

Denis Bedard: To answer your one question with respect to location, Dionne. Yes we have considered where we are going to store this material. We have an area which is presently occupied by the form of a shed. In discussion with the health board and other municipal staff it's been discussed with respect to moving that shed outside the gate which will give us more control in terms of vehicles entering the facility. By moving that trailer shed outside the gate on a pad will open up that corner area at the solid waste site for the initial storage of this cake material.

Chairperson: Mr. Bedard, do you have any maps of this area?

Denis Bedard: We can produce maps of the solid waste site, I think they were submitted with the original application and I can certainly indicate where this area is going to be on those maps.

Chairperson: Thank you. I do believe that board member Jackie Nakoolak had a question to the applicant.

Jackie Nakoolak: Thank you. I want to ask the treatment plant, my main question about the storage, are you going to have storage like the way I understand from my own vision, that the Iqaluit town pipe would be directly going to that facility? Am I being clear? There seems to be no holding tank or something, like everything's going right through the plant that you have designed here. Is there going to be a holding tank.

Rob Murray: The treatment plant as you can see on the drawings in front of me contains four large tanks, only two are needed for the treatment process so there's a lot of extra capacity there. It's approximately 20 hours of holding capacity built into the facility.

Chairperson: Thank you Mr. Murray. Dionne you have a question?

Dionne Filiatrault: Just to maybe go back again Rob, yesterday when we were at the plant you discussed some of the ongoing training that's going to be taking place to ensure this mechanical system has some safe-guards built into it because mechanical systems are new to the north. If you could elaborate a little bit on that, that would be good.

Rob Murray: Training is a very important part of the proper operation of the plant. The design build contract that we're currently entered into with the municipality includes four level of training. The first started with tours with the municipal staff around other existing facilities and this happened in the summer of 1998. Several facilities were toured across Canada, British Columbia and Ontario, where municipal staff could gain familiarity with this type of treatment process to allow them to take part in the design process, so that was the first part of the training. The second part is provided by us under the contract and that 's academic training for municipal staff and operators. That includes lectures, work assignments and exams where we can gauge the knowledge of municipal staff on this type of systems and work on the areas that are unique to the treatment plant and unique to this exact facility in the north. Number three is hands training during start up. Once the construction crews have finished all the civil electrical and mechanical work we go into a process called start-up and that's run by my colleague Lauren Cowly. Start-up includes testing of all the mechanical and electrical systems.

(TAPE TWO: Side A Ends here)

(TAPE THREE: Side A starts here)

Rob Murray: Gain familiarity with the details of the system and also how we trouble shoot leaks and faults in the system as we're starting it up. Number four is a six month turn over period which is included in the contract where we provide a full time person that's monitoring and operating the plant with municipal staff to judge their ability to operate the plant on the job for that turn over period. So four levels of training and number one as I alluded to includes municipal input into the design so they selected equipment types and manufacture types not only that they were familiar with but also that are similar with existing pumps and machinery control equipment in the water treatment plant.

Dionne Filiatrault: When made his presentation, he had made a point that the staff change-over was for three months, he had mentioned six months yesterday and he had mentioned six months again today and I just wanted to get the confirmation of what that turn over is?

Rob Murray: Currently the contract documents say six months.

Dionne Filiatrault: As part of the process for this application, staff held a pre-hearing meeting with the municipality and some interested parties back in May. One of the issues that was raised was doing potential pilot testing. This was recommended by DFO, Environment Canada and Sustainable Development and the Water Board to see how these sludge would react in Iqaluit and what not and potentially using other sludge from other operations like Hall Beach and Cambridge Bay. Is there still any possibility to be performing this part to see before the new system becomes operational does the town have any plans to do

a pilot test before December to see how these composted sludge are going to be handled.

Denis Bedard: Considering the cost of the transportation of this material, the chances of doing a pilot test of these materials is highly unlikely at this point. What the municipality does intend to do is as it produces this system or this material from the solid waste from the sewage treatment facility it will conduct tests of all the material to ensure that metal concentrations are in fact reduced prior to even considering the use of that material in the municipality. Thank you Mr. Chairman.

Mr. Chairman: Thank you.

Dionne Filiatrault: We also discussed yesterday what contingencies are built into the system. It's not unusual in the north to have a three, four, five day storm where you're not even going to be able to get out to the system. How do you remove the cakes. What contingencies are built into the system to handle that type of event.

Rob Murray: The issue of redundancy and back-up is a broad area. I'll answer the questions with specific reference to bio solids. I hope that answers your question properly. Bio solids have to be removed from the organic process on a regular basis to provide optimum treatment. Micro organisms that we grow in the treatment plant operate best if their population is controlled. They do not have to be removed every day or even every week, they'll simply grow and grow in population to a point where they will be less efficient. So the number one answer to your question is a four or five day storm, where we don't remove bio-solids from the process, it won't impact the operation of the process and it won't impact water quality in any way. Number two, we've designed the plant to have vehicle access and snow machine access so in the event of a storm or drifting across the road, then we can get operator access by snow machine and bio solids can be stored inside the facility on the lower floor. We're going to have several days of storage of cakes inside the plant if road clearing is an issue and we can't actually remove the dried cakes from the facility.

Mr. Chairman: Thank you. Mr. Bedard?

Denis Bedard: Being in the north for a number of years I certainly understand the problems concerning storms and back up systems which we require to run many of our systems in plants. In this particular plant, we do have back up generators designed into the facility which will operate in the case of power outages. They will supply power to provide and allow you to continue. That back up system is being built into this plant. Thank you Mr. Chairman.

Mr. Chairman: Any further questions? Dionne?

Dionne Filiatrault: One of the other issues that was raised and we'll hear probably more about from the other intervenors based on their presentations is what's going to be happening with the current system? An abandonment restoration plan should be filed and identify what's happening with the old sewage lagoon. I guess I direct it primarily to Denis to answer that and I guess with the affluent that's in the lagoon presently will be transferred through the current system as well as the sludge.

Denis Bedard: Yes, the primary reason for lifting the sewage treatment will be in the location that we picked was primarily to assist us in the clean up of all the sewage lagoon. We will process the affluent as well as the sludge through the new sewage treatment facility and then close out the existing lagoon by filling it. We will although, maintain it at least half the sewage lagoon as an emergency spill way. In the case that the plant fails to operate for any period of time at least we'll have a location that could act as a temporary storage for affluent that can't be treated. We will prior to doing any work on the new sewage treatment facility, this will occur early in the year 2000, is we will retain a consultant to prepare an abandonment restoration plan which will be submitted to the Water Board for approval.

Mr. Chairman: Any further questions for the applicants?

Anne Wilson: I just wanted to thank the board for setting up a very informative tour yesterday and the municipality. I thought it was very useful. I just have a few questions, some of them we had discussed yesterday, I would like to make sure every body else has had the same information and Dionne has covered some of that. One question I had of Bill Murray, is that the system is on a municipal pipe system and there is no control in force put into it, so I'd like to know a bit about the ability of the system to handle contaminants such as [falling through] oil or hydro carbon put down the drain.

Rod Murray: Mr. Chairman, any organic which water treatment process includes life micro organisms. Which are vulnerable to general kill. At trash hole levels for various things. That means, that they have trash hole for solvents biocides and various other toxic chemical which could cause general kill the bio-solids, biology in the treatment plant. Having said that scientifically it's possible the practical reality is that in Municipal waste water applications, where we have in this case. Many hundred thousands of gallons of water everyday the amount of solvents that would be required to get to those depths trash hole levels, is thousands, thousands of gallons fall in. So, if we haven't industrial facilities on the collection system that should be a very serious concern. Since we don't, we have some commercial areas and we have residential areas. There is no mechanism for the introduction of contaminants to the level that would causes concern. We don't see this in any Municipal waste water in all of years operation. We never had kill of the biological process in any treatment plant.

And in fact in across the countries it is just extremely rare. The treatment plant as you can see it in the drawing front of me has two completely separate biological process. That is another thing Safe Guards against that very, very unlikely possibility.

Mr. Chairman: Thank you.

Anne Wilson: Similar question, the contingencies have been discussed for shut downs due to weather or power outages, are there any down times associated with plan maintenance or any other unforeseen events that could be of concern?

Rob Murray: Just for the record there are weather events and power failures don't actually cause shut. The system is designed with redundancy and automatic back up power for continuous operation of full flow in both of those conditions. There are weekly, monthly and annual maintenance routines that may require inspection of a particular tank or shut down. An inspection of particular piece of equipment but the built in redundancy allows for 100% operation at full flow of the treatment plant under all maintenance routines.

Mr. Chairman. Thank you.

Anne Wilson: My next question is to do with the existing lagoon. There had been concern over the passed season expressed with some leakage in one of the berms. I'm just wondering, has that been inspected this year and is that problem going to be addressed as part of the retention of that as a back up lagoon?

Denis Bedard: The issues of the seepage through the berm has I guess always been a problem but it hasn't been serious as long as I've know about it and it will be addressed to ensure that the berm is water tight and will retain water and liquid for the periods that we need it. It will be considered.

Anne Wilson: One final question, with respect to the solid waste sight, a consultant will be retained to prepare a management plan, will that plan include provision for a land farm area for the disposal of contaminated soil, hydro carbon contaminated soil.

Denis Bedard: Simply to answer that question, yes it will.

Mr. Chairman: Okay there was another one. Okay go ahead.

David Jessiman: I'm employed by DIAND. I have a series of about four questions if I could be permitted to ask them of the municipality.

Mr. Chairman: You may do so.

David Jessiman: Mr. Chairman, I would appreciate if the town would explain their relation to the Nunavut Government and others to obtain resources and funding for the municipal projects that are before the board and of them we can include such items as the timing, the scheduling and commitments of the these plans that are before the board.

Mr. Bedard: We are fortunate today that Michelle Bertall who is Community Government and Housing is here and maybe Michelle you'd like to come forward and answer the question regarding funding.

Michele Bertol: I represent the Department of Community Government, Housing and Transportation with the Government of Nunavut. Our department is the one responsible to provide the majority of the financial resources required for the capital projects in Iqaluit. In our capital plan, for Iqaluit, for the next five years, we have three projects. The sewage treatment plant, the solid waste management plant and the water treatment plant. Let me go through them one after the other. For the sewage treatment plant, this year, we are providing the town with \$1 869 000.00. Next year we are committed to \$ 3 320 000.00. The following year, which is 2001/2 fiscal year, we have \$ 200 000.000 and this \$ 200 000.00 for the abandonment and restoration of the lagoon. Next project, solid waste management, this year we have \$ 200 000.00 in the current budget. This money is to prepare a study which will include the closure plan of the existing dump, of the two old dump sites and a study for alternate future facility which can be developed for the town of Iqaluit with regard to solid waste management. The following year, we haven't identified dollars year but the following year, depending on the results of the study this year which will propose the type of facility , okay, further to the conclusion of this report, we will identify the dollars if necessary to prepare the design of the facility. In the year 2001/2002, we have committed \$ 2 000 000.00 for the construction of this facility. For the following year 2002/2003, we also have \$ 1 000 000.00 and also a million the year after which means in total for the solid waste management plan, we have \$ 5 200 000.00 in the capital plan. For the water treatment plan this year, through the incremental infrastructure program, the government is contributing \$ 222 000.00. Next year we will have \$ 250 000.00 available and this will be for design of the improvements that are required in the plan and the following year 2001/2002, we have \$ 2 000 000.00 identified for the required upgrading and in 2002/2003, we also have \$ 1 000 000.00 available for that project.

Robert Hanson: Just a question, I hope this is not your presentation because if it is you have to do it all over again. A question just was asked and I'm sure you gave us the answer. Thank you.

David Johnston: I'm David Johnston of DIAND. The second question would be, if I can get some clarification from the town? Did the town develop the

proposed sewage treatment plant based on draft (ethyl...?) quality criteria?
Thank you.

Mr. Chairman: Thank you

Denis Bedard: The design of the sewage treatment facility is based on the effluent parameters that have been provided to it by the water board. Right off the top of my head I don't know what those parameters are but according Rob Murray, the plant will exceed those parameters and maybe I could ask Rob Murray to come forward and explain what parameters the plant will process at.

Robert Murray: The initial RASP and ultimately the design and the development of the treatment plant parameters were initiated by letter written by the water board that states affluent criteria and I don't think I need to quote from this letter but it's our understanding that these are based on the existing guidelines for waste water treatment in the Northwest Territories.

Dionne Filiatrault: I'd just like to clarify the back ground and how these parameters were set to make things clear for the record. From my understanding in the last licence renewal, the town of Iqaluit had proposed to go based on the increases in population and what not, they'd made a decision themselves that they wanted to move towards secondary treatment. The licence that was issued by the NWT Water Board proposed that they implement a mechanical screening as the first step towards secondary treatment. Throughout the process of this licence, the licensee decided that they did not want to put in a mechanical screening system, that they just wanted to go straight to secondary treatment. With that they requested some advice and some limits were suggested by the old what is classified as the technical advisory committee from the NWT Water Board. We had no background in our office of where those limits came from. So what I did was we convened based on information provided by the municipality that this is where they wanted to discharge. We provided them with the limits to be able to do that based on consultation with community government which was MACA at the time based on consultation with the department of Fisheries and Oceans, Environment Canada, DIAND and various other government bodies that are identified in correspondence to that affect in the public registry and we development guidelines for discharging at the specific location where they're discharging now. So those limits were fairly stringent, they were secondary treatment limits that were guidelines only and if I would like to make it clear that if the municipality decides to go to a lagoon system at another location, then those limits may not have as stringent and then would have been site specific to that location. Ultimately by the community deciding that that is where they wanted discharge, those were the limits that were set.

David Justman: If I could suggest that it be asked of the municipality, just curious if there's any new information that may be available from the Town of Iqaluit that may be available following their original submission of March 1999

to the Nunavut Water Board. Additional to that, have there been any changes, revisions or different priorities that may have occurred since then.

Denis Bedard: Changes to the original submission would include the final designs of the sewage treatment facility which we will produce for the Water Board this afternoon, copy of the designs to the water board prior to the meeting concluding. The only other significant change that occurred following that submission is the addition of the new RP request for proposals for the comprehensive solid waste management plan and that certainly, we can include, I know the Water Board has reviewed the request for proposals, the RP, but we can certainly submit another copy if they so wish.

David Justman: My last question, it would be for Municipality. I would really appreciated if we can get a bit of over view of the experience and certain co-operate over view of the Consultant Rod Murray, from your experience of the designing and operating sewage treatment plants within a Canada and maybe Northern District C. How are those other facilities operating and perform in Northern climates?

Rod Murray: Mr. Chairman, Rod Murray from Hill Murray Associates. Hill Murray is a Company that was formed in 1993 to address requirements of many private and municipal clients in this area of Waste Water Treatment to high standards and more community reuse. We worked in the Artic in 1995 and 1996 at Cambridge Bay and Hall Beach building a treatment plant for the Dew Line Sites there. There are smaller in terms of flow, but there is application same technology, in the same kind of environment. Our projects over the years also gets to the top of now Washington at 4,000 feet elevation in severe water conditions where we build the treatment plant almost exactly the same sizes and same lay out. It's treatment plant for the Municipality of Iqaluit, so our experience has a provided us good with background within in this environment and over the years a good testing ground for the application of this technology in Northern climates, operations and maintenance of the Arctic plans and mount Washington plans have been very reliable. There have been mechanical failures and proper operation of the automatic backup systems, it's common. The redundancy has never left the plant with down town at all. Operations and monitoring are jointly by Site staff in conjunction with the operation's headquarters at Hill Murray, where over telephone lines and internet plans are monitored continuously by us as well. So, the combination of training and operation by local staff and monitoring by local staff. And Hill Murray happens to be a very effective. The other an important point is that we are part of the lead organization, we are part of a very, very big team, which includes many designers, structural civil engineers.

(TAPE THREE ends here: Side A)

(TAPE FOUR: Side A starts here)

We have severe weather experience and we have a very careful program of training, monitoring and we proved ability to operate these plants, keep high, high reliability and a minimum operating costs in the Arctic.

Mr. Chairperson: Thank you, can we please take 15 minutes coffee break.

Mr. Chairperson: Welcome back. I saw Mr. Mason had a question there?

NOTE: FROM THE TRANSCRIBER (First few lines were not heard, not loud enough)

Marcel Mason: by the foreman's shack, that would be moved outside the fence and sludge cage stored in there. Give in that the plant is going to create 2 cubic meters of sludge cakes per day and the limited space in that area right now. I can see it filling up fairly quickly. Especially if the plant does come in operation on this December 30th. January, February, March and April the composting process is going to be slowed down considerably, just due to the temperature. So, I am wondering if the Town or the Engineer has contemplated the idea that possibly that limited space. Would get fill up fairly quickly?

Denis Bedard: We certainly anticipate, you know it will be filling up. Our estimates, you know at 2 meters, 2 cubic meters per day. Our estimate is about 750-800 cubic meters space will be required. In that area, it can be kept with a loader equipment that we have, is fairly well piled up, so we anticipate with that area. we'll supply up until we get a new solid waste handling facility which we expect to accommodate the long-term storage and processing that material.

Marcel Mason. Thank you Mr. Chairman. Marcel Mason again. That area, if I remember correctly, also holds the hazardous waste that the Town is storing now. Just back from the foreman's shack, there is container in and painting what not there. Will that area also be use for holding sludge cakes?

Denis Bedard: Actually the area we are considering in the shed area, because not contain hazardous material kept at the back of the solid waste site presently, the paints and the batteries are stored at the rear of the facility, well away from that access from the public. And it is only acceptable by our own staff.

Lynn Peplinski: My question is along the same line as Marcel and that it's sound it like is a fairly important that the solid waste generated by the Treatment Plant is well covered from, so that it is not effected by wind or by rain. I am just wondering, how you planted, such as, I guess contained it and keep safe from the wind and rain.

Denis Bedard: Yes Lynn, We keep equipped, we have a loader on the site at all the times. The loader can be used to keep the material pile up and fairly extensively. And which point what we can do on daily basis, is in sure that the material covered with the tarp to redirect any moisture that the snow might get in to the tile.

Lynn Peplinski: The tarp?

Denis Bedard: Yes.

Paul Crowley: I am a citizen here in Iqaluit. I have a question regarding a burning the solid waste and I would like to know if the Town or Regulatory Agencies have an idea of what is the result in terms of chemical release from the burning and that state?

Denis Bedard: Thank you Mr. Chairman, I am not aware of from any testing which ever been done on mission like Air Mission solid waste site!

UNKNOWN: Is there, are there any concerns about the berm?

Denis Bedard: Thank you Mr. Chairman, Yes, I would say that there are a lot of concerns about burning. In fact through the process of the preparation of the solid waste plant, the management plant which we commission, assuming commission. With the Consultant, burning will be considered that option primarily at the base to determined, to really look at cause of the weather system. But in my view, probably it is unacceptable option for this Municipality in the future. Until it foresee other options that you modify the landfill ward incineration plants for technology has been considered the option of choice. So, there are concerns, yes.

MALE: In view of those concerns, is there any plants to cease burning, in the near future of the current dump?

Denis Bedard: To answer your question, no we do not plan to cease burning. The time frame required to last for us to prepare plan and to prepare the design to begin the construction of the new site as Michele Bertol point it out, which is respect to the government. It is going to take us complete a year and half. Which point we will have a new type system. So, at the present time, we are not considering stopping burning.

What we are doing, a quite frankly is, we tamping Municipality to modify the way we burn in the location in which we burned. In the period of time which

we burned. We are trying to curtail, you know the process such as that we minimized the affect on the public.

MALE: I guess, I am not point, I just like to express the concern about burning and the smokes coming into town and also, there is a lot of campers out there who go out there to be in more natural environment.

Second point I would like to know if there is any on solid waste, if there is any plant you are looking at way to regulating the input solid waste, due to perhaps a business licences, the Power Town to admit the business licence to regulate? What the business will do, and what kind of garbage it will produce and how that garbage will dealt with.

We actually employed second person at the Landfill Site, to assisting, expecting vehicles at the Community Plant. At this point it is a very difficult employ the Municipality to regulate just what goes into the dump, prime from the fact that we don't accept many hazardous materials. One of the things that will be included, that we wanted to included in this comprehensive waste management plant. Is to look at recycling process. Any education process baring, which will assist is identifying just what doesn't have to go to dump. That'll include the public business like.

MALE: In the question, in particular, I was wondering about construction material from the paint to make up in wasting. What I can see a large portion of those solid waste and also a large portion of solid waste, doesn't make it to the dumps, that is in Town. That gets flowing around. I was wondering if there is any plants to address that in the near future?

Denis Bedard: Yes, construction waste does this point makeup a large portion what's dumped at that site. Growth in Iqaluit is going through, going to experience that a portion of waste, certainly we all recognize the fact that the construction waste can be recycled to highest degree and we hope that through preparation of our comprehensive solid waste management plant construction waste will be considered part of the recycling program. Which means, I think ultimately that waste will be incinerated, which will allow us recycle the material. We have begun discussing the issue of construction waste in separation various material with the Contractors, we've asked them to set raped plastic from the wood, that way we can at least tense to get the wood would go pile, so the people can recycle, if they need it.

MALE: Two more short questions. First one is dealing with, hazardous waste that we produce in our house-holds, I guess that might be produced commercially. Is there are any plan to have a special pick up of hazardous waste or special drop off time, so the people can drop off hazardous waste?

MALE: Existing process allowed for that we handle paint and we handle batteries at this point time and again, yes it will be considered is part of our management plan in terms of dealing with many hazardous waste we commercially produce, it will be part of that plan.

Not only to accept the materials, but this plant is next phase design also identify, you know our means of storing it.

MALE: One of my last questions, I was wondering if there is, how much knowledge we have about the environmental stage of Koojesse Inlet, as result of all the activities over the years there. If there is the way of determining, how this can impact on the land? And also, has harvesting happened there?

Denis Bedard: I don't have clear doing that, I just suspected that maybe one of the Federal Agencies maybe better answer on condition in Inlet and water fall and so on.

MALE: I'll wait for an answer, perhaps one of the Federal Agency's could be answer. That will be great.

Margaret Keast: With Fisheries and Ocean. I guess to, I can answer maybe part of that. In the early 90s Fisheries and Ocean did do a clam study, that was carried out for several years to measure the faecal coli level to see the impact that the sewage influent having. There is the summer report that I can provide. The most results came back that they were within the parameters. Right now, I have requested a health hazardous assessment from the Federal Health Board and I have the results here. That is what I know as far as the health.

And I can make copies of this report, if people wanted just the summary. Most of the Federal Department have it and also GNWT Health Department in Yellowknife have been provided copies, but we haven't really heard anything back from them either, thank you.

Mr. Mason Mason: Just to follow through on the questions and comments Paul had. The concern raised by members of the community on nature of the admission from the landfill as well as the concern expressed by organization which is the public health. Why has the Town not completed any testing to find out just exactly what is being given off by landfill when it is burning?

MALE: Quite frankly it's not going work requirement or request by any the regulatory agencies to do the test?

Dionne Filiatrault: I guess, along within topics, I am just wondering, I know Environment Canada and Sustainable Development have air quality specialist. Has any work ever been done? Specific to Iqaluit possibly in the past through any other community. I imagine wastes are pretty similar in the other

communities as far as emission testing, is that information available? And I guess, are there any other programs for them to do that?

Ann Wilson: [not clear]. I object to the [not clear] There are experts in Edmonton and Winnipeg before this hearing. They didn't have any information that they can provide me with other than facts like. The first thing I'm concerned about is the particular matter which [not clear] some of the references that I was just perusing indicated that this could also include combustible products that such as hydro carbon, dioxin, ferrous, heavy metal fairly ugly stuff, but I do not know any study that would be directly relevant here. A lot of work that has been done [not clear] the municipal staff commission. Rather than the old burning [?] I can further that the request [..?].

Mr. Chairman: Margaret you had a question or comment to make?

Margaret Keast: Fisheries and Oceans, I just have a question, I know you talked about your request for the proposal for your comprehensive management plant. If I identify the Apex Site and the Site at the West 40 the old site. There's four of other sites that has been identified and I am just wondering, is the Municipality going to discuss their reclamation of these sites and not have made the determination who has the ownership of these sites? Thank you.

Denis Bedard: Yes Margaret, we certainly well aware the other sites at present. Comprehensive Waste Management Plant will include review of Apex dump the Iqaluit landfill, which is dump previously use. And existing facility, the other four sites. Federal or situation that has been created by Federal Agencies and at this point Municipality is not prepared to accept the responsibility clean up for those sites. It is preparing a correspondence with not only the Department of Community Government and Transportation. But also we are preparing correspondence so that the Federal Government in the Arctic, to get them to recognize the fact that we do have a problems in several major sites in town with the hope that they can commit financially cleaning it up.

Robert: I am representing the Department of Sustainable Development of Nunavut. I am just going to further address the issue of characterization of initiations from dump fires. We haven't gone any work on it a short characterizing mission from dump fire extremely difficult, because of a very ability of mission, they can vary from one spot fire to another spot, fire it's all temperature depend on, if you get high temperatures you'll likely to get more complete combustion, if you get low temperature combine with, let's say plastic chlorine then you get the production of highly toxic chemical.

We have been talking about this issue for some time and we are kicking around for ideas. One idea is to trying get grabs sample from the dump, but again it would be grabs sample, it would not be dick of over all situation.

For short, we don't have an answer immediately on this, but it something we are seriously looking at into, thank you.

Margaret Keast: I am just quickly go back to the old sites, I am just going by what is in submission for the Renewal of this Licence and there is a map in there I am not with done by. Consultant Company can may. One of the sites that haven't been discussed, this called Site #2 and it says: "it is with the Municipal Site use for one year. And again that was the Consulting Company that had put that together, so I don't know. Maybe since that's been discovered that is inaccurate.

Denis Bedard: I am not aware of Site #2 Margaret. Can you tell me where it is located? We are looking at Site 4, 3 should be a middle dump, many years ago must have been Site 2 perhaps.

Denis Bedard: The best answer I can give you right at this point time Margaret, is I am not aware of that particular site being a problem, but we will look into it.

Paul Crowley: The site need it to be close off, it's matter of including that and it will be the part of next review process.

Mr. Chairperson: Any further questions Paul Crowley?

Paul Crowley: I have two questions, I guess the first question deals with the adequacy of using a tarp to cover the [?] as sludge. Having tried to tarp the thing in this town for a few years, and we've seen the results of that, I am wondering if there is any other contingency plan to tarping that doesn't work, because it sounds like in the description that there is a need for very precise conditions for the possibility for the thing to be able to be observed.

Denis Bedard: There is certainly option for maintaining a cover over cake material. It would be non-insulated shed type, it still will be a certain, tarping doesn't work.

Paul Crowley: Do you have the budget to deal such as facility as require.

Dines Bedard: I believe so.

Paul Crowley: A certain question deals with the burning again. A comment made by Intervener, but potentially here on all kinds of interesting chemical coming out of burning. Is there are any possibility that the burning be ceased immediately for precautionary approach to disposing of the waste and what are the other options.

Denis Bedard: Municipality is not make myself fairly quickly, is not considering ceasing burning at this point time. We certainly encouraging an ultimate direction with the new comprehensive waste management plant away from open burning. The main thing is strives us to continue this processing point, is the fact that if we cease doing it at this point in time, I estimate are that the dump fill up within six months. The municipality nor the Department of Community Government & Transportation can't at this time support financially or from a time perspective to plan and design to build a new facility within six months or so. We haven't capacity if we stop burning.

Rebecca Mike: Thank you Mr. Chairman. My question is to Hillman Murray, I think, when he made the presentation, he talked about this sludge generated well become composed and a little later on he also did mention about municipal clean up project, I would like to know more, what that is?

Denis Bedard: Thank you Mr. Chairman. I think, I can answer that question.

The material that produce the by-product cakes that produce the from the sewage treatment facility. Our plant is to compost this material tested to determine the suitability in the Municipality. Our hope is to try some pilot [?], what we have to do is to select the site that we can use this material spread in the area and use the plant seed, which we hope it'll grow and flourish. That's feeding the green project per site, so we hope the material will be suitable for that type of thing.

Rebecca Mike: Unless that is possible then the sludge that is being composted can be utilized to fertilize some areas in Iqaluit? Effects would the same?

Denis Bedard: Yes, that's what we'd like to see done with it. Primarily bacteria on municipal property, you know that goes to the kind of areas, we would like to see this material to used for it, to be suitable.

Robert Hanson: Municipal information for Site 2 on your dump, it's been all of those years that I have been here.

Mr. Crowley?: On your way to Causeway if you go to present dump you probably keep on going down, the road you turn to go transmitter site, further down towards Causeway about half way between that road at the transmitter site and the Causeway, there was a dump down at the bottom of that hill one time. For the Town it used for about a year and part of that still, we have material that you took some guide dump Site 3 and dumped in that area. It last about two years finally came to me.

Dionne Filiatrault: I just want clarification on that we discussed yesterday, it might have gone this morning, which respect to forecasting on solid waste site or

alternative technology that been Municipality is considering investigating. As suppose to open landfill burning. Is the alternative technology investigation separate from the Solid Waste Management Study. Now the plan has been developed?

Denis Bedard: No, the comprehensive plan that we commissioning now will include the identification of one system which could be used for the Municipality to accept for the treatment of the disposable solid waste, it also include the identification of location for this new system.

Mr. Chairman: Any further questions?

Dionne Filiatrault: Thank you Mr. Chairman, this is sort of the administrative type question and it goes to sewage building. Do you have a copy of Licence here with you?

(the end of TAPE FOUR: Side A)

(TAPE FIVE: Side A begins here)

NOTE: from the transcriber, this one is really hard to follow as the sound is not good as she keeps turning away from the mic while she is speaking.

Dionne Filiatrault: With respect to part 2 Conditions Applying To Construction, I just wanted to get. Which that will be on page 9 and all of the terms of record so that the audience can see and hear it. I just would like to get your interpretation as fact, how it applies to what that is going on with the relate to Chair. Part G. Item 1 it is applying to construction prior to construction of any dams, dykes or structures intended to contain, withhold, divert or retain water or wastes for the Board approval, design drawings stamped by a qualified engineer registered in the Northwest Territories.

Part G. Item 2 construction of design structure shall be carried out as approved by the Board.

Denis Bedard: It's part of the original commission that we made to the Water Board. Preliminary plant what I would call were submitted to the Water Board to review and they were Stage 1 Plant, they have been indicated earlier, we will be prepared to provide the Final Engineer Drawings to the Board. In fact those designs actually are only completed in the final. Nunavut faxed me three to four weeks ago, so we will be submitting those to the Board this afternoon.

Dionne Filiatrault:: Along with the in line, I'd just like to refer you to Part F. CONDITIONS APPLYING TO ABANDONMENT AND RESTORATION Given that the new facility? is, it's supposed to be operating in and functioning by December 31st. I'll read the clause. Part F, item 1, the licensee shall submit to the board for approval an abandonment restoration fund at least six months prior to abandoning any waste disposal facilities except those facilities specified in part F, item 3 and 5 which make reference to the existing landfill site. And then there's, the plan shall include but not be limited to contaminated site remediation, leachate prevention and an implementation schedule.

UNKNOWN: Thank you Mr. Chairman. Are we talking about solid waste site Dionne?

Dionne Filiatrault: We are talking about the sewage lagoon.

UNKNOWN: When those plans are prepared, they will be submitted to the water board for approval. They are not complete.

Dionne Filiatrault: Any indication as to when that type of report would be made available? I know this will come up later on by some of the other intervenors. It was one of the issues that we had discussed at the pre-hearing meeting on May 19th. That this information needed to be provided as soon as possible.

Mr. Chairman: Respected elder, Celestino Erkidjuk. Do you have any question?

Celestino Erkidjuk: I don't speak English but I'm an elder. I think I'm aloud to ask questions. I'm not originally from Iqaluit but I've be residing here for many years. At the time when I arrived, there wasn't a high rise or school. Bob was already here. He was a young man then. I don't know how many grandchildren he has now but I know he's a grandfather. I remember the lake that we got water from. At the beginning, the water that was delivered to us was not drinkable. If the water is running out, it would be bad water. Have you already picked another place to get water from?

Denis Bedard: Michelle Bertoll this morning clearly identified the priority projects in the municipality for the next three or four years. Our priority is to get the existing systems operated and improved to meet the demands of the municipality in the next 20 years. Following the completion of those plans, it is our hope to begin reviewing the reservoir and the process by which we collect and store water.

Mr. Chairman: Erkidjuk, did he answer your questions.

Celestino Erkidjuk: I would also like to further add, because you mentioned that supposing we get a bad storm, how are you going to make available... When I used to look after the streets, sometimes it was very difficult to cross to the last

building because the blockage of the roads. Extremes storms make it difficult to use those streets. I'm an elder, a genuine Inuk. I was a road foreman. We had difficulties during one night storms. Those are my concerns. Thank you for allowing me to speak up.

Mr. Chairman: Any further questions?

Dionne Filiatrault: Just along the lines of what the elder was requesting information on with respect to lake Geraldine, I'm just wondering, in the future if the community is planning to do hydrological analyses of Lake Geraldine to determine long term capacity and requirements to meet community needs and just to do an evaluation of Lake Geraldine.

Denis Bedard: Lee Crowder had completed upon review of the Lake Geraldine water storage facility, Oliver Mangeoni had also completed a review of the storage facility at Lake Geraldine, so those reports are available. The only catch to the whole thing, when we chatted yesterday, Dionne, the Lake Geraldine has never been founded or surveyed. Much of the work that these consultants have done up until this point because mapping has been some what limited, is they have used contour mapping to estimate the volume in the lake and to, you know, very briefly review potential solutions to expanding the reservoir. Reports are available, can be copied if anybody so wishes to have those.

Mr. Chairman: Are there any further questions to the applicant?

Dionne Filiatrault: With respect to the dyke at Lake Geraldine, when was the last time that it was every inspected for structural integrity?

Denis Bedard: Actually the damn was doled, we hired a diver two weeks ago to inspect damn. He videoed it and completed an inspection for us.

Dionne Filiatrault: Are the results available, can they provided to the board or are they still forthcoming? And I guess from, was the diver an engineer that is certified with in the Northwest Territory or Nunavut?

Denis Bedard: The diver was not an engineer, what he did Dionne, was he photographed and filmed the dive. Whether I can get the video to the board today is a good question but I certainly can prepare the video for the board within the next couple of days.

UNKNOWN: Mr. Chairman that may be worthwhile if we can get that today because we are in session now and it will become evidence. Anything after is just information for staff only and for our final deliberation we should have all information given to us during this hearing.

Dionne Filiatrault: Final question. Just taking a step back to the administration of the licence and the authority of the board, I'm wondering if the licence fee, as you where know where the authority of the board comes through the Nunavut Land Claims Agreement. There's Part 9 Section 1 regarding enforcement that states, "where approval of the Nunavut Water Board is required for a water application, the applicant shall not proceed until approval has been granted and I just wanted to hear the licensee's views with respect to that statement with respect to what is going on again with the sewage treatment facilities.

Denis Bedard: I don't think it's the intent of the municipality to supercede or to ignore legislation. Our main interest certainly is to produce systems that will meet the growing needs of this municipality within the time frames dictated by the municipality, by other government agencies. I think we fully want to cooperate with the water board. We have I think provided maybe not as much information as we could to the Water Board and it's certainly a two way street in our view. I think everyone is aware of the fact that the sewage treatment facility is being built and if there's any concern with respect to the lack of information, we're fully prepared to provide what ever information you may need.

UNKNOWN: Mr. Chairman just a question, I didn't quite hear what you read if I could have it read again, what you said, and maybe a bit louder, I'm sure I didn't hear it and I'm not sure that the question was actually answered.

Dionne Filiatrault: I read that again. It's reference to Article 13 part 9, item 1 and it reads, "Where approval of the Nunavut Water Board is required for a water application, the applicant shall not proceed until approval has been granted." Any approval of the board.

Mr. Chairman: Thank you Dionne, any further questions?

UNKNOWN: I didn't quite hear what Dionne said. Basically what she's saying is that there's a clause within the agreement that we would not start until the application has been approved. Is that correct? And we have started. That's also true.

Dionne Filiatrault: It's up to them for their interpretation. I leave that to their interpretation of what that means to them. I don't want to speak for the board. The board has to have a chance to deliberate.

Mr. Chairman: Thank you Dionne.

Rob Murray: I'd just like to make a couple of comments in our experience from other jurisdictions. We're working in British Columbia and the United States, the Caribbean. Water licences or discharge permits are the common thread on all

the projects. There are two issues. This is a design build project. Preliminary drawings were circulated to the Water Board early on and we actually are constructing certain phases of the project while we're designing other phases and that design, build, project design and construction are going concurrently, we're often designing part C while we're building part A. Drawings are continuously updated, the Water Board only has the prelim set of drawings and more and more certified drawings are available all the time. Section F I believe it is from the water permit or under design build, we continuously maintained compliance with that by continuously submitting drawings as they became available. In the Nunavut Land Claims article that you sighted, it's been my experience that that is more in reference to commencing treatment and discharge under the licence rather than commencing construction so we can't actually commence use of the facility until the Water Board approves the licence. I'm just submitting that to the board from my experience from other jurisdictions that I would suggest that the land claims agreement article is in reference to commencing use of a facility.

Mr. Chairman: Thank you Mr. Murray. Dionne?

Dionne Filiatrault: Thank you Mr. Chairman, maybe I'll just use an example and maybe that'll clarify where my concern is coming in. You build this facility, you go ahead with the construction, you're all ready and you're all ready to go and the board decides that site selection is not an appropriate site. Now approval thus far has been given from the board for that site or any potential discharge point of where that's going to happen. The site selection, I mean you can conceivably worse case scenario, again the board has not deliberated on this and this is my opinion only, you conceivably build, construct and be ready to go and then you're going to want to start to discharge waste and you don't have approval from the board.

Denis Bedard: I think the municipality has been rather open and forthcoming with it's process and with the information. We have provided information to you, Dionne, with respect to not only location but the facility. So you've had ample time in my view to provide comments and to provide your ideas and to submit to the board. The plan construction of the state of the art sewage treatment facility. In our view we've been open. We've planned and we've discussed not only the location but the configuration of the plant with many agencies, the Government of Nunavut and many regulatory agencies have provided us comments with respect to the location and the plant itself. If we've overlooked a particular step in the process then I take responsibility for that and if there are ways of correcting that by providing more information then so be it. Again the interpretation by Mr. Rob Murray with respect to discharge, we fully expect, I mean my whole sense of the situation here is that we are going through a water licence review at this point and prior to discharge, we expect the water board to review and grant approval for that process. Thank you Mr. Chairman.

Mr. Chairman: Thank you Mr. Bedard. Any further questions? Any further questions to the applicants?

Let's now take lunch break. It is now 12:15, we'll re-convene at 1:30.

Margaret Keast: The requested crown summary document, I only had time to make five more copies over there but anyone that doesn't get a copy that wants one, by all means, ask me. There's a couple of letters included, so here it is.

UNKNOWN: Can I please have that and I'll mark it as exhibit 3. Thank you.

Mathew House: I actually have three exhibits to submit as per the request from Elliot today. The first is the video tape of the Iqaluit damn and water intake, that was the survey that was done recently, August 19th. I have a set of stamped drawings for the sewage treatment plant and I also have a statement of work for consulting and professional services that the RSP for the comprehensive solid waste management plan.

UNKNOWN #1: Thank you Mr. Chairman, so to summarize the exhibits that have been marked today, exhibit number 1 would then be the public registry and that includes any correspondence that comes to the board in this application to the municipality of Iqaluit. Many of those materials are already here. There may be some that might be at the board office. So that would exhibit number one. That includes the application, the draft proposal etc. Exhibit number two then, as I take it will be the two drawings that were presented this morning by the consultant for the municipality and that included the signed drawing for the new plant. Is that correct?

Yes those two in the front. So that would be exhibit number two. Exhibit number three then would be the DFO crown summary. I haven't seen it yet. Study. Okay? And exhibit number three is DFO's crown summary study. Exhibit number four would be the video tape of Iqaluit's damn dated August 19th of 99. Exhibit number five would be the...I can't read my writing. Design drawings, that's right... for the sewage treatment facility? That's right. And exhibit number six would be the RSP for the comprehensive solid waste management plan. Was there seven?

UNKNOWN # 2: No.

UNKNOWN #1: Okay Mr. Chairman, I just have a question as to whether there might be two different exhibits for Fisheries and Oceans and if Margaret can help us out. We have one dated for May 25th of this year which is the request for health hazard assessment. Is this the clam study? I see, so that's part of exhibit number three. Okay, Mr. Chairman, thank you. In terms of a house keeping item, during the break, a couple of people asked if there would be a chance to ask questions of the town. So as I understand it, now would be the opportunity

for others to ask questions of the town before the town steps down and allows some of the parties to give some of their evidence. Of course, it's also an opportunity for the board to ask questions for clarification if you have any. Thank you Sir.

Chairman: Thank you, any further questions from the floor? To be addressed to the applicant? Any questions from the Board to be addressed to the applicant?

Jackie Nakoolak: From Coral Harbour. I just wanted to get more clarification about the water, is it lake? There was mention about the water, there might be at the hill to access to get more water in there? Do you have more information on that part?

Denis Bedard: Thank you Mr. Chairman. Of course, they are completing their studies. Potential solution to expanding the water shed, which contribute to Lake Geraldine on the water she therein. One solution, certainly not one have been investigated in any great detail, but one solution was to excavate a trench through winter stone, to the west of existing lake. No the rest of them haven't been done with a whole lot of detail.

[NOTE: Some of his talk has been cut off here.]

Jackie Nakoolak: How far would it be hang on to it?

Denis Bedard: It's actually the rages stone located right on west edge of the Lake Geraldine, so I really haven't a good solid answering in terms of how far? No more than couple of hundred meters certainly.

Mr. Chairman: Is there any further questions or comment?

UNKNOWN: Mr. Chairman, out of curiosity, in the winter time when the ice is covered heavy, how do you know, how much more is left in Lake Geraldine?

Denis Bedard: Deception the designers and planners make thickness of ice and remove that volume of ice from the total volume of the lake.

Mr. Chairman: Thank you, any further questions?

Guy Kakkiarniut: From Pelly Bay, yesterday when we went on the tour, I was very concerned about the sea beach from the sewage lagoon, that you've mentioned that there were some, it was filtered through, but it seeping towards the ocean and I was very concerned about that, I was wondering if you have any management plans in regards to that? Thank you.

Denis Bedard: Thank you Mr. Chairman. Actually the seeping that you noticed for the run off, you notice some of from the sewage lagoon is actually that's the way the system designed. Again the treatment at the lagoon is primarily, it allows the solids and inner via materials to settle to the bottom when the water flows into the bay is raw and fluid in, that's basically the way it's been designed and operated through the years. That is the system that we looked to correct and improve with the completion of our new sewage treatment.

Guy Kakkiarniut: I was wondering if it takes any chemical or substances that are dangers to our health? Can you answer that, if it is dangerous?

Dennis Bedard: Thank you Mr. Chairman. Certainly it run off from the lagoon is unacceptable, certainly unhealthy and that is primarily the reason for the new treatment facility that will be build in. With the new facility, what you primarily be getting discharge into the bay is clear water. In terms of been on healthier.

Mr. Chairman: Any other question?

There seem to be no other questions, so what we will do next is move on to Interveners.

12. INTERVENERS

Mr. Chairman: First one is Environment Canada.

(TAPE FIVE: the end of Side A)

(TAPE FIVE: Side B begins here)

UNKNOWN: Thank you, I worked for them [not clear] of Iqaluit in Yellowknife and I would like to thank the board for the opportunity to make this presentation today. Environment Canada's Intervention to the Nunavut Water Board presents concerns and recommendations with the respect to the Community of Iqaluit's renewal application for Water Licence. The Town of Iqaluit has applied to use up to 1,100,000 cubic metres per year of water, and to dispose of sewage and solid waste. Significant upgrades are under consideration for the sewage treatment system and solid waste site, as well as for water supply and infrastructure improvements. However, at the time of the licence renewal application, no final plans or design-documents were available for review.

This submission describes out concerns and RECOMMENDATIONS regarding:

- a) Sewage Treatment and Disposal
- b) Solid Waste Disposal Sites
- c) Monitoring a Surveillance Network Program Stations
- d) Pollution Prevention Measures
- e) General Process Issues

I just ask this Intervention be put on the record as submitted, I won't read through our mandate some of the parts of it, that will speed things up just a little bit. And then I can go to the technical comments and RECOMMENDATIONS.

TECHNICAL COMMENTS AND RECOMMENDATIONS

a) First deals with Sewage Treatment and Disposal

i) Upgrade of treatment system:

The Town has selected a membrane/bioreactor treatment facility which is to be installed adjacent to the existing sewage lagoon. The new system is to meet effluent quality standards, as outlined by the Nunavut Water Board, which are considerably more stringent than those permitted under the current licence for the lagoon system. Design, operation and performance details on the proposed system have not been provided for review, and should be circulated for technical evaluation prior to final commitment for implementation. The proposed timing for the new facility is for commissioning in fall of 2000. Or, I hear now December of this year.

Effluent discharged by the treatment facility will enter Frobisher Bay, which contains fish. To determine the level of compliance with Subsection 36(3) of the *Fisheries Act*, trout and daphnia bioassay tests should be done with the final effluent. **Environment Canada recommends that bioassay tests be included as a condition of the licence Surveillance Network Program and recommend a four times yearly basis.** Environment Canada is available to assist the Municipality in arranging such testing.

The sewage treatment plant proposal suggest the option for the Town to continue using the existing lagoon for trucked sewage, relying on dilution with treated effluent to meet the more stringent licence limits from the lagoon. **Environment Canada recommends that full transition be made to the new system as soon as possible, in order to improve the quality of effluent entering Frobisher Bay.**

And base on the discussion that the site visit yesterday it does might that is current plant.

ii) Operation of the existing lagoon system:

Until the new system is commissioned, the existing lagoon system will continue to be used, maintaining the current licence discharge limits for effluent will be upland. Total Suspended Solids, Biological Oxygen Demands, and Fecal Coliforms. Recent problems with dyke seepage have resulted in the need to operate the lagoon at lower levels, shortening the retention and treatment time. Leakage form the Lagoon's West Dyke must be monitored and minimized, and overall dike integrity evaluated. **Environment Canada recommends that a geotechnical Inspection be done during this open water season, and necessary remedial measures identified.**

iii) Decommissioning of the existing lagoon:

The existing lagoon will require reclamation measures such as decanting and sludge removal. There remains a possibility that the existing lagoon with some upgrading could be used as a component of the new treatment system. For example, it could be used as a holding pond for trucked sewage prior for the trucked sewage being routed through the new treatment system, as a surge pond for temporary storage of unexpectedly high short-duration sewage flows, as a temporary storage pond for sewage during both planned and emergency shutdowns of the new system, or for extra polishing of the effluent from the new system prior to release to the environment.

And from what we've heard during this hearing, it doesn't sound like there will be plant to shut down and any down time, but it might be option to evaluate.

So, Environment Canada recommends that the Town be required to evaluate these options before deciding on the final fate of the existing lagoon. If the result of this evaluation is that the existing lagoon is no longer needed, the Town should prepare a practical reclamation plan for approval. The plan should address supernatant treatment, sludge testing and disposal options, and final reclamation measures.

b) And we have been to Solid Waste Disposal Sites. The first issue is:

i) Improvement of practices:

Open burning has been an ongoing practice at the landfill. In addition to posing potential health and safety risks, open burning generates emissions which may contain unacceptable levels of contaminants, such as hydrocarbons, dioxins, and metals which are transported or deposited by rain and runoff to the adjacent land and water. **Environment Canada recommends that open burning be**

discontinued. Other issues such as the handling, storage and disposal of hazardous wastes and the effective management of recyclables should be addressed. **Environment Canada recommends that the hazardous materials waste stream should be characterized, and provision made for secure storage and handling of hazardous materials.**

ii) To respect to the new land fill facility:

The existing facility is nearing the end of its operational life, and planning studies completed to date haven't identified sitting or provided operational details for a new landfill. Development of the new facility should be on a "cradle to grave" basis, and include investigation of any feasible volume reduction technologies such as, compaction and incineration. A segregated, secure area for hazardous wastes should be included in the designs. **Environment Canada recommends that the Town develop a practical plan for a new landfill site, including planning for site engineering, operation, and final abandonment and reclamation. Environment Canada also recommends that the new landfill include an area for land-farming of hydrocarbon-contaminated soils.**

iii) Reclamation of abandoned waste disposal sites:

The reclamation of the abandoned West 40 landfills, there are four non-military sites identified and the Apex dump have been the subject of several planning reports, however engineered closure plans have not been developed. Plans submitted under the expiring licence have not been approved, and new plans are required to address: and assessment of type and extend of contamination, full plans for remediation measures and drainage management, a long-term monitoring plan, and the timetable for implementation. **Environment Canada recommends that development of such detailed closure plans and a schedule for implementation, subject to regulatory approval, be a requirement of the licence.**

c) **With respect to the Surveillance Network Program changes requested**

By the applicant, they requests removal of sampling stations and frequency for Poly Cycling Aromatic Hydro Carbons and PCBs at three stations. **Environment Canada recommends that the Town provide all past sample result and a rationale showing why these sites and parameters should need to be monitored.**

d) **Pollution prevention Measures**

In the water licence application, the Town of Iqaluit has expressed its commitment to being environmentally responsible. Environment Canada comments this attitude, and is available to discuss such

pollution prevention measures as water conservation and waste minimization, and we can provide information on available programs. **Environment Canada recommends that the Town of Iqaluit be required to develop a proactive plan aimed at reducing waste generation, which identifies practical measures for implementation.**

I just like to present some information that was not in our submission. Environment Canada does have some grass routes program, which a community base organization can access to implement environmental improvements and part the Millennium Equal Communities Program called: "Equal Action 2000", and I am available to get the people information on this afterwards it, it could be useful for such things as recycling and health identifying waste extremely can be reduced its source.

e) General Issues

- i) Identification of funding and finalization of plans
The renewal application refers to numerous upgrades which are identified in the capital plans of the Town. Scheduled for construction for this year are the sewage system upgrade, the water treatment plant upgrade, the Astor Hill trunk main re-route, and improvement of the existing pipe system capacity. I think that's changed since. **Environment Canada recommends that the licence renewal require that the Town provide firm funding commitments, and final designs and schedules for high priority items such as the new sewage system and solid waste site.**
- ii) Review of draft licence:
The current renewal application references conceptual plans for the upgrades to the sewage and solid waste systems, which will not have been finalized or passed through a technical review at the time of the public hearing. Because of the uncertainty surrounding proposed changes to systems, and their potential for new information to be presented at the public hearing, **Environment Canada recommends that the licence renewal be circulated as a draft for review by intervenors such that comments can be made for consideration by the Nunavut Water Board.**
- iii) Term of licence:
Environment Canada recommends that the licence duration be limited to the time frame of the implementation schedule for the proposal system changes.

We heard from Mack earlier today, perhaps three year term will be appropriate for the Funding, which is proposed as far as getting the project underway.

4. SUMMARY

Changes to the key facilities which fall under the water licence are described in the application largely in conceptual terms, and to indication of timing is provided. Without this information, a thorough review of the application is not possible. **Environment Canada recommends that the short-term licence be issued until final designs are available and funding committed.**

Environment Canada believes that upgrading of this sewage disposal system and solid waste practices are priorities, and should be key conditions of the renewal. That concludes my presentation and thank you. If there are any questions, I'd be happy to try to answer them.

Mr. Chairman: Thank you. Are there any questions for Environment Canada.

UNKNOWN: Mr. Chairman, just before you leave, I'll say that information you have there Exhibit 7.

Marcel Mason: Thank you Mr. Chairman. I just wanted to check with Environment Canada, they acknowledge that the emissions from the dump may contain contaminants that are just plain unhealthy for us. I am wondering if it is within their mandate to ask for testing to be completed.

Anne Wilson: Environment Canada, we don't have a regulatory role for air emission in the NWT, we certainly can offer expertise and cooperate maybe with some support on study undertaken, but I think it is the Municipal responsibility in this case.

Mr. Chairman: Thank you, any questions?

Dionne Filiatrault: I am just going to walk through the presentation and ask the questions in the way that it was presented if that's okay Mr. Chairman?

You mentioned at the onset of your presentation that additional information maybe brought forward and we have seen some information come to the Board today.

Are you satisfied with the information that has been provided, verbally or through the site tours or to the board now. Do you feel that there are any outstanding issues that still need to be considered by the Environment Canada at this time?

Anne Wilson: I'm very pleased with the proposed sewage upgrade system and in light of that the solid waste site becomes our main concern with this renewal and I will look forward to the management study being completed. I would like to have a chance to review that before it is finalized. I'd get sight diagrams with that. I tried to stress through out the presentation that we really need practical

reports, action plans and implementation. Those are things that we really need to see for this next few years.

Dionne Filiatrault: You also made reference to the Migratory Birds Convention Act in your presentation. Do you have any concerns with respect to the lagoon systems, the old solid waste sight, the current sewage lagoon and the new system.

Anne Wilson: I had had our Canadian Wildlife Service Biologist review this and they did not identify any concerns.

Dionne Filiatrault: Once the board does receive these final plans with respect to the new sewage treatment system, you would like to receive that technical information. If we do identify through the consultation process at that time that there are technical concerns, what action should we take or what action should the board take at that time.

Anne Wilson: I can't really speculate on that. I would refer that to our environmental engineering staff for their suggestions.

Dionne Filiatrault: You also recommended in the application that they perform bio-acid testing. If you could just elaborate on the purpose of the bio-acid testing and your suggesting that they perform it four times a year. Are you also recommending that they perform that throughout the term of the licence and why?

Anne Wilson: The purpose of bio-acid testing is one of the measures of toxicity of the substance and how it's conducted. There are several types of test organisms. The most common are rainbow trout and if the substance is toxic using the term loosely, there are many measures of toxicity. This is one indicator. It's considered toxic if it kills half of the test organisms or more within a 96 hour period. The purpose of this is to assess the compliance with the fisheries act. Section 36, 3 the Fisheries act requires that any substance that is [deliterious?] not be deposited into fish bearing waters. We want to prevent anything that may harm fish from being deposited. There are also test done with daphnia that are commonly known as water fleas and there are several licences in the NWT that are now containing this requirement. Four times a year was suggested just to catch seasonal fluctuations and changes, more frequently would probably not give us anymore information. Usually it's a seasonal thing. Since this will be a continuous operation, we don't expect to see too many fluctuations.

Dionne Filiatrault: Should the board be considering for any municipal applications that come before them with respect to sewage discharge, consider monitoring and using bio-assay testing.

Anne Wilson: Environment Canada would strongly encourage that not only for municipal applications but also for industrial applications which generate a waste which maybe discharged to waters.

Mr. Chairman: Dionne, any more questions?

Dionne Filiatrault: You recommend that open burning be discontinued. Do you really feel that this is a practical thing to ask the municipality to do at this point in time. Should it be a phased operation that the municipality has suggested that they would like to investigate alternatives technologies and whatnot. What are your views on that?

Anne Wilson: I'm not suggesting that the open burning be discontinued today, that is not a practical reality. I think what we have to strive for is improvement as quickly as possible but within the constraints of the available land fill and the resources available. So certainly in the new site that is going to be engineered. Other technologies should be used, not open burning.

Dionne Filiatrault: With that particular study, should we reconvene in a public form again as a board and a public hearing to re-evaluate the information that is then going to be provided in the solid waste management plan?

Anne Wilson: From Environment Canada's point of view, I don't know that that would be necessary. I would like to see it get a strong technical review, which could probably be provided by the intervenors present. Everything is on the public registry for the public's concerns to be addressed perhaps.

Dionne Filiatrault: You also made reference with regards to hazardous material be entering the way stream and that they be characterized and proper storage and handling measures be implemented. In general most municipal applications require the constituents of an operation and maintenance manual. Do you feel that particular issue can be addressed in a revised operation and maintenance plan?

Anne Wilson: I think it has to be addressed first in the plan and then in the practise. It would be very beneficial to have some of the characterization as a source. I'm not convinced that there's a really good understanding of all the items that are ending up in the way stream. I understand that there is a dry cleaner in town now and are there any solvents that might end up in the land fill. The other question I have is how can the municipality facilitate industrial handling of hazardous waste. Because the concern of course is that the people who don't have an easy way to get rid of this stuff will dump it somewhere when no one is looking. So I think there has to be some cooperation and a strong program for secure storage implemented where by things are pro-actively managed.

Mr. Chairman: Any further questions Dionne? Okay.

Dionne Filiatrault: Just a few. Thank you Mr. Chairman. There is suggestion that the four non-military sites. There's four waste disposal sites that are non military sites. Can Environment Canada provide any evidence that the four sites are not military sites and who is responsibility it would be to clean those up.

Anne Wilson: I'm sorry, I don't have any information on that. It's outside of our review.

Dionne Filiatrault: I believe this is the final question. You concluded in your summary that you were recommending that a very short licence be issued until the final designs are available and funding is fully committed. From my understanding with information that was provided this morning, the funding has been committed, the final designs will likely be finalized early next year. What short term type of licence are you looking at. Are you suggesting a one year licence, two year licence, five year licence and how would you justify that.

Anne Wilson: Based on the information that Michelle had presented earlier and the available funding and the timing for designs to be done, I would suggest that three years would be appropriate to get us to a point where the three main upgrades have been taken to the design stage and in the first two cases, beyond that.

Dionne Filiatrault: Three years, that's if everything goes as planned. Conceivably, there's always delays in what's happening. Should we incorporate any sort of buffer into that three year plan?

Anne Wilson: I think that three years should be sufficient to provide that time and certainly the municipality will have strong ideas in the direction they're taking in all fronts by then.

Dionne Filiatrault: Does Environment Canada have any information with respect to land fills that may be useful for the board's consideration.

Anne Wilson: I would have to do a little research on that. Nothing comes immediately to mind. I think many of the guidelines are territorial here so.

Mr. Chairman: Thank you Dionne. Are there any other questions from the floor toward s the intervenors. Environment Canada?

Mathew Huff: A question on the bio-assay tests, from the figures presented by Rob and by us over the last couple of days with respect to the effluence quality,

would those figures be adequate for the test that would be performed by Environment Canada?

Anne Wilson: I'm not quite sure I understand your question when you say adequate for tests performed. What we do is we take two to three five gallon pails of the effluence sample and shipped it to our Edmonton lab where they set up the bio assay test with the fish. We also determine the water chemistry at that time to explain any problems we may see with the test if the fish do perish. So the parameters that are measured under the water licence are quite separate from whether or not it is going to pass the bio assay because the total suspended solids and biological oxygen [not clear ...coliforms] are not usually the main reasons why it wouldn't pass the bio assay tests.

Mr. Chairman: Thank you. Are there any more questions for the intervenor Environment Canada?

Dionne Filiatrault: Based on Anne's presentation I have some questions for the applicant. Do you want me to ask these questions at this time?

Mr. Chairman: You should ask them now. Yes please. Now is the appropriate time.

Dionne Filiatrault: In keeping with the order of the presentation that Anne made, the first thing that comes to mind is with respect to the bio assay testing, does the town feel that there is going to be any problems with being able to take and do that sampling? I'm not sure, I guess from a financial perspective, how much something like that would cost.

UNKNOWN: In terms of conducting the tests or completing the requirements for the tests, I don't see it as a real stumbling block. It does come down to cost. That's not something I can answer. Maybe Anne can answer what those tests cost and who covers the cost?

Anne Wilson: I understand the commercial lab generally charge about \$500.00 per bio assay test. Initially Environment Canada could help the municipality by accepting the sample and having our lab do them just while things are getting started. And if I may add, generally under other licences, it is the responsibility of the licensee to have that done.

Dionne Filiatrault: In that regard, would Environment Canada be available to provide some advice as to the actual performing of the test or the assurance of quality control to the town?

Anne Wilson: Most certainly, the sampling is fairly straight forward. It is no more complicated than their existing [FNP] sample collection as far as clean

containers, then rinse, seal them up and ship them. So it's fairly basic and then the lab conducts all the procedures under a legal protocol.

Mr. Chairman: Thank you. Anymore questions Dionne?

Dionne Filiatrault: I'm looking.

Mr. Chairman: Are there any questions from the floor towards the Environment Canada representative? Any question from the applicant? Any questions from the Water Board? Rebecca Mike, you got a question?

Rebecca Mike: Thank you Mr. Chairman. My question is who would be responsible if the residents of Iqaluit asked for air quality control monitor? Would that be the department of Environment?

Anne Wilson: As I mentioned, we don't have any legislative responsibility for air quality or regulations here. I believe the guidelines which we developed in the NWT are grand fathered in here but I don't if there are any regulatory ones.

Perhaps Rob Redeno could answer that? I understand that the territorial guidelines for air quality are also in place here but I don't know of any legislative things that would be in place.

Rob Redeno: Department of Sustainable Development, Government of Nunavut. At the risk of sounding like I'm abating the issue, in terms of regulatory jurisdiction, this is a federally issued water licence. The regulatory agency is tasked with monitoring the licence and ensuring compliance is the agency that is ultimately responsible for anything that happens on that site. Which is not to say that our department wouldn't be willing to help out in terms of air quality monitoring but strictly from jurisdictional point of view, I believe it would be DIAND that would be responsible for air quality monitoring. You can disagree with me if you want but I think Dionne maybe you might be more aware of the regulatory aspect of the licence but that's my understanding.

Dionne Filiatrault: As far as air quality goes, I really am not up to par in what the regulatory requirements are and if you're suggesting that it is possibly DIAND's responsibility, I guess I would request that DIAND provide that clarification as to if they feel it is their responsibility.

Mr. Chairman: Is there a representative from DIAND?

Lee Webber: I am here from the Federal Department of Justice assisting DIAND today. I can't claim to have made a great study of air emission control legislation. I think that the previous comment pre-supposes that there is something in legislation or in the water licence for DIAND to enforce. I believe

it is not, has not traditionally been an element in water licences in the NWT or Nunavut to have air emission controls, air emissions standards. There certainly is nothing explicit in the NWT Waters Act or other legislation that I'm aware of, legislation that is within the province of DIAND to enforce. There's nothing in that legislation which specifically speaks to air quality standards so if we're looking directly to legislation as opposed to a water licence, I'm not aware of something that DIAND would have any business trying to enforce. I'm not aware of any legislation that DIAND is charged with enforcing. When it comes to a water licence, whether there is something to enforce depends on what's in the water licence. I think it would be something of a stretch, a novelty, to insert in a water licence standards concerning air emissions. I'm not saying it's an impossibility but it would be a novelty as far as I'm aware.

Mr. Chairman: Thank you.

Mr. Hanson: I kind of have a problem that no one seems to want to have the control of it. If it is up to us as the agency who will be recommending the licence to the minister if we do put that stipulation in the licence then it would become the responsibility of DIAND. Is that not correct? Thank you Mr. Chairman.

Bill Tilleman: I take it from Mr. Webber's comment that it would still be within the purview of the board to address open burning for example and air pollution associated with open burning as long as there was a link between the particulates or whatever was being burned and water quality. And if he could come up and either confirm that or not. In other words if the board did anything, the board's jurisdiction deals with fresh waters of Nunavut including ground waters, so if the board felt that a condition were necessary in the solid waste area because of the link between air emissions from that area and water then, I believe it is within the purview of the board to make those conditions. That, then would go to the issue of Environment Canada but in particular Fisheries and Oceans with the Fisheries Act legislation because that might then tie directly to the deleterious substance issue and water. I would like to ask the council for DIAND to get his comments on that perspective.

Lee Webber: I agree with Mr. Tilleman that a link does have to be made between any air emissions or more specifically between the particulates in the air on the one hand and on the other hand, water. That sort of link has to be made in order for the water board to have jurisdiction to regulate in respect of air emissions. Now, buried in that comment, buried in this whole issue is the question of remoteness or directness of link. One could imagine a lot of things that could be done. A lot of things that could be done at some removed from water which could through a series of processes and a series of connections ultimately have some impact on water. The question is how far back in the chain of causality can the board legitimately regulate. The connection to water in the first instance or most traditionally is fairly direct. Some uses is proposed. Some

activity is proposed which is fairly plain to see is going to have a reasonably immediate impact on water and so water boards have stepped in to regulate that activity. When you move away from fairly direct impacts to less direct impacts, a longer chain of events, a longer chain of cause and effect between the initial activity and the later effect on water, then the whole matter of regulating the activity, the activity that gets the ball rolling, such regulation becomes somewhat iffier. I think that the board has to take a long look as to whether it's roping too much into its own jurisdiction.

Mr. Chairman: Thank you. Anne Wilson?

Anne Wilson: I would just like to note following Mr. Tilleman's comments that if there was concern with the air emissions reaching fish bearing waters, Environment Canada administers a section of the Fisheries Act which deals with deleterious substances. It would be our approach I expect that we would take samples of the water. We would not monitor the air. We would still not be looking at the open burning composition.

Mr. Chairman: Any further questions for the intervenor?

Lee Webber: Mr. Chair, I just wanted to make one follow up comment. My understanding and my colleagues at DIAND can speak to this more directly than I can. My understanding is that the monitoring of air quality has not traditionally been one of the activities of the DIAND inspectors or to put it a slightly different way, it's not one of the activities that DIAND inspectors have been asked to perform. Whether DIAND would have the resources, whether DIAND inspectors would have the where with all including the expertise to do that sort of monitoring, I don't know but it would certainly be a question I would think the board would want to figure into its calculations.

Mr. Chairman: Thank you. Dionne?

Dionne Filiatrault: I just have been along that line earlier in Anne's presentation, she made reference that there was a concern with particulate matter generated from open burning and can you confirm that there is a potential concern that this particulate matter could impact on water quality?

Anne Wilson: Conceivably the matter which is deposited on the land adjacent to the burning site could be carried by run off to water and hopefully the SNP monitoring will tell us that which is one of the purposes of it.

Mr. Chairman: Any more questions?

Dionne Filiatrault: This is actually addressed to the licensee. Environment Canada recommended that the town provide all test samplings results and rational explaining the removal of PHAs and PCPs from the licence and I was

wondering if that information is available and if they could provide that for the record?

UNKNOWN: I believe it is, and yes it can be provided.

Vice-Chairman: If I may, make sure it is done prior to the hearing being closed if you want to get it in as evidence.

Mr. Chairman: Dionne? Okay, Any other questions for the representative of Environment Canada? Mr. Tillemann?

Mr. Tillemann: This question actually followed up to the town. The last point was whether or not they could provide any monitoring data that they have relative to this application and that would be helpful to the board I would submit. So even if the hearing closes even if all of the people are done today, the board could hold the hearing open until tomorrow morning to give them time over night to look through their files and then the board could close their hearing tomorrow. They'll no doubt need some time to find that information and Sir, if I might, just one other thing that came in my mind while speaking with the town. In terms of regulatory approval, they earlier said that they, or perhaps their consultant said that they sought all regulatory approval. Since the facility is located so close to the end of the runway as we all heard during the side visit the jets were quite loud at times. Did that also include the Ministry of Transport approvals and if they wanted to answer that later or now that's fine too.

Denis Bedard: The Department of Transportation had read fairly strict guidelines in terms of how tall the building was and where it was located. Our consultants had prepared several drafts of plans for the Ministry of Transportation and they have approved this location and it's height. Mr. John Graham is the fellow that we've dealt with through that department. So that end of things have been finalized.

Vice Chairman: Have we received copies of any of that correspondence for our records. Like the Ministry of Transport, Mr. Graham has approved the actual building? If not, I'd like to have a copy also entered as evidence. So we would have that also during our deliberations, if you could please? Thank you.

Mr. Chairman: Respected Elder, Celistino Erkidjuk had a question.

Celistino Erkidjuk: It's not only a question. It's not mainly for the town, but for Environment Canada. I'm concerned about the air pollution. We are between Canada and America. I was working on the DEW Line in the past. It was not coming from here. There were about 200 hundred American oil drums I had to burn them. Because they were not supposed to drain down to the salt water. I had to burry them to where the frost is. We had to collect all the oil leftovers to one including different types of oil. Those containers had to be shipped out and

my fellow Inuit who were servants were not allowed to be around. All that very dark smoke was going out. Some areas pressed it down to the ground. It did not just disappear to the air, it came down to the ground. I want you to be aware of that. Not just in Iqaluit, we are all concerned about that. If it's heavy smoke, it doesn't just disappear into the air. And it can drop down to the water. That's how heavy dark smoke comes down to the water.

Mr. Chairman: Environment Canada? Let's take a 15 minute break before we move on to the next intervenor.

Mr. Chairman: The next intervenor is the Baffin Regional Health Board.

Nicole Ritchie: I am representing the Baffin Regional Health Board from the Environmental Health Department.

Mr. Tillemann: Please spell your last name.

Nicole Ritchie

Mr. Tillemann: Do you swear the evidence you are about to give to the board is the truth, the whole truth and nothing but the truth so help you god?

Nicole Ritchie: Yes.

Thank you.

Mr. Chairman: Thank you. You've got the floor.

Nicole Ritchie: On behalf of the Baffin Regional Health Board, I am their Environmental Health Officer and I regularly conduct inspections of water, sewage and waste disposal systems in the Baffin. I'll start off with the water treatment and distribution system that Iqaluit presently operates. The BRHB, Environmental Health Department has visited this facility on various occasions in the past couple of years and we have worked with them to identify where their short comings are and also we make requirements of them to meet. The main concern I have at this time is with plant operator training, that's one of the main concerns that I have. Because it is such a large facility and a large community that it serves, I believe this facility should be manned with operators that are equipped with proper training and knowledge to safely run and provide a reliable source of water treatment for the community. At this time they have basic training and I believe, and I have been informed that they are seeking further training, it should be according to the water licence association, NWT, the consultant that I spoke to, it should be a class two system, right now there's just a basic introductory course that has been offered to the present operators. They should have class two, I believe they are seeking class one treatment at this time. Treatment system training at this time. The other main concern that we have is that the municipality provides specific details on both short -term

upgrades that are planned as required by the Public Drinking Water Regulations. I've outlined the requirements for them previously and as I understand they are in the process of trying to meet those requirements with short term upgrades. These upgrades have not been outlined for us as yet what they're planning in the short-term. Also, down the line we would like to see a fair distance ahead of time, full system expansion upgrades outlined formerly in writing and submitted to the department for comments. As yet we have not yet received this although we are told that they are seeking the funding to provide these upgrades in the next couple of years. The purpose for requesting these plans ahead of time is so the plans can under go the proper regulatory review and proper approval can be sought and obtained from the Chief Medical Health Officer of Nunavut. For the Sewage Disposal System, our main concern right now is as discussed earlier by Mr. Murray is that they are employing a design while build method of planning which from our departmental perspective, does not work very well. It doesn't provide the municipality with much chance to provide their regulatory authorities with plans ahead of time to allow for the proper approval process to proceed. Which ultimately would end up in obtaining a health approval from our Chief Medical Officer under the Public Health Act. This has not been obtained and a proper written plan has not been submitted for approval for the New Water Waste Reclamation Facility that has been planned and is in the process of construction.

A second concern is the de-watered sludge treatment and disposal methods that they are proposing are questionable. We have not been provided with very much information for this type of waste disposal option as well as the ultimate composting of the de-watered sludge. The location of where the sludge will ultimately end up has not been approved. It has not been documented for our view and it has not been obviously received any type of approval. At this time composting is not something that we have seen occur in the NWT or Nunavut in the last couple of years that I've been with the Health Board and at this time I would not have a lot of faith in that type of system unless it could be demonstrated to me in a plan that was well documented and researched that it would succeed or have a very good chance of providing the necessary treatment. The third concern that we have is that the abandonment and restoration method and schedule for the present sewage lagoon has not been submitted to our department for review or comments or approval for that matter. Ultimately this disposal system requires a certain degree of training provided to the operators. I am relatively assured that this training will be provided however I am not sure of the particulars of what it will cover and if it will cover everything necessary under our departmental requirements. For the solid waste disposal system that's presently operating, the waste disposal site that is presently being used was originally intended to be an interim site an emergency site as referred to earlier. This site is not set up to be operating to the extent that it is right now. For that reason, we have consulted with various safety officials and provided the municipality with much correspondence on how the operation and maintenance plan should be adjusted, modified or amended to be able to provide a level of safety that is acceptable for the employees out there, for the emergency crew

that has to go out there once in a while to put out uncontrollable burning operations and for the public that often visit that site to scavenge for recyclable materials and to simply drop off refuse. Our main concern is the safety of the site however I'm not sure that the Nunavut Water Board is interested in but it is my main concern. Secondary concern, and it automatically links to the first concern of safety is that the site does have a limited life span, there has not been a site for a new waste facility identified yet. We have not seen the plans and we have not seen a contingency plan for a waste disposal site should this present site fill up sooner than expected or should it have to incorporate unexpected waste such as the sludge they are expected to dispose of there as well. A new solid waste facility is necessary. It's necessary because one, presently it's too small, because a waste disposal facility should be properly planned and approved to fully address the present and future concerns of this community. Also a long term solid waste management plan should be in place. We have recently within the last year received a copy of the study that was conducted through the municipality. This study was not acceptable by any means as

(TAPE SIX: Side B beginning is here)

by the present community and future expanding community whether it's industrial, commercial usage of the facility and system. Ultimately, this site will be manned and operated by municipal workers. Again, training is mandatory. The workers understand how to segregate waste, how to do it safely, particularly with hazardous waste. And they must understand how to properly extinguish fires.

Open burning has been used there in the past however they have been informed that this is not an acceptable practice by the Environmental Health Department of the BRHB. They've been informed on numerous occasions that this is not acceptable practice and for this reason they should be modifying their operation and maintenance plan. However due to the lack of planning for a new site and lack of a management plan, to eliminate burning would obviously impact the sanitary condition of the community. We need to maintain a collection system. We do not want refuse piling up in the community. That would not be a sanitary thing. What we need is to continue with waste disposal however in a most expedient manner, put in place a long term solid waste management plan so that we can quickly eliminate open burning entirely. That is something that we have expressed to the municipality and they have expressed interest in stopping that. This I would think should be a priority. In conclusion, one of our greatest RECOMMENDATIONS for the short period would be an operational maintenance plan modification and amendment. There could be many amendments to this, I've already outlined to the municipality they should be in my reports to them. I'm available for further consultation if they wish to solicit more information. I am available to the Nunavut Water Board for the same purpose. If the water licence is issued at all, it should only be with strict conditions based on consultation with regulatory authorities. And these

conditions should be enforced by some type of DIAND Water Resource Officer or some type of official representing the Nunavut Water Board. I recommend that the licence be for a relatively short period of time simply because there's so much unknown about the systems that are operating right now and the long term needs of the facilities. In addition, we have provided much information on water, sewage and waste systems management for the municipality in the past, we further look forward to reviewing the finalized plans for all sewage, water and waste modifications and construction, new facilities. For the purpose of approval under the Public Health Act as well as to provide comments and assistance to the Nunavut Water Board however necessary.

Mr. Chairman: Thank you. Are there any questions for the Baffin Regional Health Services? Mr. Paul Crowley?

Paul Crowley: My question is, what are your concerns that you have about the open burning. They've been expressed to the town, what are they?

Nicole Ritchie: My concerns with open burning are generally the same concerns that all the community members have and that is that there is a given hazard associated with burning. There are pollutants, toxic, noxious gases emitted from unknown refuse, garbage with unknown contents. At this time there is very little segregation being conducted at the solid waste disposal facility. It is known throughout Canada what toxic noxious gases are and what can be produced by burning hazardous waste. There is no way of knowing exactly what is in that garbage, therefore we have to expect that there are numerous types of pollutants being emitted from the burn pile, when they're burning. And we can only guess or estimate what those noxious toxic gases can be. So obviously my first and main priority concerns are with the people who are out there directly working with the burn pile, the employees, as well as the public that is out there dropping things off. They are in direct contact with these types of by-products. The impact on the community is not something you can establish without testing and it's not something we are set up to do but should be considered by the appropriate authority or the appropriate body whether it's the municipality, I'm not sure, I think we were deliberating that earlier. Who's responsibility it is to monitor the site I would think because it is the municipalities land and they are responsible for the operations on that site, they should know what they are emitting from that site simply for the safety of their employees if not for anything else and the safety of the community.

Mr. Chairman: Thank you, any further questions?

Mr. Paul Crowley: Yes I do, if the warning have offered to sent to the Town, why they still burning?

Nicole Ritchie: The Public Health Act does have specific regulations on the water quality, public water systems. It also has specific regulations on sewage waste

disposal. It does not have a specific regulation on solid waste disposal and it is something that requires attention. We are in the process of regulatory review and we are hoping that the Nunavut Government will expedite this the process putting into place regulations specifically deals with Solid Waste Disposal, but at this time it is not exist. However, it does exist elsewhere in Canada and it is something that it should be considered, it is something we are looking at, but right not it is not something that we cannot enforce. What I can enforce is immediate hazards to the health. At this time is my most urgent concern it is with the employees at that site and the community impact is not something that I myself can set!

Mr. Paul Crowley: As we know there is a lot of people who camp out in that direction in every summer. Is there any idea what stuff that they are suffering from burning?

Nicole Ritchie: Like I have said, myself, I can't access what the impact would be on anyone camping or anyone being out in that area. However, because there is smoke coming from that site I have informed the Municipality that they are required to have a proper signage erected. Certainly they are seeking to get the sign. However, it has been while, I am becoming impatient [laughter]. They are apparently ordering the signs, I have to give them benefit of the doubt. It is in process, we should see their signs up shortly. Warning people. However, it is the public's choice, where they choose where to choose the camp. Unfortunately, it was not considered heavily when they put that site in that location, that is the problem with the original design location in that site.

Mr. Paul Crowley: I understand that it was an emergency location, how short with the time frame be that it was supposed to operate for? And when it was supposed to end?

Nicole Ritchie: I was not here five years ago. But when the plan was submitted it was for five year period and as I understand from my recollection reading a file, it was 1995 that the site was put in to place and it was began operating in 1995 or 1996. It was previous 1995 and but it was not operated in 1995 and I don't where, I have to check. But it was meant to be five year, a maximum five years site.

Paul Crowley: Thank you, another topic.

Mr. B. Hanson: Excuse me, please state your name when you come to the mike, so it can be recorded!

Paul Crowley: Yes, and I would like to ask another question, regarding people who have this clams and in Koojesse Inlet and close by. Is there are any idea of, I guess the extent of influence of the dump and the sewage lagoon have on the clams and how far out extended?

Nicole Ritchie: The dump itself, I am not sure what type of sampling that normally done by [?] Water Resource Office. Therefore, DIAND, they monitor effluent discharge once a year ...discharged from the site. And, I don't expect there would be any discharge that unless there is some how compromised anyone aware of it. It should be fully contained with the exception once in a year discharged, which is monitored by an Officer under DIAND. As for the Sewage Waste Disposal Site, it is normally the burned has been breached in the past and it is expected that there are certain amount of bacteria, potentially harmful bacteria coming out of that the lagoon. However, there were studies done. And there are test done, once again I am not bluntly conduct these studies, I can't give you specific on the out come of them. However, I believe Margaret Keast from DFO did give Dionne summary of what those results for and Health Canada has interpreted them I believe, if I remember reading back in my file a while ago, interpret them as being within health women, within safe with the women. But once again, I am not sure. I have to have check my own information sources.

Paul Crowley: Another question. If that is the case and clams are safe in that area. It is a fairly well known, people don't go claming in that area. There seems to be a bit of lack information, perhaps out of the any plant informed about also what is safe or what isn't. Also it might be well known in this room that are breaches in the berm and is there any way of ensuring that it is public when does happen?

Nicole Ritchie: The Municipality has the responsibility to inform the public of any instance where are they have spilled, if it's call sewage spill and the sewage spill. And if the sewage has occurred, they are responsible for the clean up. And dealing with any problem has resulted of that spilled they are responsible for if there are any effected may have on receiving on environment, including any communities in the area.

I'll have to find more information about what has been going on in the past there. I have been here for three years. But I have had questions on clam digging. However, within on these clams study there was rule out of as the problem on the health concern. But, once again there have been limited sampling. So, our opinion on sampling is difficult without more information.

Paul Crowley: Thank you, no more questions.

Mr. Chairman: Thank you. May I remind you that, all of you every time when you come up to ask the question or make a comment, please state your name for the record for the Public Hearing Transcript, thank you.

Are there any further questions for Nicole?

Marcel Mason: Thank you Mr. Chairman, I understand that on January the 18th, the Baffin Regional Health and Social Board, they did the inspection on the

Municipal Land Fill? And as the results of that it requested to the Municipality it [?] to the burning of only untreated wood and paper products.

And that the specify to the Municipality other waste must be recycled, buried or hazardous adequately dispose stuff. Since what we see on regular basis indicates that Municipality has not follow, they are not agree to that request, they are not following that. I am wondering if it this point that the Environmental Health Department has the authority some how to require do that, so since they are not co-operating.

Nicole Ritchie: That is the inspection I finally did of [?]. That was the inspection I did conduct myself and the report that I did issue to the Municipality of Iqaluit and a copy to the Water Board, I believe.

While I did make a requirement that they make these changes. I do have the right to exercise a certain degree of leniency. Now I do have to provide them with reasonable time length to exercise these requirements. If we are to receive our solid management plan, this requirement will be incorporated in that. As it is the direction we want to see the Municipality go, as for the present side, as I have said earlier that to strictly enforce that requirement, immediately it would cost another serious health hazard. And that is not something I am able to do.

Marcel Mason: Thank you Mr. Chairman. I wonder then if it might be appropriate at this time if I turn the question over to the Municipality. And ask them that, if this was a concern of the Environmental Health Department and if we're talking about a reasonable period of time. This was January 18th, so we are talking, quite a while back. If I could ask the Municipality why they decided not to follow through at that time?

Mr. Bedard: Again, the report I was recalled provide to RECOMMENDATIONS in what the Municipality has been doing is 1, certainly improving it's serving practices, we moved for example, how we moved burned pile for the back into the pits, so that is not in any facility where the people dumped their waste, which makes it up more slightly safer, certainly in terms of disposing of waste, we dug it into the pit, so the wall to wall, you know the access to the area to the dump. We began to put up some signs into prove a signage various in the dump. Most recently, just a last week we completed the signage inside this building. So, we take some steps to improve the waste burn. This we make this pretty clear that we are not in position this point to cease burn. One of the ceased burning, we speakers facilities would be full for six months. That does not provide us with the time to design plan and e construct the facility. I think the Municipality is taking good steps in terms of along with the Community Government and Transportation, in planning a new facility, I think it is agreed. You know, the Health Department, one body, it has agreed that burning is an

issue that is not acceptable to the public and to the Municipality. Okay, we hold that position and we're told to enforce to cease the system. We will not be able to burn with [?] the system.

Mr. Chairman: Thank you Mr. Bedard. Are there any more questions for Nicole Ritchie from Baffin Regional Health?

Mr. Crowley: Thank you Mr. Chairman. I'd just like to follow up on that last response. The question is, if it was an emergency site that was for five from 1995, if it will fill up in six months. That seems to all fit together in terms of the stand, that there not be, that there is no more burning. If it is emergency site, where is the plan for the future site? And as expected, it is sounds like the expectation is having that already done, it is impossible. If it is emergency site, that is due to expire this year. I don't understand the problem.

Mr. Bedard: Thank you Mr. Chairman. For my understanding, I was not certainly around when it was built, it was designed or constructed as an emergency facility. With my knowledge, I don't think there is a specific date that they do indicate by April. Legislatively we have to set those numbers in concrete. We believe through our management process that we can continue to operate that facility up to including year 2001 which will give us an opportunity to plan again designing and constructing a new facility, which is acceptable to the public. Again other factors which, you know involve in finding the funding to do this kind of work. You know the Government of Nunavut is newly established and they are going through their own organizational. You heard today that Michele Bertole has committed capital dollars to new facility at the end. To that end within a few years, we are going to see a new facility. Anticipating that we won't be open right.

Mr. Chairman: Thank you. Dionne have you got a question?

Dionne Filiatrault: Thank you Mr. Chairman. Just to provide some clarification on solid waste in old Department Site.

In the current licence new requirement that the licensee shall proceed by January 1st, 1997 commit to the Board for approval waste management plan. The plan shall address the long-term waste management needs for the town of Iqaluit.

So that amend it when the licence should issued in 1996 that they had a year to put together the proposal that Mr. Crowley makes wants him too. This proposal was never set to the Nunavut Water Board until we received the plan on September 18th, 1998. This was the plan that Nicole made reference to earlier on her presentation. And it was reviewed by our office and all of the other regulators that are here, they are present. And it esteem to efficient and returned back to the Municipality.

At the with respect to more information on the current waste site, and in the past information. Because this licence was transfer to us from the NWT Water Board. It's a very unclear what is the specific terms of reference were required for that plan.

I would suggest that possibly Robert Eno who is representing Sustainable Development to provide some additional back ground to the Board on that. The community (silence).. Iqaluit in May this issue was raised that time and subsequently the Town of Iqaluit has taken steps to attempt to that decision.

Mr. Chairman: Thank you Dionne, any other questions from the floor? Are there any questions from Water Board Members?

I am sorry, Rebecca Mike! I am sorry, I didn't see you raise your hand.

Rebecca Mike: Thank you Mr. Chairman.

My question is in regards to the statement that you made, that you had a concerned on the composed generated from the new sewage plant and what concerns do you have on that?

Dionne Filiatrault: Composting in the North is not something that I have seen very frequently. And because of the limited amount of any equality. Because of the limited amount of warm water that we have up here, I am not sure that upon posting system would work. It would really depend on what they had it in place to be sure the right conditions prompt composting.

As it stands, I can foresee problems with it. However, those problems may be something that can't be plant to ensure that doesn't occur. However, there have been no plans submitted for actual composting to determine the viability of composting in the North.

Perhaps the cold up here maybe faster. I can see that it's considerable factor in providing proper composting. It'll determine what type of processing composting would able to provide. Will it be enough to render this sludge useful as proposed using it in the community, while that's depending on how well it composts.

Is it something that has to be very regularly or it's something you can put something turf over. It's something that these things has to be considered. The degree of composting that's able to be provided up here in the Arctic environment.

Rebecca Mike: Mr. Chairman, Rebecca Mike again. In the North we do lack a

lot of things, including a lot of base line for in our environment, including our wildlife. Somewhere, something has to start and I think there is room for scientific society to merge in the Northern environment. These kind of things have to be look at or tried out at least.

I don't disagree with you, but if there is a concern in terms of bacteria that can affect the health of human population, then I would considered that a legitimate concern. But to this point in time we don't know that until somebody does something.

If I heard you correctly, you are sort of kind of recommend it to the Water Board. That unless is a well documented, you would not support the decomposing of the sludge.

But to me we have to start somewhere and I think if it is a monitored properly, something can be gained from that, thank you.

Mr. Chairman: Are there any other further questions, Dionne?

Dionne Filiatrault: I just like to expand on that the comment I finished off the last time.

With the respect to the request of the proposal that the community has submitted, I would suggest to the Town most regulators from what I heard from Nicole. Is that we don't want to see another study done.

Some of the facilities that of this community have been study to death. I think what the regulators looking for more along line of action plan.

Do identify operational details? And when each operational detail is going to be completed, as far as implementation goes. I guess, I would ask the other regulators if there are any agreement did. That is what we should be expecting from this solid waste management study that they are proposing now.

And I'll let Nicole respond to that.

Nicole Ritchie: Action Plan would seem to be the most an appropriate. There are new technology being imposed everywhere. I definitely agree the idea to try something new. However, we do have to make sure if that system failed there is contingency or there is some mess dealing with it, that is not going to absorb the community's funding.

So, we want to make sure that this is system that would be effective long-term and
if there are other system that should be considered, they should be considered as well there might be better.

The whole idea of proposing something is to have an action plan together. And to seek different bodies input. Input from different bodies on proposal, so we can ensure the best system is installed and a few problems results from the system. So, I agreed.

Mr. Chairman: Thank you, are there any other further questions? Dionne?

Dionne Filiatrault: This is sort of be to working towards enforcement Mr. Chair. Do the Environmental Health Office offer any approval to the Town? For any of this facilities as far.

Nicole Ritchie: We only provided comments on drafts of plans, they have not receive any approval on anything.

Dionne Filiatrault: So, would you considered there are some outstanding approval says that it is exist?

Nicole Ritchie: Of the operating facilities right now?

Dionne Filiatrault: And propose.

Nicole Ritchie: Propose there are outstanding approval to be received. That approval would have to be received by either myself or depending on which is facility.

(TAPE SIX: the end of Side B)

(TAPE SEVEN: Side A beginning is here)

The facilities that operating right now has been approved when they are originally constructed. Alterations has not been approve either the new facilities.

Mr. Chairman: Dionne?

Dionne Filiatrault: Thank you Mr. Chairman.

Then when would your organization be required to see these, how much advanced notice do you need able to perform a good review of documentation for any propose modification or creation a new facility. When do you need to see that information? Before the action begin to work?

Mr. Hanson: When you get the transcript Nicole, you will see. Nicole answered. Your name have to be there. The people are doing the typing, does not know that Nicole is always speaking. Always state your name before you make your presentation. Back to the Chair please! Thank you.

Nicole Ritchie: The proposal dictates how much time you tribute. We receive proposals from every establishment through out from entire Baffin. Everything from new businesses down to the large treatment facilities. Larger the facilities more time would be required to thoroughly review it. Especially if its a system that is not used typically in the North, that we have not seen come to our office. So, depending on the facility that is something that the Town should be asking us how much time we need. For the new solid waste treatment plant, I would say three to five months as minimum.

Mr. Chairman: Dionne!

Dionne Filiatrault: So, thank you Mr. Chair.

Just for the clarification what you are saying to me is that for the new facility with respect to one aspect, the sludge disposal you stated that earlier if there is any information at this point time for you to make this decision for you to grab any sort who group for that, you like to see that information for three months, before they plan to do any disposal. Which means that information need to be provided today or as soon as possible, sometime this month.

Mr. Chairman: Thank you.

Nicole Ritchie: We do make exemptions. However, I do really like to see these things three to four months ahead of time.

Mr. Hanson: That was Nicole.

Nicole:Nicole Ritchie.

Mr. Chairman: Are there any questions? Dionne!

Dionne Filiatrault: With respect to. Thank you Mr. Chair, Dionne.

With respect to enforcement of your legislation and the including regulation. What can be initiated by the Health authority, what type of enforcement? Can you perform, is they are not complying with this requirement?

Nicole Ritchie: If it were serious immediate health hazardous, I'll have to leave close the facility. However, that is never an option that we can entertain realistically. Nicole!

Mr. Hanson: You are getting it, yea. It took you a little long enough you'll finally notice to say your name first.

Mr. Chairman: Okay, Dionne!

Dionne Filiatrault: As to final point and I guess they asked us not only to Nicole, to be Dionne, they asked as well. I often ask this question not only to Nicole, but to other regulatory agencies and the people have already spoken. Should the Water Board taking lead role in compiling and reviewing information which respect to the Municipal services. We do respect to water and disposal of waste that has been impact into water. Should we be sort of the one window primary contact for the licensee or anybody who is working licensee?

Nicole Ritchie: I founded extremely helpful to be receiving things from the Health Board. I am sure that not only I am providing comments that the Regulatory Advisor to providing comments our way of what is going on. Other ways I feel as though, I must contact other Regulatory Advise to see and make sure that they are inputting on the proposal. For example DFO (Department of Fisheries and Ocean), to provide comments on, it is a very important things, it is a very important things to ran to the Health and of the people in the communities. Human health directly related to whether or not the fish in the area discharge are going to be infected the fish that the people that I am concern about eat. So, it provides me with the assurance that every day is covered in that. Only thing I have to concern about myself with the direct immediate health hazard and a long-term planning aspects of approval and not the more specifics concerns to other Department.

Dionne Filiatrault: Mr. Chair Dionne.
So, your answer is yes?

Nicole Ritchie: Yes.

Dionne Filiatrault: Okay.

Mr. Chairman: Yes?

Dionne Filiatrault: Okay.

Mr. Chairman: Mr. Crowley you raise your hand there?

Paul Crowley: Paul Crowley Mr. Chair.

What I am going to do about it, the enforcement really worry some to me. So, there is always regulations and standards to be met, but if they are not met, nothing can be done, because we are Town and we need these systems. Is there any can be put it into alternative enforcement mechanism stuff would be appropriate. Because, it appears to me that everyone can talk for themselves ruined the face and at the other Town would do whatever they wants and in the best stability that the stability that common place is the room. Even if it doesn't meet the standard, there is nothing anyone can do.

So, is there are any alternative enforcement methods is design are available to the render?

Nicole Ritchie: Under my jurisdiction, I don't assume some control over public health until it becomes an immediate health hazard to people, unless that is demonstrated I cannot respond in an immediate fashion, I cannot find many, many things. I am very limited to [...?]. That is something that the public that's concern has many avenues to pursue whether approaching Town Council, attending meetings, putting in submissions for changes or stimulating the production of by-laws. They have alternatives.

Mine is an emergency base authority and planning based authority. That is the purpose of my authority. However, I do get involved and I do prompt for change for general things. And that is what I have done with the Municipality is prompting change, through avenues like, the Public Hearings and during sessions report and continue education of responsible parties.

Paul Crowley: Thank you, Paul Crowley again Mr. Chair.
I guess, we would have to look to the Water Board itself to develop appropriate enforcement mechanisms or other Regulatory Agencies, but it does appear to be a bit of a gap, thank you.

Mr. Chairman: Thank you, are there are any further questions for Nicole Ritchie?
If not, let's we move on to other intervenor. Thank you, Nicole Ritchie.

Mr. Chairman: Okay, I just got a note here that the batteries are dying so, let us take a ten minute break, thank you.

Mr. Chairman: Welcome back. Before we convene, I've got one request from the Town of Iqaluit to recall, Nicole Ritchie for one more question.

Mr. Bedard: Just the thought I had, in terms of a Public Health issue which is respect to smoke emissions. I think the Municipality is interested in cracking problem, big time. Do you have any information that could be produced to the Board as evidence? Any research, any evaluation report that you could produce to the Board here. Maybe related, maybe linked quantitatively to the impact of smoke emissions on public health. This information I have never seen, I am just wondering if you have that too, I mean you have talked about the issue of smoke and public health. I am just wondering, if you had any experience, any reports, any research that could be produced for the Board re: quality, quantity, the effects smoke on public health?

Nicole Ritchie: You are talking about smoke emissions, smoke in general?

Mr. Bedard: Yeah, that is correct, correct.

Nicole Ritchie: What you suggest speaking for the community, it's unknown. Until staffing is done, it is unknown. I don't know of any sampling we, ourselves are not conducting any. Sampling is not in our mandate. It's quite conceivable that testing has been done in occupational settings for gases and smoke emission. Potentially most compensation board might have more information on that type of exposure for the employees and people directly working with that type of environment. That is all I can suggest.

Mr. Bedard?: There is nothing you know of that is available that we can produce for the Board that is with you?

Nicole Ritchie: No!

Mr. Bedard: Thank you, Mr. Chairman.

Mr. Chairman: Thank you.

Denis Bedard: Paul Wiczorek is dealing with emergency at the shop with one of the staff and has to be called away from time to time to deal with that issue. I certainly can discuss this privately with you, but I prefer not to publicly disclose what that issue is.

I'll certainly discuss it with the Board exactly what it is. It's a very delicate issue with one of the staff members.

Mr. Hanson: Mr. Chairman, can we wait until we can come back to carry on later on.

Mr. Chairman: Thank you.

UNKNOWN: No, I think we should carry on with the hearing. I suggest that you don't talk to the Board privately about anything!

UNKNOWN: Okay.

Mr. Chairman: Thank you gentlemen!

Now, before we proceed with the next to intervention. Government of Nunavut and DFO, what we will do then is we will hear from Nunavut and DFO.

And once we have done that we will recess and we convene tomorrow morning at 8:30 sharp.

Okay, next Intervener is Governor of Nunavut Sustainable Development, Mr. Robert Eno.

Mr. Tillemann:

State your name and spell it out for us!

Robert Eno.

Mr. Tillemann:

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

Robert Eno: I do.

Mr. Tillemann: Thank you.

Robert Eno: I guess, I don't have to introduce myself again.

Just for the record, I think there are some confusion in the public's mind any ways in regards to jurisdiction. I was going to skip this in my presentation. I'd like to go over the mandate to the Department of Sustainable Development, Government of Nunavut or Legislative mandate, so it is clearer in everybody's mind, because of this question of the jurisdiction has come up several times in the course of the day.

The Environmental Protection Service of Department Sustainable Development, Government of Nunavut has the overall mandate to protect and enhance the polar environment on behalf of all Nunavut citizens. With the Regulatory Power from Environmental Protection Act. An Act which applies to the whole Nunavut and broadly speaking is publicly in charge of contaminant in the environment.

While it applies to the whole of Nunavut, it should be understood that the Federal Legislation supercedes Territorial Legislation and that includes Environment Protection Act.

What this means: if someone is permitted to do something or perform an activity under the federal legislation, then we do not have any jurisdiction over that activity

nor can we halt that activity, even if we see it as threat to the environment. I think that should be understood by, particularly the members of public. As I have said earlier, seems to be confused us to jurisdiction, between the various Departments.

Having said that, so just dive right into our comments pertaining to water licence and the proposals, submitted by the Town of Iqaluit.

First of all, which regards to the sewage treatment facility, we believed that this is a good initiative and the we are going to go along with towards bringing

Iqaluit into the 21st Century. And therefore, we applaud this initiative. However, we do have a few comments which regard to this submission.

In the Municipality of Iqaluit submission its indicative the old sewage lagoon will be remediated and filled in. And the sludge from this lagoon as it exists [not clear...] rather than the proposed facility will be composted and treated.

IPS suggest that the existing lagoon be upgraded and left in place as emergency discharge depository in the event if the new system fails.

We are in favour in of composting as mean treating the sludge. However, we urged the Municipality of Iqaluit to conduct pilots skill project to see if it will work.

I can tell you that, I have a lot of first hand experience in remediation technologies in the Arctic including a project that I was working on at Hall Beach. I can work all kind of miracles on paper, but when it comes to applying these ideas in the field it is a totally different ball game.

And we believe that the time to iron out the bugs and the proposal is not when you are in the full scale production. So, again I urge the Municipality of Iqaluit to conduct the pilots scale feasibility project on composting of this sludge. To see whether or not this idea is going to work.

Further more, this sludge needs to be characterized. Another words, we need to find out what it contains with in the sludge. It'll be a process with the new facility and the sludge that is setting in the lagoon at the moment.

I think the characterization of the sludge will largely be determined whether or not the proposed composting proposal will work.

WATER TREATMENT

Which regards to the water treatment plant, in the October of 1997 Environmental Protection responded to chlorine leaked part of the water treatment plant, an incident which the Town was ill-prepared to handle. Subsequent inspection of the facility revealed a number of hazards associated with improperly stored chemicals.

The water licence contains a requirement for the Municipality of Iqaluit to develop this plan for the water treatment plant. The plan should include the training program for the water treatment plant for employees, that would enable them to safely and effectively respond to any actions involving in water treatment chemicals, particularly chlorine which is highly toxic chemical.

The plan should also incorporate descriptions of available storage of equipment and the Town should further be required to provides safe and chemically compatible storage facility for the materials that have been stored at the treatment plant.

GENERAL CONDITION OF EXISTING SEWAGE TREATMENT FACILITIES

Which regards to the general condition of existing facilities. We disagree with the statement made on page 9 of the application that the dykes are in satisfactory condition. Given the well documented history of dyke's breaches.

The licences application points out that seepage was discovered 1997 and the result the lagoon level was lowered in order to prevent another dyke failure. Officials further noted the dyke is closely monitored. Which is a good idea and while we support the development of new facility, we've concerned the present facility might not have the capacity to deal with increased volumes, until the new facility becomes operational. And this statement is made in light of rapidly expanding Iqaluit population and the fact the Municipality has forced to maintain low lagoon levels as the results of this faulty dyke.

RECOMMENDATION

We therefore recommended the water licence contain a provision that's compulsory for the Municipality of Iqaluit to closely monitor the structural integrity of the dyke. If it becomes apparent that the new sewage treatment facility will not be in place operating on schedule then the Town should retain a qualified engineering firm who is registered with the NWT Association of Professional Engineers, Geologists, Geophysicists to conduct a thorough inspection of the dyke. Any RECOMMENDATIONS made as a result of this investigation should be implemented.

OPEN BURNING

With regards to open burning much has said about this, but I'll repeated anyways. We referred to page 13 of the application, which states: "Regulatory agencies would to see a further segregation of wastes prior to burning".

While the statement is true, some one misleading, because it seems to imply that regulatory agencies sanction the practice of open burning; in fact, the opposite is true. Some of the comments made by the previous interveners. Open and uncontrolled burning is not an effective method of reducing the volume of solid waste. Furthermore, dump fires pose a risk to the environment and to human health. EPS has in the past, and continues to, receive complaints from the public with regard to the noxious smoke emanating from the dump. EPS has over the years, discussed this issue with the local environmental health officers

and as spelled out by Nicole, which she indicated they have expressed concerns regarding this practice.

Most if not all, regulatory agencies would like to see an end to open burning. We recognize also that in the short term, the burning will continue and however, a viable option must be found.

RECOMMENDATION

We recommend that the waste management plan, required by the water licence, include a stipulation that properly addresses solid waste volume reduction in the proposed new solid waste disposal facility. The municipality is urged to pursue the feasibility of obtaining a municipal waste incinerator for Iqaluit.

The current generation of Municipal waste incinerators are unlike the predecessors. They are efficient, effective and very clean burning and therefore, worthy of a serious consideration. During the last water licence application hearing in 1994, when the plans for the current temporary solid waste disposal facility were being discussed and the regulatory agencies, including Environment Protection of the former Department of Renewal Resources granted conditional approval for the site. The approval encompasses open burning as means of volume reduction provided that the Municipal develop a long-term plan within two years of issuing of the water licence. As it was indicated before, the period has lapsed and there is no long-term planning placed.

ENVIRONMENTAL PROTECTION SERVICE

The Environmental Protection Service therefore, wants some assurances that this plan will be developed as promised. Unfortunately in the absence of adequate information pertaining to this proposed new facility, Environmental Protection is unable to assess the potential environmental impacts and to recommend licensing conditions on any landfill management activity.

We are concerned however, that this existing site is going to reach the capacity in anywhere from one and half to two years. And if the Municipality does not have any immediate plans or ideas that actually will be taken at the end of the period concerned about the possibility of crisis decisions having to be made down the road decisions not necessarily be in the best interest of the public or the environment.

RECOMMENDATION

The Environmental Protection therefore recommends the water licence contain stipulation that requires the Municipality of Iqaluit to develop and present for review, a plan for the establishment of the new solid waste disposal facility and companying comprehensive management plant. This should be done for both the current and future solid waste disposal sites. And because of the fact that, I think we are reaching the end of line for this current site, I believe that it won't be unreasonable for the Town present this plant full review within six months of the issue set the water licence. The plant should addressed in detail how to reach the management waste segregation recycling and message volume reduction other than open dump fires.

The current plan which was included with waste application is not EPS opinion adequately addressed these concerns.

(TAPE SEVEN: the end of Side A)

(TAPE SEVEN: the beginning of the Side B)

...they promised.

RECYCLING

With regards to recycling be strong EPS observations, there is pressing need for an effective recycling programming in Iqaluit. As an example, the local Coca Cola bottling plant, which was presumably given a business licence by the Municipality, is contributing significantly to the bulk of waste in the landfill. The figures that we have available to us indicates that the approximately 12,000 plastic bottles are being produced every day at the Iqaluit plant.

I welcome anyone from audience if my figures are incorrect, welcome anyone to correct me on that.

These bottles are not recycled and therefore they ultimately reach the landfill where there are burned open and garbage fire. Burning plastic produces highly toxic smoke, which further contributes contaminants to our atmosphere. Where possible negative effects of health Iqaluit citizens. If anybody disagrees with me on that statement, I welcome anyone to consult with any Fire Department in any large city, and I will gladly tell you about the hazards associated with big fires and involving plastic.

The recyclable materials are part of the municipal waste stream, and as such, the Municipality should actively and sincerely pursue the development of a program to address this concern. Further more the viability of a recycling program should not be contention upon realizing profits. The intention of

recycling is to reduce the volume of waste going into the landfill as well as conserve the resources and protect the environment. Environmental Protection is willing to work with the Municipality to plan, initiate and develop a program to address recycling concerns in the Municipality of Iqaluit. However, the Municipality must demonstrate initiatives and to take the lead in such a project.

RECOMMENDATION

We therefore recommend that Town of Iqaluit present of a viable recycling program as means of reducing the volume of material going into the landfill site. And this recycling program should be meaningful, it should not be just the cursory mention in water licence document, so everybody feels a good about themselves. It should be a meaningful plan, it should be something that is effective and it should accomplish as many recyclables as reasonably possible.

This regards to HAZARDOUS WASTES

The Municipality appears to have made an honest attempt at addressing the problem of hazardous waste management, however, more emphasis needs to be placed on training municipal employees to safely handle and dispose of hazardous waste and hazardous materials. The current system that the Municipality has in place, serves more as long-term storage solution than one which addresses disposal and treatment.

RECOMMENDATION

EPS therefore recommends that the current and long term solid waste management plans fully-address the issue of hazardous waste disposal by including in the plan, a description of employee training, available equipment, and disposal and recycling facilities approved by the Municipality of Iqaluit. EPS further suggests that the Municipality consult with other jurisdictions in Canada where such programs are already in place. EPS will be happy to provide references and assistance with this development. But as with recycling the Municipality must assume that we have grown in a such initiative.

Abandonment and Restoration

As regards to Abandonment and Restoration. We reviewed countless abandonment and restoration plans and these plans were found to be deficient.

RECOMMENDATION

Environmental Protection Service recommends that the water licence contain a stipulation that requires the Municipality of Iqaluit to develop

and present for review, a comprehensive and realistic abandonment and restoration plan for all former and current waste disposal sites within their jurisdiction. Acceptance of the plans should be subject to approval by the appropriate regulatory agencies, such as, but not restricted to, DIAND, Health, Sustainable Development, Environment Canada and Department of Fisheries and Oceans.

CONCLUSION

Finally, we are at the end

General Comments

At the General Comments, the Municipality of Iqaluit must also recognize that due to a steadily increasing population, there will also be a commensurate increase in industrial activities. This, in turn, results in more exotic materials and chemicals being deposited into the waste water systems and solid waste disposal facilities. The coke bottling plant is mild example of this kind of growth, as is the dry-cleaning business that was established in Iqaluit a few years ago. The Municipality of Iqaluit is urged to ensure before issuing business licences, they should first determine what kind of wastes will be generate and how these waste will fit the Municipal Waste Management systems.

Other than looking upon this as is incumbent the Municipality should recognize as such plant within the long-term save them a lot of money as some industrial waste can caused great deal of costly damaged to the Municipal systems.

And that conclude my presentations, Mr. Chairman, thank you very much.

Mr. Chairman: Thank you Mr. Eno.

Are there any questions for Sustainable Development of Government of Nunavut?

Mr. Mason?

Mr. Mason Mason: Thank you Mr. Chairman.

A couple of things. One I just like to confirm what is meant by. I think, I got an idea, but I like to confirm what is meant by lowering of level of lagoon?

Robert Eno: I think this is a question, we better addressed by Mr. Bedard, although I can take a stab at it, essentially the water level in lagoon adds decreased pressure on the dyke. Whether or not that is still in force, I don't know for sure.

Perhaps, Mr. Bedard can answer that question.

Denis Bedard: Thank you Mr. Chairman.

That is just correct and it has been low [?] over the two years that I'm aware of [...]changing the overall elevations

Marcel Mason: Thank you Mr. Chairman.

Does that effectively mean the water has been or [ethyl?] has been released from the lagoon prior to going through complete treatment cycle?

Denis Bedard: There is no treatment lagoon besides from the moving solids. Basically we were discharging a raw effluent over at this point.

Marcel Mason: Thank you.

One further question, I saw that you were mentioning in your report that the burning is not an effective method for reducing the solid waste volume. Although, we keep hearing that open burn is the only option perceived available to us right now for reducing the volume. I am just wondering if that statement really holds any hope for us. Regarding stopping the practice?

Mr. Robert Eno: I can't give you any hope at this time. When I say open burning is not an effective method, I stand by that. It is a method, it is not an effective method. Nor is an environmentally sound method in our department's opinion. But unfortunately the options that are available to the Municipality of Iqaluit seem to be few and far between at this juncture. And, therefore, they've decided to exercise the open burning as a means of volume reduction, which the Department by-the-way is not endorsing.

Mr. Mason: Thank you.

Mr. Chairman: Thank you.

Any further questions? Yes Mr. Bedard.

Mr. Denis Bedard: Thank you Mr. Chairman, Mr. Bedard.

Robert are you familiar with any research conducted in the waste production issue, a volume production? Are you familiar with any research conducted in ways of the reduction issue? Are you familiar with any reports that have been conducted in the North which identify burning as a method of reducing volume?

Mr. Denis Bedard: As matter fact, I believe the former Department of Municipal and Community Affairs has a document that promoted the idea of burning burial. However, I wanted to reiterate the department, never agreed with this. We're always vehemently opposed to the idea of burning burial.

Mr. Chairman: Thank you Mr. Bedard.

Denis Bedard: Thank you Mr. Chairman, Denis Bedard.

I have not been in agreement with the fire as its surely not acceptable as a method of disposing the solid waste.

I am just wondering if you are familiar with [...] report which met Municipal Community Affairs Commission some years back where they studied consistency waste in the North. And also, identify the you know, potential waste production percentages on these burned systems.

MALE: Robert you know, yes I am very familiar with [...] report and I don't think, I would like to make a comment on that report right now. Except I had some problems with it.

Mr. Chairman: Mr. Bedard?

Mr. Bedard: Thank you Mr. Chairman. Just one a brief comment. Basically hanky and worm report commission by MACA. I identified, it could be reduced up to eighty per cent. Depending on it's consistency. If it's burned at our presently existing solid waste site, right now we are getting a significant reduction in a volume. Again we recognise the fact the burning use is not acceptable. But nonetheless it does reduce volume. Thank you.

Robert Eno: I just like to make a comment on that, I would question about the percentage of combustion when you have open burning, [...] the waste stream does that which exists in municipal waste stream. I think 80% volume reduction might be realistic if you were open burning wood or paper products, but I have my doubts whether that would true for municipal waste.

Mr. Chairman: Mr. Crowley, you raise your hand there?

Paul Crowley: I have a question regarding the putting in the place of reduction a plan or a plan would allow sort out of the garbage. So, it should be known what has been burnt. I would like to know how long would take to put one in the place and if it could be done immediately?

Mr. Chairman: Were you addressing that?

UNKNOWN: I just would, first Mr. Eno, he is aware of how long it would take to put in. What would be require to put such a program in place? And then perhaps if the Town could respond and address that.

Robert Eno: I can only give you my own personal opinion. It's not Bob's opinion. But I suspect the segregation of municipal waste stream on site and municipal landfill site would be extremely labour intensive and time consuming. And not realistic, if you were to pursue option the segregation of waste, I believed this was something would be more effectively accomplished at the source. Whether or not that is

something practical and it's matter of public participation and willingness to under take such a venture.

Mr. Chairman: Mr. Bedard?

Denis Bedard: I kind of agree with Robert's a comment. It is a very difficult at the site, what we have began to do, we have began to educate and consult with the contractors. For example, in segregating the ward and the plastic and insulation waste at the site. When they are just discharging their garbage from construction site. We are getting some improvement, but it does take a long time to educate them in terms of exactly what we need. So, we are beginning to implement some ideas right now.

Mr. Chairman: Thank you.

Paul Crowley: Paul Crowley again, Mr. Chair.

Is it possible with those ideas be causes to by-laws requiring? Contractors and/or at the resident home owners to do the same thing?

Denis Bedard: Thank you Mr. Chairman, Denis Bedard.

It is a possible to developed by-laws, but it does take time.

Paul Crowley: Would you foresee that being in shorter period than currently required to fill up the dump with the burning factor? Paul Crowley, asking another question.

Denis Bedard: Thank you Mr. Chairman, Denis Bedard.

By-laws typically take from three to six months to bring into law, I don't proceed happening very quickly. Depending on the public review process so on.

Paul Crowley: Just to reiterate Paul Crowley. One last question and the current time frame for on going burning is total 2001?

Denis Bedard: Yes, that is correct.

Mr. Chairman: Thank you Mr. Crowley. Mr. Mason, you were raised your hand?

Mr. Mason: Yes, thank you Mr. Chairman. Marcel Mason again. I am just wondering about the date on the [?] report that was mentioned?

Mr. Chairman: Mr. Bedard?

Mr. Bedard: Thank you Mr. Chairman, Denis Bedard. 1984 or 1986 I think it rings to my mind. I can certainly produce that report for the Board tomorrow and maybe I'll remember the date, I thought it was 1984 or 1986. But I certainly can produce copy of that the report for the board tomorrow.

Mr. Chairman: Thank you, please do.
Any further questions Mr. Mason?

Mr. Mason: Yes, Mr. Chairman, Marcel Mason again.
I think possibly just as a conclusion that we safely assume that the nature of our waste has changed considerably over the last 15 years. And possibly set the report is not as it not as today as it would have been 15 years ago. Thank you.

Mr. Chairman: Thank you, are they further questions for Mr. Eno? Dionne?

Dionne Filiatrault: Thank you Mr. Chair, Dionne Filiatrault.
Just to confirm Robert. Do you have any authorization or what so ever under your mandate?

Robert: No, our Department, we've consulted with our legal [...?]. I don't want to make the people think we are trying to avoid the issue, but from jurisdictional stand point we do not believe, we have any regulatory jurisdiction over the landfill site. For the simple reason that the landfill site is licences by Federal Agency and therefore to go back to an original point, I made at the beginning of my presentation. Federal Legislation super seat Territorial Legislation and anybody that is permitted to conduct an activity under the piece of Federal Legislation is a bug. Our regulations now are legislation. Of course, probably a couple Lawyers in this room, I think everybody is familiar they are also welcome to challenge me in that point, but that is my understanding of this situation.

Mr. Chairman: Dionne?

Dionne Filiatrault: Thank you Mr. Chairman. Another point, do you feel that recycling as an issue is responsibility of this Board to consider, under their mandate?

Robert Eno: Whether or not responsibility is the Board or Municipality split between two of you, I believe it is the municipal responsibility, because I've stated earlier. If these materials are not being recycled they would be part of the waste stream. As such they are part of the solid waste disposal facility, therefore it is responsibility of the town. The fact that you have limited recycling program placed in this town right now is a bonus. But that does not mean that in our view the Town can solve their own [problems] totally and have responsibility for those materials that have been diverted from the waste stream. And then to recycling for example.

Mr. Chairman: Dionne?

Dionne Filiatrault: Thank you Mr. Chairman. Robert, you made one comment in your presentation. Actually you didn't make it, but in your a formal intervention statement that your RECOMMENDATION was: "Within one year, this one

supervised them that: That the Municipality provide us with abandonment restoration plans for a formal car disposal site". For my understanding of information is provide to the Board earlier today. Those documents are not going to be available within one year.

Robert Eno: Yea, keeping in mind these comments was submitted several months ago, so I have to change through to tone to rebook changing conditions. I don't think that we would expect that to happen within a year. The priority for our Department is to have solve the waste disposal facility plan in place. And then to end the open burning.

Mr. Chairman: Thank you. Are there any more questions for Mr. Eno?
Mr. Bedard?

Denis Bedard: Any idea Robert with respect to the potential waste would volume reduction, potential with the recycling program? Have you got any experience in terms of Southern Municipalities, on what those numbers could be?

Robert Eno: No, I have no idea what the volume reduction is in terms of recycling. Again, it's depends on how vagarious[?] community is with regards to recycling. If you conduct limited recycling programs, such as the one that exists in this town your volume production's probably is not going to be appreciable. However, as I've mentioned earlier, now you have got a Coke bottling plant in town, now you are increasing the volume of plastic waste going into the waste stream.

If you have a recycling programs to deal with this sort of stuff, then I believe that you would make it... You take a significant chunk of solid waste, out of waste stream.

I think this is a particular importance, if you are going to continue burning until year 2001.

Denis Bedard: Not question or comment, Mr. Chairman. You are familiar Robert Wieczorek that we do not have [?] out requesting the submission or consulting with regards to the comprehensive management plan. Several times when ... submission you kind of referred to the fact that the question I adopted something was not being done. What was recently with the system [...?] Community Government and Transportation. We have taken that step to initiate as substantial program. Part of that program will look at restoration of the old site. We will also look at the potential for recycling programs and their costs. I just wanted to make that clear what the Town is doing.

Mr. Chairman: Thank you.

UNKNOWN: I just like to make one more comment in regards to that, I have no doubt that you are making some efforts. However, you have to understand that we've been wrestling with this issue for a quite a few years and right now. I think Bob Hanson will identify with this more than anybody in this room. People come and go, and none of the people that are sitting at the table representing this town of Iqaluit were here years ago. And we are initially wrestling with this issue and when the Town of Iqaluit assure there will be solid waste management plant in place by certain time. And in fact of regulators that who were involved in this, I think there are two of us in this room from those days. So, another words I have seen people come and go, and I have heard this many times before or I have said: " I don't doubt that you are sincere that you are doing something", I just wanted to make the point that we would like to see a plant put in place.

Denis Bedard: Thank you Mr. Chairman. Yea, certainly not promise, it is an action at this point. The step has been taken, there is are action in place, we are expecting the results.

Mr. Chairman: Thank you, are there any further questions from the Board for Mr. Eno?

Are there any questions from the floor for Mr. Eno?

Thank you Mr. Eno.

Robert Eno: Thank you.

Mr. Chairman: Next Intervener. The Department of Fisheries and Oceans. Margaret Keast.

Mr. Tilleman? Please state your name and spell it out for us?

Mr. Tilleman: Do you swear the evidence you are about to give to the board is the truth, the whole truth and nothing but the truth so help you God?

Margaret Keast: I do.

Mr. Chairman: Thank you, you got the floor.

DEPARTMENT OF FISHERIES AND OCEANS

Margaret Keast: Thank you Mr. Chair.

Again this is being submitted in, it is on the Public Registration, I will skip over our mandate and get to the technical review.

I will be covering the:

A) New Sewage Facility

- B) Existing Sewage Facility
- C) Present Solid Waste Disposal Site
- D) Abandoned waste disposal site at West 40 and Apex.

A). New Sewage Treatment Facility:

The new Sewage Treatment Facility designed by Hill, Murray and Associates Incorporated will be a significant improvement of the existing sewage lagoon. Hill, Murray and Associates has included information in their proposal which indicates the new facility will be able to meet the new effluent quality standards set by the Nunavut Water Board.

Raw sewage treated by the new facility will produce a liquid effluent and a sludge-like material. The effluent is to be released into Frobisher Bay, and the sludge is to be stored.

Additional information is required on what is to be done with the sludge. This should include information about proper storage and management of the sludge to ensure the material or runoff from the material does not enter fish-bearing waters.

FISHERIES AND OCEANS Recommendations:

1. A construction/operational schedule is submitted for the new facility.
2. The above schedule is incorporated as a condition of the water licence renewal.
3. The Town of Iqaluit provides additional information on the sludge which should include:

- composition of the sludge
- the method and location of sludge storage
- the length of time required to compost the sludge in a northern environment
- the potential use as a greening material.

And I know some of these has been addressed this morning.

B). Existing Sewage Lagoon

The existing sewage lagoon is a facultative lagoon with a continuous discharge. The retention time is approximately 5 days and this is a personal communication with Doug Sitland, with Community Government Housing and Transportation. Previous study from bioassay tests have indicated that during warmer months effluent from facultative lagoons is non-toxic. However, shortly after ice cover forms, the performance of the lagoon deteriorates and does not improve until after spring breakup. This is from Heinke *et al.*, 1988. These studies indicate that facultative lagoons with continuous discharge cannot consistently meet the Fisheries Act requirements throughout the year. This is taken from the document called: "*Municipal Wastewater Treatment*

Technologies Capable of Achieving Compliance with the Fisheries Act in the Northwest Territories", this was prepared by UMA Engineering Limited, in March 1993.

And I do have a copy for the Public Registry, that I can submit as evidence.

Mr. Chairman: What was the Title again?

Margaret Keast: *Municipal Wastewater Treatment Technologies Capable of Achieving Compliance with the Fisheries Act in the Northwest Territories.*

Mr. Chairman: Thank you.

Margaret Keast: Now again Hill, Murrays and Association has it included information in their proposal which indicates the new facility will be able to meet the new effluent quality standards set by the Nunavut Water Board.

An additional problem associated with the existing lagoon is the integrity of the dykes. The level of the sewage lagoon was reduced in 1997 due to seepage through the West Dyke. Until the new facility is fully operational, Fisheries and Oceans is concerned with the lagoon's capacity to retain all the sewage produced by the town and with the stability of the dykes. Uncontrolled seepage poses a threat to fish.

Fisheries and Oceans Recommendations:

1. The Town monitors the integrity of the existing lagoon while it is using the sewage lagoon.
2. The town submit an abandonment and restoration plan for the sewage lagoon in advance of the opening of the new sewage facility. This should include environmental studies to identify the composition of the sludge in the existing lagoon, and determine whether the new facility is able to process it. If the composition is such that the new facility cannot process it, the Town's Abandonment and Restoration Plan must provide an alternative disposal plan.
3. The Town investigates the possibility of leaving the lagoon intact as a backup facility should problems be encountered with the new treatment facility. This would require revisions to the Abandonment and Restoration Plan.

C). Solid Waste

Existing Solid Waste Disposal Site

There has been no finalization of plans for a new solid waste facility. The expected life of the current facility could be as soon as next summer. No it's been indicated here that expected life should go to 2000 and 2001. The condition of the 1996 water licence

renewal, Part D Item 13, states that a long-term waste management plan be submitted by January 1st, 1997. This is still to be done.

Wind blows garbage from the dump across the tundra or into the water. This is not only unpleasant to the eye, but plastic debris is harmful to aquatic life. The practice of open burning is a health concern to both wildlife and humans. Emissions from burning garbage, such as dioxins, are released into the air and are transported to the surrounding area, where they may fall in the water. Runoff from the rain and spring melt may carry contaminants

from the dump to the surrounding land and into water bodies. The deposit of deleterious substances into fish bearing waters is prohibited under Section 36 of the Fisheries Act.

Open and uncontrolled burning has been an ongoing practice at the land fill sites. Due to uncontrolled burning the fire department has been called to the site 10 times from June 1st, 1998 to June 30th, 1999. (That is personal communication, Neville Wheaton, the Fire Chief of Iqaluit).

(TAPE SEVEN: the end of Side B)

(TAPE EIGHT: Side A beginning is here)

Department of Fisheries and Oceans Recommendations:

1. Plans for a new facility are a priority and a condition of the licence renewal. New technologies need to be investigated such as incinerators. If an incinerator is the chosen method, it is recommended the Town modifies and utilizes the existing site to house the ash so that a new facility would not be required.
2. We also recommended that there is no uncontrolled burning at the site.
3. An Abandonment and Restoration plan is developed for the site.
4. The Town ensures that garbage is sorted when brought to the dump.
5. The Town examines the amount of waste produced by the abundance of construction activity and considers a proportional fee structure for these industrial users.

D). Abandoned waste disposal sites at the West 40 and Apex

Fisheries and Ocean received the document "Municipality of Iqaluit Solid Waste Management Study" from the Nunavut Water Board on January 18th, 1999. The document listed six abandoned solid wastes sites around Iqaluit. The management plan was not approved by the Nunavut Water Board.

At the pre-public hearing the Town indicated they would not be responsible for any abandoned military sites. Of the six sites identified, two of these were sued by the military.

The site of Apex, one of the remaining four, literally spills into the tidal flats. The tidal flats are littered with metal and other debris. The composition of this site is still unknown and is a potential hazard to aquatic life.

Site 6 was the previous solid waste site used by the municipality. This site over looks Koojesse Inlet and has been partially covered. There is a potential for run-off from this site into the Inlet during rain or spring thaw. Koojesse Inlet is fish-bearing waters and the deposit of deleterious substances is prohibited.

Recommendations by Fisheries and Oceans

1. The Town initiates a study to determine what is in the abandoned sites.
2. The Town identifies drainage patterns around the sites which may affect receiving water bodies.
3. Upon completion of the above study the Town submit a revised Abandonment and Restoration Plan for the abandoned sites. This should include an implementation schedule, subject to regulatory approval of the plan. The plan should include a long-term monitoring program for potential runoff.
4. And finally, the Town determines ownership of the remaining abandoned sites and the responsibility for their restoration.

4. Conclusions

In conclusion Fisheries and Oceans-Habitat Management recommends that the Town of Iqaluit and also Community Government Housing and Transportation consult regulatory agencies early in the planning stages before implementing changes to existing operations or proceeding with designs of new waste facilities. Early consultations would enable the Town and Community Government Housing and Transportation to meet the requirements of the various regulatory agencies and alleviate problems before the construction phase.

That is the end of my intervention. I would just like to submit. This is just a references document. It is called: "Guide Lines For The Preparation Of And Operations And Maintenance Manual For Sewage Solid Waste Disposal Facility In The Northwest Territories" for the public Registry.

Mr. Chairman: Exhibit #9?

Yes.

Margaret Keast: Thank you, are there any questions?

Mr. Chairman: Okay, are there any questions for DFO?
Dionne?

Dionne Filiatrault: Thank you Mr. Chairman.

You made recommendations with respect to the New Sewage Treatment Facility, how is the Board to go about implementing some of the recommendation, given that, in a short while when we are waiting half way through the process, any idea?

Margaret Keast: My recommendations again some of them were covered in Murray & Associates presentation. And again that was the composition of the sludge. I feel that it is also Rob had said it is on going process. But, I think that there can still be a clause within water licence that states: "These are what need to be looked at and what they need to be confirm". Maybe, that doesn't completely answer your question again. These are recommendations from our department.

Dionne Filiatrault: Your reference one documentary in there, probably handy and all in one in 1998 with regards to sewage lagoon? Do you have a copy of that as well?

Margaret Keast: I have a copy in my office that I will photo copy and bring in tomorrow. I knew you were going to ask for that Dionne.

Mr. Chairman: Okay, are there any further questions for DFO?

Robert Hanson: Margaret, you bring that to the table tomorrow and we will put it for the exhibit.

Margaret Keast: Just for the record. In Nicole and her presentation, wasn't quite sure about the result in clam studies, I just wanted clarify when it comes to human consumption it is not our mandate, but we have passed the information on and it's not analysed yet, but the request is in and they will analyse the results and when we get them, I will make sure that the Nunavut Water Board has results and the other various regulatory agencies.

Mr. Chairman: Thank you, are there anymore further questions for DFO?

Dionne Filiatrault: Actually this is more directed to the Municipality and reference to some of the statements that Margaret made. The New the Solid Waste Management Study that your currently is there open. Reading through the RRIP that you are providing, it says: "*The contract supposed to end March 31st the year 2000*", when with the Board then expect receive some indication or results from that study? When could that be provided to us subsequently to that we would then provide to DFO and to the other regulators?

Denis Bedard: Thank you Mr. Chairman.

March 31st is the date we expect to see reports completed. Although preliminary reports will be produced and they will be also produced to the Board, the final reports will be provided to Water Board shortly thereafter.

Mr. Chairman: Thank you Mr. Bedard. Any further questions?

Okay we will convene again at 8:30 sharp tomorrow morning. Thank you.

(TAPE EIGHT: the end of meeting at Side A before the tape finished)

(TAPE NINE: Side A beginning is here)

Mr. Chairman: The next Intervener is Dionne.

Yes, Peter Kusugak, are you going to make a presentation?

You remember that yesterday morning when we started the public hearing, I read the issue of Mr. Chairman's position here, with possibility of if there are any conflicts of interest that anybody might object to Mr. Hanson's participation?

I think there is no objection, so we shall carry on. Mr. Kusugak.

Bill Tilleman: Please state your name for the record and spell your last name.

Peter Kusugak.

Bill Tilleman: Do you swear the evidence you are about to give to the board is the truth, the whole truth and nothing but the truth so help you god?

Peter Kusugak: I do.

Bill Tilleman: Thank you.

Peter Kusugak: Yes.

Bill Tilleman: Please state your name for the record and spell your last name.

My name is David Jessiman

Bill Tilleman: Do you swear the evidence you are about to give to the board is the truth, the whole truth and nothing but the truth so help you god?

David Jessiman: I do.

Bill Tillemann: Thank you.

Mr. Chairman: Just for your information here, I just would like to remind you that:
channel 3 is a Inuktitut,
channel 4 is a floor,
a channel 5 is English
and channel 6 is French.

You may proceed Mr. Kusugak.

Peter Kusugak: Good morning, Peter Kusugak from Department of Indian Affairs and Native Development.

I thank you for allowing me to speak at your meeting. I am with David Jessiman.

We will be showing you slides and during my presentation.

Okay, these copy of slides will be hand it out, distributed.

Robert Hanson: That will be exhibit #10.

Peter Kusugak: Can everyone see the screen?

Okay, I am going to be making my presentation in English and Inuktitut. I will be switching from one language to the other during my presentation.

First one is Introduction. We'll be talking about in March of this year, these were drafted and the second one is the main issues and recommendations and the closing remarks.

INTRODUCTION

My name is Peter Kusugak representing the Department of Indian Affairs and I am the Manager of the office that is located in Iqaluit, but the person beside me works in Yellowknife and behind me is Lee Weber from Justice Canada and also the individual who helped me draft this. Some of them are not present Paul Smith and Miss. Shannon. And some of our managers could not make it, because they had other commitments. I apologize on their behalf. Those are the individuals that helped me or helped out.

The main issues and recommendation, Lake Geraldine, In regards to the Lake Geraldine it is acceptable looking at the water level.

[...?] GEO technical inspection of the reservoir down.

SEWAGE DISPOSAL

RECOMMENDATIONS

DIAND agrees that there is need to address the secondary sewage treatment, additional information required to accept the sewage treatment system. Adjustment advice is excellent quality criteria for the sewage plant discharges into the receiving environment. And continuing with the regular inspections and operation and maintenance of the existing sewage lagoon until replaced with a new approved facilities.

SPOKEN CONTINGENCY PLAN

RECOMMENDATION

Revise the plan to adjust issues that maybe raise by the Board.

SOLID WASTE MANAGEMENT PLAN

RECOMMENDATIONS

Open ongoing communication with the Board, Government of Nunavut, Municipality, Stakeholders and the public to developed the plan and revise the plan to address the issue that maybe raised by the Board.

ABANDONMENT AND RESTORATION PLAN

RECOMMENDATIONS

Sewage lagoon submit a reclamation plant and implementation schedule to the Board.

WASTE DISPOSAL SITES

Waste disposal sites submit one plan to form the plain work for all sites.

There is no network program ES&P (ESNP[sic?]).

RECOMMENDATIONS

Existing ES&P should remain and additional station should be added to address the propose secondary sewage treatment plant and monitoring of any waste disposal site.

The sampling and analyse of the waste disposal site should remain in renewed licence until the Municipality demonstrate that runoff is not affecting down stream waters.

Submit a quality, assurance quality controlled plan to address fuel sample and monitoring methodology.

LICENCE TERM

I know the Municipality of Iqaluit asked for six year term.

RECOMMENDATIONS

We are recommending a ten year term.

This would allow for on going coordination with the Board, Government of Nunavut, Municipality and the Stakeholders to establish long-term resource planning and financial commitments.

The Municipality is to be given a reasonable time to implement and carry out the terms and conditions of the renewed licence including time for obtaining Board approval for the plans.

This suggested term allows the Board and the Municipality to address the ongoing and major water licencing issues.

Taima Mr. Chair

Mr. Chairman: Thank you Mr. Kusugak.

Are there any questions for representative of DIAND?

Mr. Crowley: I like to get better understanding of DIAND's rule and the monitoring the current licence, in future licence and in it's rule of enforcement?

Peter Kusugak: We had an employee who monitored, the inspector who inspected the quality, water quality and the inspector after we hire one will be demonetizing starting this year, thank you.

Paul Crowley: The further question, Paul Crowley. So, that is monitoring of the effluent? Is that correct?

Peter Kusugak: David would like to answer that question.

David Jessiman: Good morning Mr. Chairman, my name is David Justman. And response to the question: Yes, the DIAND Water Resources would be inspecting the mineral water licence and his continue to inspect the in terms of

conditions on the existing the water licence. And specifically the inspector would be inspecting the Municipal Facilities of Town of Iqaluit both water use which would be the volume. And any amounts of rates and additionally the inspector would routinely monitor the sewage effluent either by the inspector himself or with the Municipal staff for the application purposes. And depending on the season of the year expect to also monitor leachate from the various facilities, thank you.

Paul Crowley: Further questions, Paul Crowley. Which regards to of the burning solid waste, does the DIAND has rule in terms of monitoring that?

Peter Kusugak: The monitor during the term of licence all of the commission are related within the licence.

Paul Crowley: I like to understand better, how DIAND works with other government departments in particular the Territorial Department of Health, one day request that, for instances burning the ceased. What would DIAND rule would be in such a recommendation?

David Jessiman: In response to the question. It's normal for the DIAND Resource Officer and their inspectors to have open communication with the other government and Regulatory Agencies maybe involved in resource management in Northwest Territories and Nunavut.

For the, in particular to the water licence, it would be fairly routine for the Water Resource Officer to be a regular contact with officials of the Department of the Health and Social Services, Renewal Resources Officers and Officials of Environment Canada and Department of Fisheries and Oceans as well as Official of the Licensees, such as in case Mrs. Pauline{sic?} of Iqaluit. So, again it's a routine thing, it's done regularly so there is open communication comparing ideas and keeping all of parties informed of their mutual mandate jurisdictions. I think it is a regular thing, thank you.

Paul Crowley: Further question, I guess what I am trying to get to, I am trying to figure out who has the key to enforce recommendation such was made by the Department Health and is it DIAND who would be enforcing that kind of recommendation. If it is in the future there was a further recommendation someone to the one was that had happened. Who would then act on it? If it is the Department of Health cannot do it, can DIAND?

Peter Kusugak: Thank you, can you repeat your question please, because I did not catch your question, thank you.

Paul Crowley: I'll repeat the question, yes I am wondering if DIAND has the power to enforce recommendation such as made by the Territorial Department of Health?

In the past to cease burning? If such recommendation was made under the New Water Licence, would it be up to DIAND to enforce that recommendation?

David Jessiman: If it would be the Department's position that DIAND is one party of many Advisors that provide information and advised to Boards on Water Licences. And in many cases various opinions and positions at various departments and agencies are included in water licences.

In the case of water licence the Department would be responsible for enforcement in terms conditions of those water licences. Which would include one submission plans for instance and the amount of water use in years. And additionally the volumes and pipes waste maybe they're discharged into the environment. And it would be the water of Nunavut, inland waters.

Additionally if there are recommendations that provided by the other agencies to the Board, we would set the deal though all of their recommendations to ourselves and we are active participants of this process. If the agencies provide revised suggestions and it is in our positions and experience that is up to the licences and how the licence is restructured, you give guidance to our Departments and ultimately comes back to us how those plans would be submitted and the necessary efforts making sure licences are being followed. However, if the Department of Nunavut or another Federal Agency is providing suggestions and recommendations for something maybe under their mandate. We can't step in to potentially follow somebody else's mandate or regulatory requirements. An example; I could give is a generic plant, maybe such as an operation's maintenance plan for instance, that form was developed settlement by the licence dismissed by the Board for a year approval. So, again DIAND is one which is in the processing. There is issues that are not within our mandates. Specifically we may not be in a position to enforce specific things, that does not deal with water use and waste disposal, thank you.

Mr. Chairman: Any more questions?

Bob Hanson: Just clarification, I know you are coming from, but I have to ask, I don't know how I am going to do it.

But, if the Board, they are getting the licence, but they would not be any more burning in Town of Iqaluit, would you then become enforces of that licence? Thank you.

Lee Weber: Good morning, my name is Lee Weber I am from Justice Canada and I am here as Council for DIAND. Mr. Hanson, in answer to your question of the power of the inspectors derived for instance from the Northwest Territories and why it is that also that the Nunavut Land Claims Agreement has role to play. Beyond that the power of the inspectors tied to the transit conditions of the licence. I hope we'll put it more plainly. The inspectors are charged enforcing

with the Northwest Territories Water Act. and enforcing the terms conditions of licence. Now, if term or condition is in licence, then starting point would be, there is obligations on the inspector to enforce that condition. As I indicated yesterday, I wouldn't think the Board deciding what kind of conditions will go into the licence. We'll bear in mind a couple of the things, we wanted to bear in mind a couple of things.

First is a [women's...?] board to be on mandate. The board is concerned with water use and deposit of waste. They are limited to the board's mandate. It's not a environmental [cure all...].

And second the thing would be some concerns of not stretching the inspector's resources to thinly. There'll only be so many inspectors. That inspector will have to divide his or her time among the enforcement of various water licences within the jurisdiction section. That inspector will have several conditions to attend to and be mindful of with respect to each water licence.

Robert Hanson: Thank you Mr. Chairperson, I have no problem with the timing, I just had a question, I guess it was answered already. If that clause was put in by this Board within our licence and the DIAND inspector would be looking after that licence, then he would then have a piece mentioned before to enforce, what the Board has put in that licence, is that correct? Thank you.

Lee Weber: I believe that the particular formula I use with it, if there is a condition in licence then in the first instance, the inspector has an obligation to enforce it, not conceivably both the board and the inspector could find themselves in the little bit of bind, could find themselves subject to legal challenge, perhaps in licence. Licence might argue that some particular condition, some particular terms of licence. Which is beyond board's jurisdiction to insert in the licences, including the licence. If it doesn't belong in the licence, the inspector has no business trying into enforce it. That's the argument that might be directed at the Board licence and inspector by who ever finds it in his or her interest to make that argument. For example, a licensee who finds the condition unacceptable.

Robert Hanson: Thank you Mr. Chair. I have no problem with any of your comments. That the recommendations [tape unclear...] then give it to the Minister. I would sooner give it to the Minister. After giving it to the Minister and then if it did become the licence [tape unclear...] DIAND inspector would become the enforcement sector, to carrying out the provisions lacking in the licence. And if it is contested then I understand you are telling me the truth, thank you for that.

Lee Weber: And one further comment and that is simply that I wouldn't want to generate a theme which I think is pick up on in DIAND's Intervention and the intervention of number of the other interested parties. And that is desirable for

the Board in providing draft proposal licences to those areas of interested parties before the licence is finalized.

Robert Hanson: That is understandable, it would be forth coming prior to a final decision, thank you.

Mr. Chairman: Are there any further questions?

UNKNOWN: I would like to ask the DIAND that if it appears that there are regulatory gap, it would have to do with regulation of perhaps the burning of the solid waste. Would it be DIAND's position that they rather step into the regulatory gap and covered it? Or they would rather leave it, and have fall to through the crack? I am wondering in terms of the legal challenge worth risk to the human health and where the DIAND fall in terms, where would they act?

Lee Weber: Mr. Crowley, I am sure you appreciate, but excuse me I should directing my comment to the Chair.

Mr. Chairman, Mr. Crowley will appreciate, but some sort of distinction has to be made by DIAND, by the Board by every other players in this end.

(TAPE NINE: the end of Side A)

(TAPE NINE: Side B beginning is here)

...entitled us to deal. I said that maybe observation earlier that Board and the document is the empower the board or not environmental cure alls. Same could be

said of DIAND an inspector and the documents that empowers DIAND inspector. DIAND can not do something. DIAND's inspector is the creature of statutes, DIAND's inspector is created by statute, DIAND's inspector has those powers given to DIAND's inspector by statute. If power is not given to the DIAND's inspector by statute, DIAND's inspector does not have that power. And as much as the DIAND's inspector might like to step in to clear off the particular a problem. If the DIAND's inspector does not have a power to deal with, that is the end of the story. DIAND's inspector might to see two people fighting on street and that one person might be getting a better of the fight, really doing the damage to the other as a ordinary citizen, DIAND's inspector might step in. But the DIAND's inspector is a Police Officer, it does not have a power of a police officer in that situation. He couldn't step in as a DIAND's inspector and to say: "I am the DIAND's inspector, you have to stop that fight, because of the DIAND's inspector don't go so far. Is it able for DIAND's inspector as DIAND's inspector to break it up on the street, Again distinction has to be made between what the DIAND's inspector has of the thinking, breathing concerned member of the Iqaluit community feels urge to do.

What the DIAND's inspector as DIAND's inspector has the power to do.

Paul Crowley: I have a further question another topic, at first like to make the comment again. I have concern about the regulatory gaps and who will be enforcing on that enforcement have teeth. And it appears that there are many regulators, but also no one regulating for instance: The Air Missions and that is of concern to me.

And another topic, I would like to ask DIAND, if they have done, they're having the position research regarding the background levels of various contaminants in Iqaluit and surrounding area and an idea Kimmirut of impacts that the new licence will be producing.

David Jessiman: Mr. Chairman, my name David Jessiman. I wonder if the question can be restate of last section of the question, I think there is a slight divert in my hearing as slight divergence to what it was falling into the last part. If he can state those the last portion, it would be appreciated.

Paul Crowley: Mr. Chair. Perhaps, rephrase it my concern is with the background level of various contaminants in Iqaluit area. And what a appreciation DIAND may have of cumulative impacts that the future water licence will have.

David Jessiman: Mr. Chairman. In response to the question it covers in a broad area. What I can suggest is within DIAND and DIAND's resources, we did have a Department that refers to contaminant flight office. End of that, this should have been continuation. Because I have familiar with an earlier initiative of the Federal's Green Plan. Such as the programs action on water in action waste. There have been research programs within the Nunavut and there have been a few programs that have been conducted within the Iqaluit specifically on dealing with the research oriented projects. So in order to answer, to in order to provide specific information which I believe question is looking for. We would have to check with other portions of our Department. To define there is a current information that is available.

I guess latter point would be such the information that we would use for the propose maybe in terms of conditions and this renewal of water licences. Would be things that we would have to self once the board concludes their deliberation and final licences signed. Those are the things we would have look at those conditions to see if the additional information or resources, maybe required in their specific areas, thank you.

Paul Crowley: I just make a final comment, that I guess as member of public here and a father of a young child, I don't have a very good idea of what is the status of environment in Iqaluit. And from there don't have a very good idea of how is this water licence will impact on that further or lessen it.

And as we know Iqaluit has been a dump for many people over many years. And it is hard to grasp on just what is the level where we at now and where we are going, thank you.

Mr. Chairman: Thank you, any further question? Mr. Mason and Dionne and then Robert Eno in that order.

Marcel Mason: Thank you Mr. Chairman Marcel Mason.

A comment first through out the process, we've learned a fair bit about how this works. I had assumed up until yesterday that Department of the Sustainable Development or Environmental Health for the Health Board was responsible for potential pollution in the air and now I found out from the comments made by Mr. Eno that is not necessary the case, because the licence that allows the Municipality to operate the landfill is a Federal Licence and therefore, falls under the Federal like Regulation on Territorial Regulation. This morning just for few minutes ago I heard comments regarding from the Federal side of it, we seem to the way I understood it anyway cast a little bit of doubt regarding the Water Board's ability to regulate landfill operations. Leaning then there is more towards the water side of things.

Which I don't really understand, because the Federal Legislation created the Water Board, gave the Water Board authority to deal with the matters to pertaining to water use waste disposal and sewage disposal. Therefore, which stands to reason to me anyway. That mandate would include the ability to regulate portions of those particular functions.

Since we have everybody here now, we got the Municipal side the Federal side to Board, Territorial people. I wonder Mr. Chairman if we could come to determination, so somebody could answer the question, who is responsible for monitoring the missions from the landfill. Who has the authority to regulate what comes out, thank you.

Mr. Chairman: Before we proceed, we shall take five minutes break!

Mr. Chairman: Marcel, there still on the mike, before you proceed could I call upon a Legal Council please to make a comment, thank you.

Bill Tilleman: Thank you very much Mr. Chairman. I am member of the Board and my name is Bill Tilleman.

And as we know, we had a break a few minutes ago and the Board discussed during the break the several issues and I would like to present the results to that discussion to any other parties for the comments right now.

Earlier today, and yesterday the issue of distribution of draft licences or terms and conditions came up in the discussion. The Board in that point would like to

be clear that the Water Licence when it is finalized by the Board it will be released as decisions with reason supporting that decision. Having said that there are couple of issues common concern among all of the parties. The main issue is that continue arise are:

- 1) Who has powers over enforcement of Nunavut Water Board licence?
- 2) Jurisdiction of the Board to address the burning and related air missions from burning the solid waste at the landfill of Iqaluit.

In effort to reduce the repeated questions and concerns over these main issues, the Board chooses to have all of the parties and interveners and anyone who wants to make written submissions on these to points following the oral hearing today.

The written submissions should be received by Board no later than September 28th, which gives everyone approximately two weeks to put your thoughts, arguments, supporting the legal reasons, policy reasons in writing to the board. Then the board will then copy this submissions and send it to all of parties and allow all of the parties opportunity to reapply in writing to submissions that we made and to do so by October 6, 1999.

UNKNOWN: Mr. Chairman, is that fairly summarized, the Board's discussion?

Mr. Chairman: Yes, Mr. Jessiman, thank you.
Marcel you are still on mic?

Marcel Mason: Yes, Mr. Chairman. Okay, maybe I'll take a different tack. Under current Territorial or Federal Legislation who is responsible for mission controls from open burn landfills?

Is this Territorial or Federal responsibility?

Lee Weber: I think that Mr. Mason has fairly enough reiterated the question which Mr. Tilleman has said the Board will be looking written submissions on. So, with our respect to Mr. Mason I am going to give only very limited response to the question.

At this point I just wanted to stress yes, Northwest Territories Water's Act speaks to two matters the use of waters and deposit of waste. However, the second heading, disposal of waste, that's not a branch the of Act which entitles the Board or DIAND or specifically DIAND's inspectors to take care of or mess in all of problems related to waste, to the disposal of wastes or to put them simply to deal with all of the garbage problems. Because more specifically Northwest Territories Water's Act deals with disposal of waste in waters, that link to the waters. The Act is called: "Northwest Territories Waters Act, this is a Nunavut Water Board. Link is always to water. Neither the Act nor the Board nor the DIAND Water inspector has the authority jurisdiction to look after every

and any problem related to the dumping of garbage. It has to be that link to waters and it can't be just a remote along distance link, it has to be direct link. It is not often to say that some deposited wastes might have a chain of events and have it impact on water. I would argue the links to water has to be fairly direct. Beyond that I think, I would wait for the opportunity that Board is extending to provide witness submissions and hopefully give Mr. Mason and Board fuller answers to the question that's been imposed, give fuller answer via those written submissions.

Marcel Mason: Thank you Mr. Chairman. Generally in Canada, not specifically pertaining to dumps. Are there general air quality standards that someone has passed with setting acceptable levels for and monitoring?

Lee Weber: I can answer that question only to the extend of my own expertise, the areas of law that I deal with I council to DIAND in the North. As far as I am aware, there is no legislation conferring on DIAND in the Northwest Territories or in Nunavut. The kind of power that Mr. Mason is asking about, I cannot speak for the other Federal Departments. I don't have that sort of broad overview.

Marcel Mason: Thank you Mr. Chairman, Marcel Mason again.
Possibly than I could ask of the Territorial level, if general air quality is within their mandate?

Robert Eno: From Department Sustainable Development. Our Department has adopted number of guide line under Environmental Protection Act, among them ozone pleading substances sofa dioxide missions. There is nothing specific to open garbage fires. However, keeping in mind what I've said yesterday, these guide lines were adopted under the Environmental Protection Act., as I sated before any activities are permitted under Federal Legislation supersedes in Environmental Protection Act. for Northwest Territories and therefore, to repeat what I am probably going to submitted in written submission. We believe that we don't have any jurisdictional for that, because it is Federally permitted activity. However, we do have some guide lines pertaining air quality and missions.

Lee Weber: I don't have any desires to get into battle with Territorial authorities here today. Figure pointing exercise is your jurisdiction, with your jurisdiction is your fault, now it's your fault. So, if date have been offered, I am here by declining to raise to that bait.

I think that there are arguments that cannot be made to the effect that Territorial authority to do have some responsibility, I am not going to say no more in the point.

Marcel Mason: Thank Mr. Chairman. I guess, I will remain unclear as I am now on the issue and hope for some Resolution when it is written submission is looked at, thank you.

Mr. Chairman: Mr. Robert Eno, you had your hand up earlier there?

Robert Eno: Yes, I just wanted to get back to Air Quality the Missions. First of all I just want to point out to Mr. Weber, I was not offering bait for you raise to. It is just statement the fact we are Environmental Protection Act is written, I can so it to you if you wish.

There is specific clause it says: *"Where there is a conflict between our Act and Federal Act, Federal Act will prevail"*. The other point I wanted bring up, somebody earlier was asking whether there is monitoring done on stadium environment. The former the Department of Renewal Resources now currently Department of Sustainable Department Development has been operating high volume air sample in the Town of Iqaluit for, I think about seven years. And we are operating in behalf of Environment Canada in Ottawa. And it is part of National Civilian's Monitoring Program. They have several stations through out Canada. One of them is being here in Iqaluit. We monitor for Lead total particulates. Thus for the date that I have seen and I have to keep in mind that it takes about a year before the data. For instance, the day of 1996, we don't usually get it until 1998 or 1997. It takes quite awhile. In any case if need be, we can go back and look for the other contingences, because the filter that we use high volume air sampler are archived by Environment Canada in Ottawa. For the specific purpose of being able to go back and looking at other contingences of concerns. So, there is concern and there are other types of heavy metal loading going on in Iqaluit, we could conceivably go back and try to analyze for these. However, that costs a lot of money, but it's something we've been looking into.

So, anyway for this long talk there is let the people know. There is some limited air monitoring going on in Iqaluit and I haven't seen anything in data would cause any concern.

Mr. Chairman: Okay, thank you. Dionne you had your hand up earlier?

Dionne Filiatrault: Yes, thank you Mr. Chairman.

I just had a couple of questions which respect to their presentations this morning and formal intervention that the DIAND filed.

There is a lot of talk in intervention statement about the water consumption data. I was just wondering, the previous licence was issued by the NWT Water Board and for my understanding the Department Water Resources provides technical assistance to or provided technical assistance to the organization asking for the licence. Does the DIAND have any background information with

respect to the water volumes for Lake Geraldine and any biological information for Lake Geraldine?

That would be useful for our records as well as we heard from the Town that they are proposing due to some sort of investigation in the next few years on that to make sure that the capacity Lake Geraldine is sufficient for the long-term.

David Jessiman: Good morning Mr. Chairman, my name David Jessiman.

Yes, DIAND does have a water quality information others should be information that would have been provided by licencees to the Northwest Territories Water Board, when they issued the water licence.

Additionally on later point of additional specific information about Lake Geraldine. No information that we come across is information that had been provided by the former Government of Northwest Territories would be operating Nunavut.

It's Sewage Departments and any consultant's report that could have been filed in support of those previous water licences.

DIAND does not have specific information about Lake Geraldine on high logical done point.

I can make one final comment on that when the hydro were looking at the [?] earlier they were not able to work with the benefit of a [?] map. So, that is the area I think it should be pursued, thank you.

Dionne Filiatrault: Thank you Mr. Chairman.

I guess, I am curious is this is a renewable licence and we are going based on compensation right or water demand that has been requested once that is one million is exactly the same what we issued in the last licence renewal.

And there doesn't seem to be any background information available anywhere and I just find that difficult to understand, how come that was not requested at that time? I assumed that would be on the record somewhere. It is just a comment.

Dionne Filiatrault: Thank you Mr. Chairman, it is just to continue. In the Intervention statement DIAND it's states in the recent Department has been approached stamp on analyse water. Within small lakes, Jasson's Lake Geraldine.

It would be interesting to know by whom they were approached? I guess, I refer to the Town as well on this question whether or not it was the Town that approached the Department to do that testing and whether or not that information is available for our records and Town's records, because that

information would be useful for on going studies that the plan the Town is planning to do.

Peter Kusugak: Mr. Chairman, Peter Kusugak, David Wilman will answer that question.

(TAPE NINE: the end of Side B)

(TAPE TEN: Side A beginning is here)

UNKNOWN: Geraldine North, sometimes referred to as a small lake that information to my knowledge is part of the public record and I believe it would be part of the Board files, we can check again and provide additional copies if you wish, thank you.

Dionne Filiatrault: Thank you Mr. Chairman, Dionne Filiatrault.

As you probably aware right now as far as the public registry that we have on file, that information is not in that file.

But then again the Board did try to file several years ago. So, this information was pre file, it's gone. And I would suggest that this information is not required for the purpose of deliberation right now. I am just broadcasting it, this information will be useful to the Town, it should be provided as at later date to the Water Board and a copy to the Town.

NOTE: PART OF UNKNOWN TALK IS NOT LOUD ENOUGH TO HEAR HIM AT THE BEGINNING?

UNKNOWN: ...we will be able to hearing this afternoon and have it into the evidence on under the Exhibit #11 if possible.

Peter Kusugak: Mr. Chairman, Peter Kusugak
We will provide you with that information.

Mr. Chairman: Thank you, Dionne?

Dionne Filiatrault: Thank you Mr. Chairman.

In your presentation this morning you talked about the civilian [unclear tape...] just curious the DIAND wasn't very specific in that. Did you feel that any RCMP station community should be added? To the current licence?

Peter Kusugak: Mr. Chairman, Peter Kusugak.

We are requesting that if there a was a new site, that, from the new facility, we would also monitor that, the outcome of that.

David would like to add on to that Mr. Chairperson.

David Jessiman: Mr. Chairman, my name is David Jessiman.

Within the DIAND intervention what was suggesting is that the dates available at the Radio Station could be added to this facility.

I think, we would look at that there is a possibility that additional, more communications could be included within the sewage treatment plant.

I think is once we have a file design going, I think our Department would be much better position to finalize our assessment of the document various design drawings and in my option will additional on site. Assist to provide better information to the Board for this one facility, thank you.

Mr. Chairman: Thank you. Rebecca Mike, you had your hand up?

Rebecca Mike: Thank you Mr. Chairman, Rebecca Mike.

On the main issue and RECOMMENDATION on solid sewage disposal. He mention that they address residue effluent quality criteria for the sewage plant discharge receiving environment. What I would like to know is, what is the criteria use now is it being revised?

Mr. Chairman: Peter or David?

David Jessiman: Mr. Chairman, my name is David Jessiman.

What the Department would suggest, is that the DIAND was part of the Board's Advisory meetings that is assisted the Board in helping with wood effort quality criteria. Which I believe is representing the Board correspondence.

I believe that the additional information may be more appropriate if the Board staff could provide that information specifically.

Again the Department has assisted in participating in that and I guess it would be the Department's use of that information that helped [?] standards. It would have been derived from the Northwest Territories Water Board's Municipal Guide Lines, thank you.

Mr. Chairman: Are there any further questions, Dionne?

Dionne Filiatrault: Thank you Mr. Chairman, as I actually, I can provide response to that question.

It goes back to when the Municipality approached us to provide them with some, I guess I'll call them draft guide line of where they should. Guide Lines that we were projecting if they wanted to discharge to Koojesse Inlet.

For when was that based consultation as David sat with DIAND, with the Municipal community. What used to be Resources Wild Life Management Development, Environment Canada, Public Health, DFO. Those ones are for with water flow, using per capita per day at 150 to 600 litre per capita per day. BOGF 30 milligrams per litre [?] all at 35 milligrams per litre. I think there is coliform of 10,000 coliform per delineated litre.

For water flow greater than 600 litres capital per day, BOD at 25 600 solid of 30 and people coli of 1,000.

This letter is dated March 18th, 1998 a letter from myself to Mrs. Brown, who was the Senior Administrative Office for the Town at time and this letter is filed on Public Registry.

Robert Hanson: We will put in the Exhibit #11 a letter from Mrs. Brown.

Dionne Filiatrault: It can't, this specific is in Exhibit 1 already. But if you like to be as a separate exhibit, we can do that. It is entirely up to you.

Robert Hanson: It should be, because we are keeping it in sequence evidence of putting it at the present time. Mark that as Exhibit #11, please, thank you.

Mr. Chairman: Thank you. Mr. Robert Eno, you had your hand up?

Robert Eno: I just would like to make a short comment on the burning issues, the one attended. The Regulatory Agencies have act of to submit a written response regards to jurisdiction.

Could we have those in writing just so, we can make sure that everybody is responding exact same question?, thank you.

Mr. Chairman: Mr. Tilleman?

Bill Tilleman: My back to the Board is that the instructions be repeated at the end of the hearing. And also the written letter to all of the parties. It will be given to the parties within in one or two days.

Once again setting in this writing after hearing closes. I should also suggest Mr. Chairman that the request for the written submission goes to everybody who wants to make a request, not just Regulatory Agencies.

Mr. Chairman: Thank you, any other questions?

David Jessiman: Chairman, if I am permitted to add. My name is David Jessiman. Again Mr. Chairman, if I can be permitted to make one more request. Would we also be given the opportunity to obtain written transcripts of these

proceedings? While we have the written question that we have been asked to respond to, thank you.

Mr. Chairman: Mr. Tilleman?

Bill Tilleman: My advise to the Board is to answer that question at the next break. Let them take a few minutes and discuss it. Normally it's matter of cost, because to publish transcripts on a daily basis is very [?]. So, we might come down to that I'd just like the Board take a few minutes and discuss it. And then they can get back to you.

Mr. Chairman: Mr. Weber?

Lee Weber: Mr. Chair, a couple of comments that I wanted to make. First of all, further talk to the Board might want to take with it into the break. One, to discuss is this matter, a number of things have already been said this morning also yesterday on the questions that we've been asked to, we have been opportunity to provide with written submissions on. A number of the parties already made a number of comments. That you will form part of the record and then it will be helpful, I think for all of those who are incline to provide written submissions to have before them. Everything already have been said on these issues. That is one comment.

Secondly, I wonder if I can ask for bit of clarification of the first remark that Mr. Tilleman made when we came back from the last break. Mr. Tilleman I believe shut off by noting that the issue of a draft licence at the Board is providing a draft of the licence. The Licence Renewal, that issue had been raised by a couple of people, including myself. Mr. Tilleman said that: *"The Licence will be released as decision with reason"*, I hope accurately reporting what Mr. Tilleman have said.

What I am wondering is whether that means no draft will be provided? Before the licences finalized.

UNKNOWN: Thank you Mr. Chairman, member of the Board, the answer to that question is yes.

Mr. Chairman: Any other questions? Dionne?

Dionne Filiatrault: Thank you Mr. Chairman.

I'd just like to inquire, I just got the copy of our Public Registry.

This questions is to DIAND, when was the last inspection performed?

Peter Kusugak: The last inspection was in 1998. There has been no inspection in 1999, summer of .99 due to the fact that we did not have a water resources after that at this time.

We are in the process of hiring a inspector before end of September. In which time he or she will be doing .99 inspection of Iqaluit, thank you.

Dionne Filiatrault: It's a good to hear you are planning to hire a new person. When roughly can we forecast it that is going to happen and when do you foresees it subsequent inspection of this Municipality. Any Municipality or Industrial operation in Nunavut it will take place?

Peter Kusugak: Can you repeat the question again, please so.

Dionne Filiatrault: Thank you Mr. Chairman, Dionne.

I guess, I have concern there have been no inspections this summer, but when can we forecast it that you are going to be hiring somebody. If the position open, when is going to close. And then when can I expect to see Water Resources the inspector in place. How many are there going to be and when can we forecast it, inspection is going to take place here in Iqaluit and for any other Municipality operations or Industrial operations in Nunavut?

Peter Kusugak: The inspector will be starting this month and also it was open for job. It has been finalized. He is going to start, I don't know exact date, but I know that he is expected in Iqaluit during 1999.

I think the second question you had, if there ever been Municipal inspection done during the summer time. Yes, in Keewatin coming from water inspector and as well as inspected water licence during this summer, thank you.

Mr. Hanson: Mr. Chairman, Mr. Hanson. I guess this is a question within your submission that we received from David in the back of that there was the Water Resources Offices information. Starting from 1995 to 1998, we were very concern that Mr. Smith might have had pertained to Municipality Water Licence. I guess, I have hard time in believing. Now this is now September the 9th. And it is known there is no inspection at all in Iqaluit until January 1st, it's nine months. And I think, when Paul actually left. I think it's only a few months ago, but I having a hard time being in 1999 January 1st. Until September the 9th that no inspection has been done.

If because this position hasn't been filled, is there somebody within your organization, from January 1st until September 9th, it should have came over here from Yellowknife, if they have that jurisdiction. But they didn't until April 1st. But do you not have [RR?] under [RMOUF ?] under from my understanding, have here with from your Department. In Yellowknife, to make

sure of that the Water Licence doesn't have an issue, inspections are done from January 1st/99 until September 9th/99. Thank you.

Mr. Chairman: David?

David Jessiman: Mr. Chairman, my name is David Jessiman.

Based on the record that DIAND has, formal has, formal inspections. DIAND have provided to the Boards. Did it occur on October 18th, 1995, October 7th, 1996, July 22nd, 1997 and October 14th, 1998. The important point is that these formal inspections, which are done the near of the year. And this is what the formal Resource Officer, Paul Smith has conducted. And provided to the Boards.

Now again these were the formal inspections, through out the year Mr. Smith has been involved in routine follow up with the municipality on many issues that before the Board. And I think with the numbers of correspondence on our files are part of the public record.

I would suggested that Mr. Smith has completed many on sites visit and tours, and follow up with Municipal Officials of other regulatory agencies that have been before you on these proceedings.

Additionally in my understanding that Mr. Smith has continued on through out 1999, it best he could within the that was allowed. In the bit of transistion going on to this news possibility. And Mr. Kusugak has mentioned a new Resource Officer will be hired and the formal DIAND inspector will have done this as soon as possible.

As for latter point of having another individual come to Iqaluit to do that. It could have occurred and something could have occurred. I believe what Mr. Kusugak provided to date. You probably don't need to repeat it, thank you.

Mr. H? Mr. Chairman, Mr. [Hinn?] I appreciated your comments that you are making. Again, I realize the amount of work that Mr. Smith has done since 1995 until 1999, he was great deal of help to this Board. That means he has fulfill his position. And I realize there is saying happening wrong way in bases all the time. But yes, to me is, you know it has one DIAND does get new office over here. They will have more staff to be working with them. I guess there is another links again, now we are in the East, you are coming and yes, they do and DIAND come, we better have more report to the staff, we'll always have to depend on them. They have some in West. So, there expertise will have them here. But, again I feel much better, I am sure Paul is here at this hearing. He has done a lot of work that have been in 1999 already like David said. Again just reading over the information they have some problem, some 1995 with control might be 1998 maybe for going in 1999. That perhaps what that will be address in public have them addressed already and hopefully we will come to the

conclusion and then we will find out where some of those problem areas are. Don't forget, thank you very much for comment.

Mr. Chairman: Thank you. Dionne and then we will take 15 minutes break.

Dionne Filiatrault: Thank you Mr. Chairman, Dionne.

Just go to back to, I guess to over all the enforcing agency. How this the inspector enforce in North compliance, What's procedure for that? I am speaking to existing conditions of the licence and how following their compliances review and identify things that the licencees are not in compliance for, how do they follow up on that? what's step are taken finds and closed, is it something that is simpler not having submitted sale of important, it's a year and half late. What alternatives out there for the inspectors to able to do that job and enforces the licence's condition?

Peter Kusugak: Peter Kusugak, thank you. At this moment in Iqaluit there are four reason that they are like to get the compliance reports, so when they are delay our Water inspector, he was having meeting with the groups to see how they can assist or help to them. One time when were having a meeting, they coming us to seek how their rules would be. And what the records has to be or text has to be formed. And they usually come to us for assisting them.

I know for the fact that it has been delayed. But we know for the fact that although it has been delayed. Coming because we are working with them. So, for my own knowledge this is we haven't proceed, we haven't gone further then what we can demand, like. Is that answer your question? Thank you.

Dionne Filiatrault: Thank you Mr. Chairman, Dionne.

I understand there is that we wanted all working in good faith with the licensee is and allow there are going to be two years later and two weeks for the report.

What I am going to is, 1) if there is suppose to submitted the report in 1997, then the report is still not submitted, now is 1999. To me that is grouse area in that. That's, you can't just set there and say that is forth coming. So, what step do you take? To then enforce that. Can you impose fine or not, that is one. If moving away from just the issue of report, in the issue of effluent quality limit.

I am not suggesting this is the case with the Municipality of Iqaluit. But if you are effluent quality parameters are said in certain level and that municipality say has BOD level, but it is too high in one month. Then you are conceivably you are going to wait and see if there is going to be consistently over the limit. If it is consistently over the limit for four months running. What enforcement law does DIAND play in the forcing that the term of condition of the licence?

Mr. Chairman: David, can you answer that?

David Jessiman: Mr. Chairman, my name is David Jessiman.

I believe there is two questions here. So, I'll answer them accordingly.

I think, one issue that was raised as on as matter of late reports. Yes, DIAND have those responsibilities to make sure the licensee are meeting in the terms of condition of licence, including the reports and other requirements that means a part of licence.

And specifically on the report, normally the DIAND's inspectors would work with the Municipality, particularly in this case, the one on their licences and would it soon to be renewed water licence. So, we anticipate they would go over the terms and conditions of Senior Representatives from the Municipality to go over what the are the expectations for the Department to ensure the clients of terms and conditions. And you would have better idea of where the municipality is in submitting the reports. Such as someone is raised to date have a waste management upon on the operation maintenance policy as examples.

What I would suggest as it occurred is that the DIAND's inspector have it alert it be the Municipality in writing of date of reports and file those letters to the Senior Administrative Officer or the Director pull over the Engineer. Usually there on letter that has been send. And they are continue on sometime, typically those letters request these reports submitted by specific period of time.

So, again the important thing I like to remember this a relationship that the inspector is making with the licensee to ensure compliance, one very simple.

The second issue of ethnic quality is that the DIAND, in fact that is too responsibility to ensure that waste maybe just urgent to receiving waters. Needs the licence to run it. And in the example that were provided on 1985, if the sample came in above the life of form of. And again if that information was provided to the inspector, then it would be my believe that the inspector would contact a licensee to inquire to final what may of cause in that order. If there potentially any problems with it that sample whether was done in the actual field, when the sample have been collected or if there is any problems may have occur with the laboratory. And I guess there is usually, we find as any, I mean typographical errors.

And lastly, if there is appearance

(TAPE TEN: the end of Side A)

(TAPE TEN: Side B beginning is here)

I am sure that the licensee is in full compliance, in terms of conditions of licence. Thank you.

Mr. Chairman: Let us take 15 minutes here please.

Mr. Chairman: Okay, welcome back, before we proceed, I go a couple of little house cleaning item. For those of you who made submissions, would you please ensure that you leave your full address and name and telephone number and Fax number with the Licence Administrator, please!

Mathew Hopkins: Mr. Chairman, Mathew Hopkins Howdy, I just like to ask the Boards permission to allow Rob. Murray from Hill, Murray Associate to going to attend to other matter in his appointment time. If there are questions from Board or from anyone who is present today, we ask him to come back later on in the proceedings.

Mr. Chairman: Okay.

Mathew H. Hawley: Okay, thank you.

Mr. Chairman: Thank you. By the way, I've been instructed by the Interpreters to remind you not to cough into the microphone, because they've got a headset on, and apparently they get quite a blast. It is probably very annoying, O'Kay?

Mr. Chairman: Dionne.

Dionne Filiatrault: Okay.

Robert Hanson: Before Dionne speak, this is for Mr. Murray, it's Robert Hanson. Did he realize that, if we do need to call you back, like Mathew said. We will bring you back and you will still be under Oath. Thank you.

Mr. Chairman: Thank you, Dionne.

Dionne Filiatrault: Thank you Mr. Chair, Dionne Filiatrault.

Just before the break, we were trying to, we were discussing with DIAND. How we instruct on enforces not compliance. From my understanding, now there are the first to hold the meeting, discuss the issues with the Licencee. The second is if there is still not complying they send out the letter, I am asking them to respond to the issues that are raise by the letter and the issues are not compliance.

My question back to DIAND it is, if the licencee then repeatedly ignores your letters, what is the procedure that takes the place?

David Jessiman: Mr. Chairman, David Jessiman. Just a reminder, we will respond to the question shortly, thank you.

Mr. Chairman: Thank you.

Peter Kusugak: Peter Kusugak, I am going to pass it on to David.

David Jessiman: Mr. Chairman, my name is David Jessiman.

DIAND agreed that to points, the things that the inspector would generally deal with is met with the Licencee, generally there'll be also, maybe verbal instructions, there will also be as indicated formal letters to the Licencee, requesting certain actions has been done. Additionally they can also include the specific dates and times when the requirements are to be met. Following that other options DIAND would consider, would be written direction. Again with specific times and dates. And that would be formal letters that would be, would characterize the activity and would request that the licensee have been compliant by the certain date. Additionally the inspector could consider issuing warnings to the Licencee, other option can also include conducting formal Investigations, followed by possibly of a following through with the enforced directives, enforced action. Which could include documents of any experiences of non-compliance and providing written briefs to Town Council and ultimately charges against the licensee in circumstances that required.

The point I would like make for the information to the Board, the DIAND's inspectors cannot issue fines. We cannot take a people. So, if under the authority that is allowed to the inspector under the Northwest Territories Water Act, the inspector would be required to go through the formal court system.

Mr. Chairman: Thank you. Dionne.

Dionne Filiatrault: Thank you Mr. Chair, Dionne Filiatrault again.

So, what you are saying from my own understanding at this point is that after meeting sending your letters, providing written direction, providing your warnings, the only alternative open to the Water Resources, the inspector is to take them to the court, is this correct?

David Jessiman: Mr. Chairman, my name is David Jessiman.

Yes, that is something that the inspector has, he has ability to do that. Again it comes back to different events, again working coming back to working with the Licencee to ensure the compliance.

I would not suggest that the inspectors would be charging the area of individual licensee for that might be slightly too little late, maybe there are medical circumstances that may delay or change staff and so on.

If there are serious situations that require a direct action, those orders will be issued or directions will be issued. And if there is serious occurrences, then yes, it is an option that an inspector can follow through it, thank you.

Mr. Chairman: Thank you. Mr. Weber?

Mr. Weber: At just so that absolutely, Mr. Weber.

Just so that there is no uncertainty on particular point, I think Mr. Jessiman has already brought out, I'll stated probably a little more baldly.

The DIAND's inspector does have the power to issue a direction. That's a step, short of going to court, prosecuting looking either for fine or probably for imprisonment. So, there are these two discrete steps. One is issuing some direction by the inspector other is prosecution. Direction can take up variety forms, it can be a very formal document and it can be a less formal document. It can be as concise as one step higher than engaging the licensee in conversation.

Mr. Chairman: Dionne?

Dionne Filiatrault: Thank you Mr. Chairman, Dionne.

So, what I am understanding is, is that in an sense compliance report, what an sense be direct to say that you are referring to? If the directive any compliance report and the issue is not compliance. And repeatedly non-comply with them. The only alternative subsequent to issuing the compliance report is to take then to the court? Is this correct?

David Jessiman: Mr. Chairman, my name is David Jessiman.

I would suggest that the responses is no. A compliance report is a report that DIAND do an annual basis. And typically what it is, it is just over view of terms and conditions a licence. A little like ages that, yes they are meeting them if there are any other circumstance due to late reports. So, again the answer is no. It's really as a auditing system, comparing licence to what actually being done. It may form a part of information within the formal information brief, that maybe part of the information that maybe part of the prosecution, thank you.

Mr. Chairman: Thank you, any more questions?

Dionne Filiatrault: Thank you Mr. Chair, Dionne.

Have any Director have ever been issued to the Municipality of Iqaluit?

David Jessiman: Hi, Mr. Chairman, my name is David Jessiman.

In response to the question is yes. The inspector has issued a direction, there have been formal of a letter direction. And there have been also letters that I would characterizes warning as well. In they are games that in Board records. And they deal with a number of issues that subject to this Public Hearing, thank you.

Mr. Chairman: Thank you. Any further questions? Mr. Hanson?

Mr. Hanson: Thank you Mr. Chairman. This is a just question for the licensee and I will ask this as I read, looking in the compliances...my information as decision maker. Time and time again the information has been given to the Municipality and I am sure of the compliance in 1995 up until 1998. Does the Municipality

have any legislation that perhaps lets you deal this? Have those problems been brought to your attention or are you actually [...] of those questions, some of the problem maybe coming in the licence? You haven't been taking them readily to the court once I think, the government had been enough paying for half their actual fee ...]

Maybe I might get the answer for the question, but it should hold to do something time and time again. I don't understand why some of these items are not being addressed. I realize that, you know, it happened the way imagine plan was asked about it number of times over the years. And again, we fill and we did a plan in 1978 overlay a few times and whatever. Now we are doing a new one again. I just see the raw sewage of course coming out of the sewage lagoon. I say, raw sewage, but the actual water, if you wanted call it coming out, effluent coming out for months. I guess its brought to the attention, perhaps of the Municipality, yes we definitely are correcting that problem now. I guess this clarification from myself is, at what time is the Municipality going to deal with some of those problems. When they can afford or. I don't want to get into specific, but just I am hearing what Dionne is saying, I am hearing what Dionne saying. I am not hearing a whole lot from the licencees. Maybe some clarification from the licensee when it is appropriate, thank you Mr. Chair.

Mr. Chairman: Mr. Bedard?

Mr. Bedard: Thank you Mr. Chairman, Denis Bedard. Specifically with the respect to letters and Directors provided to the Municipality by DIAND. I guess, I will get specific, for example the Director which is respect to the height of the sewage effluent into the lagoon. You know, we often have been given a RECOMMENDATIONS to either reduce or increase the elevation. Any Municipality has responded to those Directors. End has to the best ability is to correcting them. Discharge limitations at the solid waste site for example, has been comment to provide the Municipality from DIAND. And we need the patterns within the solid waste site. While the Directors provided by DIAND, it is specifics. And the Municipality has responded to those Directors by you know, by correcting or tempted to correct the situations. And I have to agree with DIAND in a sense that it's a very much team of approach. Paul Smith in the past and Peter have worked together with the Municipality. In terms of coming up with solutions and problems. And it has worked well, it is not always cut dry situation where by the issue in order and they walked away from it. They brought up the advice and an Assistant of Municipality fixing a lot of problems so, we tried to react to problems that and concerns that the Department has, I guess that is a far I can go, thank you.

Mr. Chairman: Thank you, are there any further questions? Dionne?
Thank you Mr. Chair.

Yes, I have one final question. With respect to the environmental screening report that the Department of Indian and Northern prepared, we've received on August 12th. In this report, there is a consultation of the report that suggested information was received from, I believe from Emery Packwen with DIAND, David Eno. And there are the dates and comments receives in it. It says: "See others", I am just wondering if we can get clarification the one what that others referring to, because it has bearing on subsequent question that I like to ask?

David Jessiman: Mr. Chairman, my name is David Jessiman.

I think, I would suggest if I could have the Board's indulgent, there have been two screening reports that have been file to the Board. One would be the original 1995 report and we have another one dealing with 1999.

I think in order to provide a complete answer to the Board, I certainly would appreciate maybe for some references, maybe two pages or something there so, I can take look at the various specific page within the document. I think it might be useful for the Board as well as the audience here, thank you.

Mr. Chairman: Dionne?

Dionne Filiatrault: Thank you Mr. Chairman, this is Dionne. The screening report decision I am referring to is dated August 3rd, 1999 to Thomas Kudloo, it's level one environmental screening. Which is respect to the Municipality of Iqaluit. And the page I am referring to consultation on the project it's page 7. On page 7 if you look at NWT Government under Renewable Resources. It's Emery Packwen with Dia Roberdino[?].

And if they would like to look at this particular report I can for eases, I can use this.

David Jessiman: Mr. Chairman, my name is David Jessiman. If the Board has copy of that page I could response very quickly or I could check it in my own references and I could give an answer, some, thank you.

Mr. Chairman: Thank you. Dionne?

Dionne Filiatrault: Thank you Mr. Chair.

I should make a note for the record that this document was not distributed. It is not a requirement of the application before you and enter fire in the Land Claims Agreement goes. This is information that was provided on Public Registry in General from the Department of Northern and Northern Affairs. The licencee is not aware of report is exist.

Mr. Chairman: Mr. Bedard?

Mr. Bedard: I am not quite sure what's been discussed here, what the report contains that you may have concern with it. That we haven't reviewed it.

Robert Hanson: Mr. perhaps that could become Exhibit #12. When you get that copies made for the discussions for this afternoon and give it to the licensee. Even though it is a public registry.

Dionne Filiatrault: Yes, Mr. Chairman, we can make that available.

Mr. Chairman: Okay, are there any further question?
Mr. Paul Crowley?

Dionne Filiatrault: Just before Paul asks some question, it's Dionne again.
I guess, maybe what I will do, I just like to do a wrap up to prepare this for the distribution for the Board and the Licensee.

But I would like to ask question at this time if I may.

Covering the letter that of screening decision, the statement on the bottom, in the second paragraph, the last line there is a statement that reads: *The Regulatory Process is not likely to cost significant adverse environmental it effects, providing that effort continue to improve INY Management in particular*", I am just wondering if.

For the board indulgence and David Jessiman is the second paragraph starting with previous Licence Renewal. And it is the final two lines.

Mr. Hanson: Mr. Chairman, Mr. Hanson no fairness to the licensee, they don't have a copy for what you are talking about. And perhaps that question could be asked maybe after the break at , back at the lunch. I am just saying that is not fair to them.

It is just react to the piece of paper, just have them right now. Give them opportunity over the lunch, perhaps to look at it. So, David you could perhaps have comments to fill afterwards. I just want to actually input for help, thank you Mr. Chair.

David Jessiman: Mr. Chair, my name is David Jessiman.

Yes, I appreciate your call and so, I wouldn't appreciate if the question that we were being asked to respond to could be clarified. And then I will be able to response to documents that, I have now, thank you.

Dionne Filiatrault: Thank you Mr. Chairman. This is Dionne. I will clarify and ask to complete questions so, they can have them the time to review them. Maybe response to that after the break.

I made references to consultations to the Board in that document, reference to a letter from Robert Eno and Renewal Resources. And the line on the first page that I've already read in the record. I also like to refer to DIAND to Department

of Sustainable Development. Their report, in their report on page 3 on the bottom they made the statement that the Environment Protection is unable to assist potential environmental impacts and to recommend licencing and conditions on management activity. And I wondering if Sustainable Development can make a comment like this, how can the Department of Indian and Northern Affairs in their covering letter make the statement they have made? And that is will require, I guess them to compare the two statements and response to the Board latter time.

David Jessiman: Mr. Chairman, my name is David Jessiman.

It's my understanding then these questions will be answered after lunch and concerns that had been raised would be address that time? or do you wishes to ask and the partial questions now or to carry over both during the break? Thank you.

Mr. Chairman: I rather have them after the lunch. Okay, Mr. Crowley?

Paul Crowley: Thank you Mr. Chair, Paul Crowley.

On the issue of enforcement mechanisms, it's my understanding for reading the Nunavut Land Claim that the Water Board has very broad powers and regulations over the introduction of waste and so forth. So, if there was condition of the Water Licence that there was a potential permit to be issued. Would the DIAND's inspector have any reason that would stop them from working on the Licence Fine? Fines are available under the licence.

Lee Weber: Mr. Chair, Lee Weber. I don't understand the Land Claim to give the Board any power to create and effect fining provisions. I don't think the Board has jurisdiction to say in the licence DIAND's inspector shall have a power to alleviate fine to impose fine on the licensee. I think such a condition impose in the licence would be clearly beyond the jurisdiction. I think that quite frankly it wouldn't be the Board that the paper is written on.

Mr. Chairman: Dionne?

Paul Crowley: I guess, I only have comment on. It's Paul Crowley that I would disagree with that interpretation and then it is something I would encourage to the Board to look into.

Mr. Chairman: Thank you Mr. Crowley. Any further questions?

Are there any further questions, for DIAND's representatives?

Okay, are there any further questions?

Mr. Hanson: Thank you all for coming for this, Mr. Hanson. Thank you all for DIAND before. There is one thing, I realize it is true there is the report from David Livingston with the second RECOMMENDATION, I think that was

summarized within Peter's submission, is that correct? From DIAND? Thank you Mr. Chairman.

David Jessiman: Mr. Chairman, my name is David Jessiman.

Yes, I can suggest is that the intervention was prepared by the Department through a few individuals and the reports, that I believe Mr. Hanson fringe to what we are referred to compliance report attached to the intervention. Yes, content of that are those were prepared by Mr. Smith. Thank you.

Mr. Chairman: Thank you. Any further questions? Dionne?

Dionne Filiatrault: Thank you Mr. Chairman, this is Dionne.

Just for the final point to make sure that obvious information is in place. You made a statement in the report similar to these the statement of Environment of Canada has made with to drop additional information being provided to the Board. I am just wondering, there have been allot of new information at the provided with respect the sewage treatment. And do you need to seek additional advise? or expertise in this information at this time or can a Board proceed with the information that is filed?

David Jessiman: Mr. Chairman, my name is David Jessiman.

Yes, there are two interventions states. DIAND would require an additional information on what is being composed for the sewage treatment plant. The documentation that we received to date is proposal and they believe that, we would like to assist a [?] and provide comprehensive recommendations to the Board and for the Board's consideration on that issue.

And we certainly recognize the efforts of the Board and other agencies to this stage I believe we are at. We're aware of an agreement that may have to occur in this facility. So, it would be our perspective that what was before the Board is a proposal. We certainly aware of the new information has been provided during these proceedings. We would like to get begin into opportunity to look at that new information and again provide the informationends.

(TAPE TEN: the end of Side B)

(TAPE ELEVEN: Side A beginning is here)

The Board [...?] March 1999, the application was originally submitted. In other words we'll have, so we'll have opportunity to find out if anything has changed. So, maybe, you just want to hold judgment until we receive that information, thank you.

Mr. Hanson: Thank you Mr. Chairman

I am, I guess concerned and confused here. When the facility is going ahead as we speak. And you know how concerned, now DIAND now has concern about this new building, about what has been happening. I thought you already, that DIAND was informed with all of the information prior to this hearing. I guess, I am just...Am I confused? Denis? Thank you.

Mr. Bedard: Which regards to the sewage treatment facility, I don't think there is a whole lot of new information which regards to any changes to the process, so any changes to discharge limitations. That wasn't present in original proposals. Which respect to that particular facility there wasn't really anything new to present to DIAND. Which mean able them to continue with their approval process. And so, I just wanted make that comment.

Mr. Chairman: Thank you Mr. Bedard. Any other questions?

Mr. Hanson: Mr. Chairman, Mr. Hanson.

I am still concern. If DIAND is having problem with perhaps with the information that is left them give us at this hearing. I mean, once hearing is closed we are making decision. That is my understanding. So, that is him, if you are not satisfy with some of information, that is for you maybe there is a issue I advise you to get that fairly quickly. I am surprised you are not already have all of it. Any way, I think our decision will be made fairly quickly. I don't want to say anymore right now, thank you.

Mr. Chairman: Thank you Mr. Hanson. Dionne, you got a question?

Dionne Filiatrault: I guess to put this question very simply. Does DIAND at this pointed in time have enough information which regards to sewage treatment plant? Does DIAND have enough information which regards to the landfill, and the landfill operation. And does DIAND have enough information which respect to waters other than RECOMMENDATION that already have been provided with the intervention statement?

David Jessiman: Mr. Chairman, my name is David Jessiman. The answer is no. A lot of this information as I understand it was submitted as a proposal. There was not a final design. Unless if I receive clarification that what was provided to the Board is deemed. The final documentation that the Board are deliberating on, then that concern was drawn. Again the information that was mention about the terms of reference for the waste manage plan, again that relatively a new information that I am not aware of a various the stakeholders had reasonable opportunity to provide comments on that. If that is what again before the Board, thank you.

Mr. Chairman: Thank you Mr. Jessiman. Mr. Bedard.

Denis Bedard: Thank you Mr. Chairman, Denis Bedard.

Your statement rather intrigues me in sense that you require further information. I guess my question is why wasn't this request brought to us, the Municipality and the Water Board much sooner than this meeting? Why we finding out now that your requires more information? That is my question.

Mr. Chairman: Mr. Tilleman?

Mr. B. Tilleman: Thank you Mr. Chairman, the Board members and Parties. What the Board is been hearing in the last a several minutes. In my opinion just raised in several procedural questions. For example, if I've heard DIAND correctly, they just stated just now that they did not have enough information on certain aspects of this application to be satisfied the Board can make final decision. I just heard them say that. I also heard, someone say, maybe I think it was DIAND that members of the audience including perhaps DIAND and the Board would need sometime to review some of the exhibits that has done failed. Including not the least, which a large construction drawing, because they haven't seen those. I've also heard the applicant quite correctly state that they were surprised by reference to CEAA (Canadian Environmental Assessment Act) screening, that was made available to the Board recently. On August 3rd for it's information, but that contains a valuable information. And unfortunately it was not is in the copy. And so, I also heard earlier this morning at least one concern that and the Board has heard that the parties would like to make comments on licences condition's before they are finalized. And we also heard yesterday and today, mainly yesterday that the certain report are not yet in. That impact on issues before the Board.

And so perhaps Mr. Chairman it may wise to take 15 minute. I realize it's close to noon. But perhaps if we could take, for Board could ask the members of the audience, the licencee, the DIAND party another parties, if they have any comments on what I have just said?

Because following that I would suggest the Board deliberate for a few minutes and perhaps over the noon hour and come back with the procedural directions on these very important issues.

Mr. Chairman: Okay, let's take 10 minutes break then.

UNKNOWN: It's just the proceedings that break, you might just ask the party, is any of them like to make a comment on what I've just said. In other words, I would like to know if the parties are agree or disagree? Or of the Board took consider anything else. For example the written submissions, for example may now includes three things. The first one, which we discussed on the enforceability of NWB licences; the second one on the ability of the Water Board to deal with burning as it relate to the deposited waste into the water; the third one perhaps, on the issue of review of draft of licence. And maybe there are others. I just before the Board retires if anyone in the audience can briefly either agree or

disagree that those issues sure shouldn't be addressed by the Board, maybe you could ask the DIAND currently on the floor and then the applicant and anyone else is in the audience to comment on these. And then following that the Board can take a break to make decisions.

Mr. Chairman: Okay, are there any comments from DIAND Officials? About what Bill just stated.

Peter Kusugak: Can we have a minute?

Mr. Chairman: Okay. We'll take a 10 minutes break while they are deliberating.

Mr. Chairman: Shall we reconvene? For your information our Legal Council Mr. Bill Tilleman has to leave this afternoon. And there are three more Interveners. What we propose to do now, swear them in now, because Bill as legal counsel has to leave for Ottawa. And there are three interveners, if we could swear them in now. Mr. Mason Mason, Mr. Paul Crowley and the other one is Michele Bertol. Do I pronounce the name right? Okay.

Bill Tilleman: Thank you Mr. Chairman, it is Bill Tilleman.
On that point I apologize deeply and regretfully the hearing was adjourned and I wiped everything off that I can for this week except the meeting in Ottawa that I couldn't, that I am chairing I couldn't get out of.

Before we swear anyone else in, while there'd be any objections to doing that, by any of the parties? Dionne?

Bill Tilleman: No, as the applicants? No. Is there is anyone have problem if I swear everyone in now and then they can remain swear until the hearing is over? Mr. Crowley?

Mr. Crowley: Mr. Chair, my question is any other member of the public present themselves say after lunch. Would they be able to present at that point?

Bill Tilleman: Thank you Mr. Chairman, Bill Tilleman. I've asked the Board if that happens to run over to NTI ask their Council if he might come over and swear them in. So, during the lunch hour we intend to make that contingency to stand by plan.

Bill Tilleman: If that is the case then, Mr. Mason would can you come up to the table and I'll swear you in now? And then I'll do Mr. Crowley and the others.

Mr. Tilleman: Thank you sir, please state your name for the record and spell your last name.

Marcel Mason: My name is Marcel Mason.

Mr. Tillemann You solemnly affirm that the evidence that you are about to give the Board about today, it'll be the truth and nothing but the truth the whole truth and nothing but the truth do you so solemnly affirm?

Mr. Mason: I sole affirm.

Mr. Tillemann: Thank you very much.

Mr. Crowley, would you come up here please. Do you want to swear or affirm?

Mr. Crowley: Aa, sure.

Mr. Tillemann: Okay. Please state your name for the record and spell your last name.

Paul Crowley: My name is Paul Crowley.

Mr. Tillemann Do you solemnly affirm that the evidence that you will present to the Board and sharing is the truth and the whole truth and nothing but the truth do you so solemnly affirm?

Mr. Mason: Yes, I affirm.

Mr. Tillemann: Thank you sir.

Mr. Tillemann: Madam.

Michele Bertol: My name is Michele Bertol.

Mr. Tillemann: Thank you very much.

Do you solemnly affirm that the evidence that you will give the Board these proceedings is the truth and the whole truth and nothing but the truth do you sole affirm?

Michele Bertol: Yes, I do.

Mr. Tillemann: Thank you, Mr. Chairman.

Mr. Chairman: Are there are any further questions?

Mr. Hanson: Sure, Mr. Hanson.

This is a just question for DFO the Lawyer front of table appropriate if somebody should come. It is just happen to adjourned to find the Lawyer from the NTI, could you also do it?

UNKNOWN: I don't know, I have to ask that question if he is here, you are Lawyer.

Mr. Hanson: There is a Bible here, can you do that for us, sir? Thank you.

Lee Weber: Lee Weber speaking the other Lawyer. I quite frankly, I am not sure what the answer to that one is. Mr. Tillemann, I am not sure what Mr. Tillemann's the authority which was before Mr. Tillemann. I am not sure what the Mr. Tillemann's the authority which was percentage was Mr. Tillemann is swearing in people with that authority is. If for example one has to be a Commissioner ahouse for Nunavut, I don't have that authority.

I am a Barrister and Solicitor for the Northwest Territories.

UNKNOWN: Oh, I see.

Lee Weber: This is Federal to be own, qualified for that.

UNKNOWN: Oh, I understand.

UNKNOWN: I am both of that I am member of the bar, I am Solicitor for the Nunavut, so I could do the deed.

Mr. Chairman: Thank you, thank you.

UNKNOWN: Thank you Mr. Chairman.

Mr. Chairman: Okay, I was informed by Dionne that she had one final question. And we can deal with the procedure.

Dionne Filiatrault: Thank you Mr. Chairman, this is Dionne. Just a very quick question to DIAND. If DIAND have enough information to perform a level one an Environmental Screening for this application. Why do they not have enough information now for us to proceed?

David Jessiman: What I would suggest within the Screening Report the information what we were provided, this time what was provided to the Board and what we also provided in our Screening Report. Board also based on the information that would be provided by the others, that DIAND have historically done as well is to considering the information that we also provided. And additionally is that within the information that we had at that time based on that information that was filed to the Board and provided to our Department. So, the information that we had the current as it was. And I believe in our cover letter of the reports suggest again maybe add ional information that maybe brought forth within in these proceedings. That would maybe further address issue that maybe the best directly handled in the water licence. I think that's generally covered off on the cover letter, in the letter of from our Department to the Chairman, thank you.

Mr. Chairman: Thank you. Any other question?

Bill Tilleman: Thank you Mr. Chairman, having said that I'll be away this afternoon. If there are issues come up, then they may come up for legal major, I'll teleconference the Board later today. So, if I do so I don't know how long it will go, but if it goes later another issue then the Board may decide them or I'll discuss with them and they'll decide later to night maybe tomorrow morning.

On the question of process before the break, several issues came up. For example new information, written submissions, transcripts, dead lines and so on. And what I'll propose Mr. Chairman and Board members would be to offer some directions to the audience with their comments and hear their comments. And then depending on those comments the Board could adopt the procedures that I propose to enumerate right now.

The first point would be that given the new information that has been filed and tabled. And questions about the fairness of not able to review that information at the last minute. The Board proposes that all parties will have until end of September to comment not only on the enforcement and the issue of burning. But also on any aspect of the application before the Board.

Number two on issue of transcriptions, it would be proposed that the Board will endeavour to get the transcripts to understand it that is partly out of control of the Board. Mainly because of timing issues and translation. But the Board will endeavour to get the transcripts to all parties as soon as possible.

Number three on the issue of reply, all parties would have one week to reply to any issue raised by any party.

Mr. Hanson: Mr. Chairman, the Boards decision or short term licence, is that done?

Bill Tilleman: The Board will have to read the submission by the end of September and see if it had enough information. I mean, I just don't know?

Bill Tilleman: So, Mr. Chairman, what we need to do is ask the applicant to DIAND, the Regulators and any citizen that is here if those procedures are acceptable or not. And I was specifically relieved to the request of the Chairman, if those procedures are fine, then the people say yes, if they are not please say no and give us an alternative that we are willing to hear from them.

Mr. Chairman: Okay, I guess what we will do is, we'll start out with the applicant first. Would you accept those conditions.

Denis Bedard: Thank you Mr. Chairman, Mr. Bedard
We certainly have no severe problems with those conditions. I like the Board fully understand that we are preceding, continued proceed. You know, strict

nature timing with the construction of the new sewage treatment facility. And we certainly prepared to participate in providing on additional information to who ever needs it or wants it.

But I think we're concerns with here is that we would specific requirement, you know if you tell us what you need, we will get it for you. Thank you.

Mr. Chairman: Thank you Mr. Bedard. DIAND Officials, you got comments to make about those conditions?

Lee Weber: Lee Weber, Mr. Chair. If we just have a moment to confirm ourselves here. Thank you.

Mr. Chairman: Members of the Board. Pardon me. How about the Department of Fisheries?

Margaret Keast: That is fine with our Department.

Mr. Chairman: Environment Canada?

Ann Wilson: Ann Wilson, Environment Canada. And those conditions are fine with us. I just want to say that although Intervention had that information was coming out at the Public Hearing we'll have to address. I do feel that it has been and then we have been provided with sufficient information, for this decision at this time, thank you.

Mr. Chairman: Thank you. Sustainable Development?

Robert Eno: Sustainable Development [?] those conditions.

Mr. Chairman: Thank you Mr. Eno.
Baffin Regional Health Services?

Nicole Ritchie: In Environmental Health, Baffin Regional Health Services. I found no, I don't see any problem accepting that conditions.

Mr. Chairman: Thank you. Mr. Mason Mason?

Marcel Mason: Thank you Mr. Chairman. About the only concern I have is being, the only private Intervener who is not a Lawyer. Some of the issues that the Board accepting in put on. Especially the enforcement and responsibility issues. I definitely in realm of legal discussion, the Municipality, the Board, [?] proponents or not. Do you have a fairly healthy access to Legal Advise regarding on that? Anyone who is not associated with the Board or one of the parties. They must have a heavy deep pockets, does not have the same legal

access. I am wondering if. I know example for the Board lent their lighter. That was coming cheapness creature on us.

Mr. Chairman: Thank you, ha, ha, ha, ha thank you. Mr. Paul Crowley?

Paul Crowley: Mr. Chairman, it's Paul Crowley. My only concern is have been here is the member of the public only my own time the one with time frame might be difficult for me to deal with. I certainly will do my best, but there are some leniency, but perhaps I could be allowed for the members of public, who were operating around the other jobs that would be appreciated.

Mr. Chairman: Thank you Mr. Crowley. Michele Bertol?

Michele Bertol: No, I have no problem with it.

Mr. Chairman: Thank you, I believe Rebecca Mike? Would you agree to those conditions?

Rebecca Mike: I don't have any meaning problems or concerns with it.

Mr. Chairman: Thank you. Officials from Indian Affairs?

Lee Weber: Mr. Chairman. As DIAND indicated before the last break DIAND does have a concern about incompleteness of the information that has been provided by the Town. The information ahs, specifically on the new sewage facility including what will be done was the sludge a various other details, it seem to be emerging as we going along, as we worked on as proceedings. In a general way the concern the DIAND has is what is the Board has been ask to approve, what is the DIAND one of the other Interveners have been ask to comment on it's incomplete set of plans now. On the whole I would summit that Mr. Tilleman's set of proposals excellent one. I do perceive one possible difficulty though and that is this. So, we have until the end of September to put in our submissions. You might well find that the end of September you get or by the end of September, you'll get a submission from us, which we erodes this concern we have incompleteness of Town Plans for this sewage treatment facility. And assuming for the shake of argument that you find merit to that submission, you'll then be in position having to go to Town and saying to the Town. Where is more complete plants. Therefore the amendment to Mr. Tilleman's proposal, I'd like to make is this that Town have say one month to provide the Board and Interveners with a fully worked out plan for the sewage treatment facility. And when the further comments are made by DIAND and by the other Interveners, they will have in hand that fully worked out set of plans, fully elaborated set of plans, fully develop set of plans for the sewage treatment facility. That is my main comment.

The other issue that I wanted to raise was one of copying, if we are going to working to certain schedule submission deal by a certain date. Perhaps the Board wanted to clarify for all of concern, just who has a responsibility to provide copies to whom the copies should be provide. For example if DIAND making a submission, should DIAND, while DIAND would of course send that direct thatthe end of the tape before finishing the sentences.

(TAPE ELEVEN: Side A ends here)

(TAPE ELEVEN: Side B beginning is here)

They can send out the copies. Can the Board provide DIAND with the list of the people to whom DIAND should send the copies? Thank you.

Mr. Chairman: Thank you.

UNKNOWN: Thank you Mr. Chairman and member of the Board.

Following the input of the parties on procedural points then, mine are proposed to the Board of the following procedures been adopted and once I suggest that you can ask if there is any objections if no then you can then so order, this will be the procedure.

Number 1 that the initials submissions come in by October 11th. Which gives additional time to review the material will hopefully come in as soon as possible.

Number 2, let the reply would be in by October 25, that would give two weeks for those are in parties. We need the more time.

Number 3, that the parties should intend to provide copies and staff will tell how many copies you'll need to provide. I bet low you to suggest to order everyone to do that, because the citizens don't have the thing budgets and frankly if people cannot copy it, I would suggest the Board make the makes at his expense.

Next point, if possible to translate the summary in Inuktitut do your best.

And finally, that by the first of next week this for these directions will be copied all of parties in writing by the Board.

Mr. Chairman, I don't have anything else to add, but if there is no objections. Would you ask the audients then you can so order, then we can carry on with the Hearing.

Mr. Chairman: Any other comments? Any objections by the way?

Mr. Mason?

Marcel Mason: Thank you Mr. Chairman, Marcel Mason again.

The issue regarding the potential legal assistant to private Interveners wasn't dealt with. Mr. Tilleman?

Bill Tilleman: Thank you Mr. Chairman, that raised the issue of Intervener funding and the best then I can say is put in the writing. I am saying that the Board has jurisdiction to granted.

Certain Environmental Board do have authority by law to grant Intervener funding like the Canadian Environmental Assessment Panels. I don't see those provisions in the Land Claims Agreement or the contract implementing the agreement. But I am not saying, we should not request to them in writing earlier. You don't need the wait until the end of September. Make sure the point known. I don't know what else to say.

Mr. Chairman: Okay, Mr. Bedard?

Denis Bedard: Thank you, Mr. Bedard. Just one comment we might want to move the date of Initial Submission from the 11th to 12 is a, looks like the 11th is Thanksgiving.

Mr. Chairman: Mr. Crowley?

Paul Crowley: Mr. Chairman, on the issue of Intervener funding I would like differ with the Legal Council for the Water Board and say that there is nothing restricting the powers for the Water Board to awarded and that the request on the record now. And perhaps there is in need to put it in the writing, if it is on the record then, it is for the Board to deal with it. Thank you.

Mr. Chairman: Thank you Mr. Crowley. Any other comments?

UNKNOWN: I understand that the procedures are accepted and the Board has so ordered and the request for the funding is in writing and Mr. Crowley's point is taken, Mr. Mason your point is taken sir.

Mr. Chairman: So, ordered?

UNKNOWN: You are the boss.

Mr. Chairman: Thank you. I need some advise here from everybody. It's 20 to 1:00.

Mr. Hanson: Can I'll the ask the question, Mr. Hanson. I have word from 6:30 last if there are any warning, I haven't slept yet. Is anybody hungry?

Mr. Chairman: Come back what time?

Mr. Hanson: I'd say 2:00.

Mr. Chairman: We shall reconvene and come back here at 2:00. Thank you.

Mr. Chairman: I do believe that DIAND has one more question. Dionne?

Dionne Filiatrault: Thank you Mr. Chairman, this is Dionne.

I actually really don't have question more so than the for those questions this morning about the assistance for people from the general public. And there are, there will be copy left in Iqaluit of the Public Registry and to date that has we left at, at the DIAND office and that copy will remain here at the DIAND office for review from the general public any question we have to date.

And just let the people know that the staff of the Water Board in Gjoa Haven is available for clarification any questions anybody might have to go any assistant that they may need. Thank you Mr. Chair.

Mr. Chairman: Thank you Dionne. Does anybody have any comment? or Questions?
Mr. Kusugak?

Peter Kusugak: Thank you, I said that I would provide this afternoon. We are still in the process of gathering it together and it will be provided later this afternoon if not tomorrow morning. And it will be provided to the your staff.

Mr. Chairman: Thank you, thank you very much. Are there any final questions for representatives of DIAND? on the floor or Board member?

Peter Kusugak: Thank you very much giving us opportunity to make a presentation on behalf of DIAND to year of representative.

Mr. Chairman: Thank you gentleman. Okay, next Intervener is Mr. Mason Mason.

Marcel Mason: Thank you Mr. Chairman, my name is Marcel Mason.

My presentation is not that lengthy and not of technical major really at all. At the end of the verbal portion of it, I would like to step over to Lap top there, I have a few images which I would like to display to the Board, if that is Okay?

My presentation deals with the Solid Waste Disposal Section of the Municipality application. There are number of problems or yea, the problems I have with that the statements are made.

The Municipality states in its application that:

"As outlined in the Town of Iqaluit Landfill Operation and Maintenance Manual for site 3 in West 40, controlled burning occurs under the favorable conditions with respect to the tank farm and the community."

And further that:

"Burning does not take place during the following circumstances:

- Air temperature is above 15 degrees C
- Wind is from the northwest between May 1st and September 30th
- When the tank are being filled
- A spill occurs at the tank farm
- Or when the venting tanks during high wind"

While I have a little doubt that the Municipality makes every effort to adhere to these guidelines there are many instances where the wind switches direction during a Municipal burn and the smoke from the landfill moves over the community in a smog like cloud that I consider is a very dangerous and has a very unpleasant order.

Today Mr. Chairman would be a very good example of that. It is prior to September the 30th. There is burn going in the landfill and the smoke is moving towards the Town.

Additional to the community of Iqaluit itself there are two areas of community use that are affected by Municipal burns.

- (1) The Sylvia Grinnell park which is genially north of the Municipal landfill. Many residents of Iqaluit and the tourist have either been picnicking or fishing in the river there. During the Municipal burn when the wind has been coming from a southerly direction and smoke from the dump contaminates the area.
- (2) Resident of Iqaluit also use an area known as "the causeway" as a small out of town camping and picnic area. We have the same problem there when the wind northerly direction smoke from the dump contaminates that area.

The definition of the contaminant that I am using comes from the Government of Northwest Territories Environmental rates at which I understand it has been grand fathered into the Government of Nunavut.

"It's states contaminant is any solid, liquid, gas, odour, heat, sound or vibration, or
or any combination of them, the release of which into the environment
(a) causes or contributes to the impairment of the quality of the environment,
(b) causes harm or material discomfort to any person, or adversely affects or impairs the health or safety of any person, or
(d) renders the environment unfit for use by any plant or animal life or by any person;"

"environment" is defined as:

"..the components of the Earth within the Territories and includes
(a) all air, land, water, snow and ice..."

Under these definition smoke from the Municipal burn does create in odour that contributes to the impairment of the environment both within the actual community of Iqaluit and its surrounding area.

Due to the nature of waste being disposed of by burning (plastics, plastic compounds, and chemicals such as found in detergents, various household cleaners, drain openers, etc...) It is quite possible that the gasses created when these items are mixed together and burned could impair the health of people, most notably young children, elders, and individuals with reparatory problems. I have contacted the Environmental Protection Office the Government of Nunavut asking of there have been regarding this one, but no tests have been completed.

In regard to the definition of contaminate when smoke from the Municipal burns enters the community, the park area, or the causeway area, the area basically becomes unfit for use due to the odour and, in some cases, quantity of smoke created.

Which respect to Waste Reduction (part 2 Section V)

In the Municipal application

"The Municipality states that reusable materials are separated at the site for future use. A local contractor operates a recycling program to handle aluminum cans and class bottles. Both are crushed to reduce the volume. The Musicality has also considered implementing a blue box program that would encourage more recycling."

The separation of materials at the site seems to be of a very basic nature. (As I will show some of these images) The domestic waste is not separated to the other area separate from metal debris.

The recycling program operated by a local contractor consists of a crusher for aluminum cans (and possibly glass, but I am not sure) However it is not a full time operation and not well publicized. I would like to emphasize that I do not wish to detract at all from the effort of the local contractor who is I am sure doing the best work possible given the funding, equipment and storage area available to the operation. The fact is that at this time there is a severe baking of aluminum cans to be crushed material is being stored at the Municipal landfill.

With respect to the Municipalities consideration of a blue box program this would be a start to a more proactive waste management system, however, with out an actual plan in place consideration of the matter may not go further than just that.

The application states that:

"A new group has been recently been formed in Iqaluit called the Iqaluit Environmental Beautification Society. High on their list of priorities is further reduction of waste in the community, more re-use and recycling."

Again, I do not want to detract at all from the activities of the group mention. The group has been, to date, fairly low profile within the community and if it has followed through with discussions as outlines at the public meeting where it was formed, (the meeting that I attended). It generally concerned with the visible aspect of the community, i.e. community cleanups, public education regarding littering, and general community beautification projects. All are valuable contributions of the community, however, they have little to do with solid waste management.

The "Commercial, Industrial or Hazardous Wastes Disposal Area section of the application states":

"Commercial waste form hotels, restaurants, retail stores, contractors, and other private business is deposited in the landfill. This would include food waste, cardboard and paper, construction materials, cans and other metal, plastic or rubber. No hospital waste is deposited at the site. Only household hazardous waste is accepted."

One would have to assume that included with the various items deposited in the landfill form commercial sources stated in the application that we would see industrial solvent and cleaner containers which would be deposited, and burned with other waste materials they have been mixed up with during dumping process. Again, there is the concern of toxic elements being either created or emitted into this community and surrounding areas from the landfill when this waste is burned.

With respect to Abandonment and Restoration of previously used solid waste facilities there are 3 areas that are severe need a work. Non one of these areas apparently is under the discussions as to possibly who is ultimately responsible for that nonetheless is in the Municipal boundary.

That is the area known as the "old metal dump" is a large jumble of car, truck, heavy equipment, and (at least one) airplane body, in addition to the other assorted metals and

wastes stored there. This area needs immediate attention.

The last used waste facility is located on the side of a bank across the inlet from community. During the summer months refuse is still visible on the side of this hill. That dump I believe was closed five years ago. Spring and rain runoff goes through this area into the waters of the inlet. Restoration of the site as well as diversion of runoff

needs to be completed. And as it has mention before the Apex Dump Site is located on side of the deep hill and that dump side is basically been left to the ocean to clean it up. The refuses is laying in the water.

To date Municipal Restoration efforts have to the best to my knowledge consistent baring material rocking gravel fill.

If there is have been any study completed indicating the nature of waste and whether or not this is the fact the best to course of action to dealing old sites. Whether if there is any potential hazards the study have not being publicized.

In deed Mr. Chairman, I think and I could stand to be corrected either by the Water Board or the Municipality, but the abandonment and for the restoration the work that has been completed on to the facilities, I don't think that was approved by the Board. I don't think that was done under the unapproved licence.

Section VII - of the application, of Public Concerns

It is stated in the application that one public concern is:

- Smoke and debris from open burning

and that the Municipal action will be:

- Further restricting the hours of burning
- More segregation of waste prior to burning

The people within the community are concerned with the health safety issues created by the Municipal open burn as well as the effect it has on their enjoyment of the land surrounding the community.

Further restriction s should include:

- no burning during any time of the year when the wind direction could cause smoke from the landfill to move into the community,
- there should be no burning between April 15th and October 1st when the wind direction could cause smoke from the open burn to move over the causeway area or the Sylvia Grinnell Park.

The application states that action will be "more segregation of waste prior to burning":

- should be further expanded upon to state how the Municipality will achieve this additional separation.

It is stated in the application that a public concern is:

- not enough recycling

The Municipal's action will be:

- further separation of wastes at solid waste site
- more re-use and recycling encouraged

Again, these actions should be expanded upon to state:

- how further separation of waste will be accomplished at the Municipal solid waste site, and
- now the Municipality will be encouraging re-use and recycling of waste materials

Basically without a plan this is what we intend to do, this is how we intend to achieve our goals. What we have a application are simple statements.

Conclusion

A few closing comment or conclusions:

- (1) Open burning of waste materials should be extremely limited as opposed to the primary method of community waste disposal of health and safety reasons, as well as economic consideration the open burn is one of the first sites seen by many tourists and travelers as they land at the airport.
- (2) The potential health risks created by smoke from the open burn that move into the community, the causeway area, and the Sylvia Grinnell park area should not be ignored by either the Municipality, the Government of Nunavut, or the Nunavut Water Board. Testing need to be completed and the results made public regarding nature emissions from the landfill.
- (3) Cleanup and restoration of previously used waste disposal areas needs to be made a much higher priority than it seems to be present time for health and safety reasons, for environmental considerations, again as well as economic reasons as they have an impact on potential tourism resources as well.
- (4) Many responsible Municipal Corporations all over Canada have, and are, engaging in waste management education programs such as separation of household waste at the household point. This has been done at both the community information of biodegradable, non-biodegradable, and waste that can be recycled is made mandatory by Municipal By-Law. The Municipality of Iqaluit should begin moving in the same direction as other Canadian Municipalities in this regard.

During the course of site visit the other day, it was noted by comments by Municipal staff their dump sites of Municipality is unaware of as well as others that there is doubt who does, does not have responsibility for the site. Possibly regardless of who use it.

This problem should be rectified immediately. And dump sites as well as responsibility for the dump site so, identified.

Based on comments that I heard yesterday, specifically asking about if there is any data regarding of missions from open burns. I sat down last night for while on the Internet, a little bit of research into this:

"Environment Canada in Nova Scotia has stated the plastic waste can post a wide variety of danger to the environment, plastic contains additives, coloring, stabilizers and plasticsizer [...sic]. That may include toxic substances such as cadmium and lead, (these are heavy metals) the effects of heavy metals on health system are fairly well known.

The Northwest authority, (..this is United States reference, still valid since is dealing with the open burned) states: "Every time when we burn outdoors we contribute air pollution in our area. Smoke from outdoor burning clogs the air mixture of with fine particles and another toxic pollutants which goes deep in our lungs when we breath, it can make breathing difficult many causes serious , can cause serious health problems. Burning produces carbon monoxide and mixed gases that contribute too acid rain."

I had to ask what cadmium, I am not sure if I am pronouncing it correctly is the effects of lead and I was advised that the effects takes a long time to be known. In other words, what your potentially breathing today could carry around with us for years and years before the full facts of cumulative amounts. Start to pose health risk to us.

If it is Okay, I would like to step over shoot a few images upon the screen?

Sorry about that, I am not sure how to go with the lights on. I only could be, possibly for some one to put switch and darken up a bit.

Mr. Chairman: Anybody from audience wants to be there?

Marcel Mason: These images were taken in Iqaluit this year towards end of May up until the middle of June.

This is a current landfill site, as it can be clearly seen ...

(TAPE ELEVEN: Side B ends here)

(TAPE TWELVE: Side A beginning is here)

...rock has basically been dumped in there. There is a lot of garbage floating around in it. This is located on side of hill that leads straight down into the inlet and you can see the water pulling and you can see the garbage laying side of the hill.

For those who are concern this is solid waste portion of the application impact on the water. It's all down hill to the ocean.

This is image taken across the inlet, from the dump, area circled in red is what's left over of the old landfill. It is right on side of the hill.

And again Mr. Chairman as I say it's all down hill into the water.

For those again who are concern that this application or mandate of the Water Board, it's dealing with water, we have some fairly graphic examples of how Solid Waste Management practices in Iqaluit. Effect both the ocean and depending upon which way the wind is blowing, inland waters as well as the water we are drinking.
Thank you very much.

Mr. Chairman: Thank you Mr. Mason. Are there any questions for Mr. Mason?
Guy Kakkiarniut?

Guy Kakkiarniut: I am from Pelly Bay. The smoke had to be extinguished, by the fire? that is my question, is that what from the Fire Department?

Marcel Mason: Mr. Chairman. Marcel Mason.
I am sorry I didn't have the earphone on, so I didn't get the question.

Guy Kakkiarniut: That heavy smoke we have seen, does the Fire Department had to extinguished, is that what you meant? What they do with that heavy smoke, because it must have been hard to put the fire out and it must have been very smelly? Can you elaborate on that a little bit?

Marcel Mason: Thank you Mr. Chairman. Marcel Mason again. As I understand it, it took some where between six or eight hours for the Fire Department to put the burn out. Should be noted that, I notice when the Fire Department was addressing this particular problem, they would definitely wearing a self contained breathing apparatus whenever they were anywhere near the smoke.

And the Board Member is indeed correct the smell was obnoxious. At this point I have no idea what was actually burning. I've heard rumors that it was asphalt roofing. I don't know whether that is true or not. And we have no absolutely no idea of the potential health effects on anyone who ended up breathing that.

Mr. Chairman: Dionne, you had question there?

Dionne Filiatrault: Yes, thank you Mr. Chairman. This is Dionne Filiatrault.

Marcel has presented several photos for the Board's consideration, I would suggest that it would be appropriate if he has the copy of those, to submit those as exhibit. Marcel has also made reference to two other documents or research articles that he has quoted from. And maybe if those can also be provided to the Board or at least the proper reference, so we may go on to the Internet than pull those off ourselves.

Mr. Chairman: Thank you Dionne.

Are there any questions from the floor for Mr. Mason?

Robert Hanson: Mr. Chair Mr. Hanson, if I can than Mr. Mason. We do have our own package pictures, I may have them available also. That could become Exhibit 12, the pictures and the two documents of Dionne and maybe two representatives here. Internet access could become item 13. Is that will be available for us? Thank you.

Marcel Mason: Mr. Chairman, I do have with me packages which have copies of images you just seen. Which I cannot certainly give to the Board.
And I have the notes that I made last night while looking up sights at in Internet. I do have a couple of the Web addresses available that I looked at, I will certainly make those available to the Board as well.

Mr. Hanson: Thank you. The other item 12 for pictures Mr. Chairman and 13 will be the document.

ITEM NUMBERS CORRECTIONS

Dionne Filiatrault: Mr. Chairman this is Dionne, just for clarification with the program Mr. Hanson. The numbers have changed, we actually, with those submissions that would be item 13 and 14.

Mr. Hanson: Did I miss it?

Dionne Filiatrault: But, I can clarify that with the Board. At latter date.

Mr. Chairman: Thank you. Are there any questions for Mr. Mason from the floor?
Any questions for Mr. Mason from the applicant? Thank you. Any questions for Mr. Mason from them? Dionne, you had a question?

Dionne Filiatrault: Some of the aspects of the Operation & Maintenance. Sorry this is Dionne. Of the Landfall Sites, the Water Supply and Sewage Treatment. If the license is issued and would be incorporated into Operations and Maintenance Plan, would you like to receive and be in process of that the review of that plan?

Marcel Mason: Thank you, Marcel Mason, yes indeed I would. I am not sure what is fully contain in the plan right now, based on references that the applicant has made in there licence application. I assume some of the point I just were in the operation and Maintenance plan for the facility and I certainly would like to see any revised or new ones, thank you.

Mr. Chairman: Thank you. Any further questions for Mr. Mason?

Mr. Mason: Thank you.

Mr. Chairman: Thank you very much Mr. Mason.

Mr. Hanson: Dionne.

Mr. Chairman: Oh, I am sorry, Dionne, I didn't see you.

Dionne Filiatrault: Thank you Mr. Chairman Dionne.

Just the point to clarify for Mr. Mason is in his presentation, he made references to the two Abandonment Restoration Plan that the Board has seen. I just like to confirm for the record that, yes the Town of Iqaluit has submitted to prior occasions that the Restoration Plans one for the Apex Dump and one for the West 40. That is what they called it the Iqaluit Landfill Site. Most of those plans were rejected as deficient at this time and from what we have heard yesterday from the Town those will hopefully forth coming once they follow through with their Solid Waste Management Study.

And continue with that just to confirm, yes the West 40 Iqaluit Landfill Site, there was accumulation of material that was placed on that site without a approval from the Board.

As soon as that occurred the DIAND inspector immediately requested that the Municipality stop that work no subsequent material was put on the site.

Mr. Chairman: Thank you. Thank you Mr. Mason.

Mr. Mason: Thank you Mr. Chairman.

Mr. Chairman: Are there any questions or comments? Address to the Interveners by the members of Nunavut Water Board.

Are there any questions or comments, address to the Interveners by the Town of Iqaluit?

Are there any questions or comments, address to the Interveners by other Interveners? And other parties?

13. THE INDIVIDUAL REPRESENTATIVES

Okay, moving on to next item.

There are two individuals, who have advised Chairperson that they wish to speak.

The first one is Michele Bertol? She is with the Community Government Housing and Transportation.

Michele Bertol: Thank you Mr. Chairman, my name is Michele Bertol. I represent the Department of Community Government and Transportation with the Government of Nunavut.

And the purpose of my intervention is to provide to the Board information regarding funding for the projects. Which we are discussing here today, which means the Sewage Treatment Plant, the Solid Waste Management Plant and the Water Treatment Plant.

If you'll allow me, I will put the overhead projector on. It will be easier to follow.

Mr. Chairman: Would you take the mike with you, please!

Michele Bertol: Aha. Thank you.

Mr. Chairman: For those of you who cannot see, please come forward here!

Michele Bertol: The chart represents The Five Year Capital Plan for the three projects, which were discussing today.

I have indicated in the first column that the current Budget for this year. Which is approved Budget.

I guess, what interest us the most is what will be happening in the future years. With regards to these projects.

So, let us just go down column by problem for the Sewage Treatment Plant, the next year the Government is providing the funding to cover the cost and it is \$3,320,000.00 and the following year and that is for the construction of the plant.

The following year there is \$ 200,000.00 in the proposed budget and this is to do the abandonment and restoration plan of the lagoon.

The following project Solid Waste Management, we have \$200,000.00 apparently and this is to prepare the plant which we have discussed several times during the fact day. It will contain and Betterment Plant for the two Sites, the current Site and two old Sites. It will also provide conclusions on which type of facility is the best to use here in Iqaluit. So depending on the out come of these conclusion. Depending on what type of facility this Document Proposal in 2000 and 2001, we will have budget. The reason why it is plan right now, it's because, it depends on what type of facility is selected. We will know that as soon as the document is prepared in a few months time and that time we will be able to evaluate and estimate a dollar value for that.

So, construction of this facility will start in 2001 and 2 there is 2,000.000 allocated for that year. And in subsequent in two years another \$2,000.000.00.

And for the Water Treatment Plant in the year 2000/2001 there is \$250,000.00 allocated for the design of the upgrade that required for the plant. 2,000.000 the following year for construction of those upgrade other million the year after for that.

So, this is the Proposed Capital Plan for this project.

Any questions?

Robert Hanson: Nicole if I can, in your presentation by yourself to become exhibit 16. That could be given to Dionne, please. Exhibit 16?

Dionne: Yes, thank you.

Mr. Chairman: Are there any further questions? Dionne?

Dionne Filiatrault: Thank you Mr. Chairman, it's Dionne. I am just curious these are all numbers that are proposed. I am going to call it Community Government, because I don't know the whole name. I am just curious. Does this Incorporate figures that the Town is going kicking in, it might be interesting to hear what are the additional figures the Town is going to be kicking into extra with all of those program?

Michele Bertol: Yes, you are right! This only represent the support...

Mr. Hanson: Name please!

Michele Bertol: Speaking. In fact you are quite right this only represents the portion that the Government of Community, the Department of Community Government and Transportation's funding. If it is not reflect the portion that the Town is kicking it.

Mr. Chairman: Mr. Bedard?

Denis Bedard: Just to clarify, under the Funding Regulations and Rules are developed by Community Government, the Municipality is required to put in a certain amount that is determined by the Formula. It works out to approximately 20% of the total cost of the project. It's what the Municipality will be expect to put in.

But it is a very specific a formula that they're required to meet.

Mr. Chairman: Thank you. Mr. Crowley?

Paul Crowley: Thank you. I have a question to the Intervener, I guess it is a major funder for these projects. Of what responsibility does the Department of Community Government have to ensure that they are done properly? And on time.

Michele Bertol: Speaking. I am not sure what you call properly. I am not sure what you are referring to when you are saying properly. Perhaps you wanted to extend on that?

Paul Crowley: Yes, during the hearing. Paul Crowley again. During the hearing we heard of missed deadlines and the plants being the building going ahead before appropriate proposals are submitted and accepted.

And I guess, my question is how much responsibility if any does the Community of Government have to ensure that process is properly followed? Seeing that the Department is major funder of these projects.

Michele Bertol: Speaking. Perhaps, what I will try to respond is to say that, generally the comment that we face with is that the things don't go fast enough. So, we do try to provide the money and timing basis.

It is not our responsibility at all the time to interfere in terms of scheduling. The Water Board or other Agencies interfere with Supervising or you know the policy aspect of the work.

Paul Crowley: Perhaps a comment. It's Paul Crowley. I guess where I am coming from is that when the lending the Institution lend money. There is often liability that is attached to what that project is that the money lend for. I am wondering if that has been examined here in terms of Community of Government's responsibility. It is appears from the Intervention that happened that the Town has not really lived up to it's responsibility in terms of planning and being on time.

And I just, my question is what kind of redundancies are in the system, so it won't happen in the future.

Denis Bedard: It's Paul's question in part. When the Community Government and Transportation provide funding to any project in Town. They are included as part of the Review Team, which includes the staff from their Department and staff from the Municipality. As well as the Councilors, they are represented. You know, just to ensure that all of the parties presented equally and all of the concerns has being met. So, that answers part of your question, in terms how they are involved. For example in the review of the Solid Waste a proposal that was assume receive. The Community Government and the Transportation will be involved indirectly reviewing those proposals along with the Council and along with the Municipal staff. Thank you.

Paul Crowley: Thank you, that does answer my question.

Mr. Chairman: Mr. Mason?

Marcel Mason: Thank you Mr. Chairman. A couple of questions. The first one I guess would be: Has this Five Year Capital Plan containing this line items and figures have been approved by the Government of Nunavut?

Michele Bertol: No, Capital Plans for the Government of Nunavut has not been officially adopted yet. This will happen in a few months time.

Marcel Mason: Thank you Mr. Chairman. So, these numbers we don't have anything but these numbers will be approved by the Government of Nunavut at this time?

Michele Bertol: Speaking. No, they are subject to approval by the Government.

Marcel Mason: Thank you Mr. Chairman. I'll also possibly more just get right into the record or anything else. I like to confirm that the way Five Year Capital Plans work, is that the after they are approved the current year shown in the Capital Plan, this generally accepted as what will happen? And further we go way from the current year, there is less and less absolute certainty that those dollars will be committed.

Michele Bertol: Every single year, other than the current year. Every single year, every year has to be approved by the Legislative Assembly, that is right.

Marcel Mason: Thank you Mr. Chairman, Marcel Mason again. And just stay question possibly for Municipality, Mr. Bedard reference to a funding formula that says: "If the Community Government and Transportation at the Department. Is to contribute maxi amount of dollars, there is a formula that the Municipality must contribute. Maxi amount of dollars. I am just wondering mechanism to ensure that if in the year 2000 and 3, 2000 and 4 there is one million dollars for Solid

Waste Management. That Municipality will indeed have either the will or actual finances to contribute to that. And therefore to see the plan fall through?

Mr. Chairman: Mr. Bedard?

Denis Bedard: You already answered that. But given the Five Year Capital Plan certainly allows the Municipality to plant within their own reserve funds. The proper continue these require to carry out our projects to this nature. I guess that's as far as I can go.

Marcel Mason: Thank you Mr. Chairman, Marcel Mason final. I am just wondering if there is any mechanism in place that would require the Municipality to create a by-law, that in effect becomes municipal legislation, that requires them to follow through on these plans.

Denis Bedard: Thank you Mr. Chairman, the problem with the by-law is it's very specific. It's certainly not a problem, even a motion or resolution from council does the same thing, in a sense that it defines the need to have this much money at the end of the year. It doesn't require by-law, it's probably a wiser idea not to go to a by-law because if the government funding formula changes in any way shape or form in the next five years, then the municipality must be in a position to be able to react fairly quickly to changing their requirements, so resolutions are usually easier.

Ann Wilson: Funding identification and commitment was one of our concerns in our intervention. I just wanted to ask the applicant if the levels of funding which have been identified, which are fairly new to all of us here are sufficient to do the work which lays before you. Particularly to address some of the remediation of the dump site.

Denis Bedard: At first glance I would say that the funding formula laid out by Michele Bertol is adequate. Certainly the sewage treatment plant is more than adequate to finish that project. The water treatment plant as well. Original estimates that we received from consulting engineers ranged as high as 2.8 million dollars. It is well within the limits that we are looking at, at this point in time. A solid waste site as well, at an initial look, it looks like it's an appropriate amount of money to complete the work that we hope will be done in the next few years.

Mr. Chairman: Are there any more questions?

Nicole Ritchie: Earlier in the hearing we, I believe it was the municipality that quoted, estimated the present landfill to last until 2001, meaning the summer of 2001. Upon that estimate I would like an idea of how they came to that lifespan. I know the original approval, or the original approval process that it went through was for five years, which would end the lifespan of that site in the summer of

2000. I understand it may be predicted to last a bit longer, but I'd like to know if that's based on past practices, Municipal operations and maintenance practises, which did not coincide with the operation and maintenance plan and manual, or whether it was based on the actual operation maintenance plan as it stands and should be used.

Denis Bedard: Thank-you Mr. Chairman. The estimate that we have been using for the year 2001 is based on a couple of things;

1) The site is approximately one third full at this time, it was designed at a capacity of 44000 cubic metres, and we are producing waste at approximately 12000 to 13000 cubic metres per year, given some of the growth we have been undergoing I think a conservative estimate would be that we have a capacity given the present operational procedures until about late in the year 2001, which certainly gives us the opportunity based on this funding formula that SHELF(sic) presented to us is to begin construction of the facility.

2) In terms of funding it is broken off into four years, a couple of options available to us as a municipality, once the comprehensive plan is complete, is we can build the facility in stages over those three years or the municipality has in the past debentured it's own financing to complete the whole project in a given year and then relied on the department of community government to provide them those annual payments as they come available.

Those are the two options we have available to use in terms of completing the needed works. Thank-you Mr. Chairman

Mr. Chairman: Thank-you Mr. Bedard.

Nicole Ritchie: I would just like to make one comment. From my perspective, I do realize there has been a change in operations and it has been more so to improve the operations, quite a bit actually, but recently (TAPE ENDS)

(TAPE TWELVE: the end of Side A)

(TAPE TWELVE: Side B beginning is here)

...when they made that estimate. I'm wondering if, this change in operations as well as the expanding rate of Iqaluit presently, and what's expected in the next couple of years, what is taken into consideration and you feel constant with that estimate.

Denis Bedard: Yes the changing population figures were accounted for in those estimates, and yes the need for fill cover was also accounted for in those estimates.

Nicole Ritchie: To Michele Bertol, have you received any type of request for funding from municipality for some type of contingency plan should the estimate that was quoted by their engineers not be sufficient?

Michele Bertol: We haven't.

Denis Bedard: Just a comment in that the efforts made here on the presentation, made on behalf of community government transportation are significant in the sense that over the few years that I've worked with Michele, there is a very distinct interest in seeing that these major facilities are constructed. In knowing how the government works as these things come up the department has usually responded positively to making sure that resources are available.

Robert Eno: Representing Department of Sustainable Development, Government of Nunavut. Just a question I want to direct to Mr. Bedard actually. As with any location in this country, the location of a landfill site can be a very contentious issue. My understanding is maybe Bob or people who have been here for quite a few years can fill me in on this; I understand that there was a plan at one time to put a landfill site on the Road to Nowhere. There was some serious public opposition to that, I think particularly from the residents of Apex. Correct me if I'm wrong anyone, but this is my understanding, my question is: does the town of Iqaluit have any idea of where they intend to put the new facility? It seems to me that they're aren't a lot of options available and to put it anywhere else but on the existing site is probably going to raise a bit of public outcry. Do you have any idea where the intent to locate this site?

Denis Bedard: The process as I see it unfolding will certainly involve first identifying a system. The type of system is going to drastically dictate where it's placed. To answer your question more specifically, no, I have really no starting point in terms of where this is going to go. It is one of the reasons a consultant is being hired. Another reason that the public in the various departments will be consulted because we really want to start fresh, determine what type of system we are going to use, and then find a place to put it. Thank-you.

Mr. Chairman. Thank-you. Any further questions? We shall take a fifteen minute break.

Dionne: My apologies, I have thought of another question during the break. I was just wondering if Michele would be willing to provide some clarification if possible. If the board will indulge me I will proceed. One of the issues that's been raised over the last couple of days, is an ongoing issue with many of the regulars, is the ownership of some of the abandoned landfill sites within the community of Iqaluit. I started to think that possibly one way of identifying potential ownership of those sites is through land leases, and the owners of those lands and whoever hold titles to those lands. I think I direct this both to the Town and to Michele, whether it is on municipal lands and the municipality holds the leases for some of those properties. Or if they're on commissioners land, or even I suppose back to the Federal government, if they're on Federal

lands. That may be one way of sorting through that, clarifying that issue and then potentially identifying whose responsibility it would be to clean those up.

Michele Bertol: Mr. Chairman I don't have the answer. I don't know right off the bat whether there are reserves on these past dump sites or whether they are on commissioners or municipal land. We would have to look into that.

Denis Bedard: Many of the old sites are commissioners land. All of the sites in the area of the airport still belong to transportation as they were transferred down to that department from the federal government. We will with Michele's help work through determining exact reserves and land ownership in those issues.

Mr. Hanson: Mr. Chairman, just a question. That document that you just gave us as Exhibit 17. Is that a public document at this time have that gone through Nunavut Government? At the present time?

Michele Bertol: It is, it has been provided from the Department only. Now it has to work its way through the approval of Legislative Assembly. They will approve an official Five Year Capital Plan for the Government of Nunavut. This is what we are submitting as a Department.

Mr. Hanson: Mr. Chairman, it's Mr. Hanson, just clarification for this Board. This is a Capital piece of Capital Plan that has not been approved by our Nunavut Government.

Michele Bertol: That's exactly right. The Government of Nunavut has not yet officially adopted the Capital Plan.

Mr. Chairman: Dionne?

Dionne Filiatrault: When would that potentially be approved by Legislative Assembly? I don't know that level politics like.

Michele Bertol: It's difficult to give a date at this point. This is a first year of government and they are doing their best to due meet their responsibility at the timely manner. But perhaps in early January, there will an official capital plan.

Mr. Chairman: Okay, thank you Michele, before we proceed I had a special request from Major Town of Iqaluit to say a few words. Would that be Okay with the Interveners? The Major of Iqaluit to say a few words? Are there any objections to the Major.

UNKNOWN: Mr. Chair, I just wanted to say that if what the Major is going to count the evidence. Then the Major should be swear in.

Mr. Chairman: Mr. Crowley, would you please swear in the Major, please?

Mr. Crowley: Do you swear that to tell the truth the whole truth nothing but the truth help you God?

The Major: Can you hear me?

Paul Crowley: Mr. Chair, Paul Crowley Commissioner of Oath in Nunavut. I would like to give the Oath to the Major before he gives his evidence?

Mr. Major, do you swear to tell the truth the whole truth nothing but the truth help your God?

Mr. Major: I do.

Mr. Chairman: Thank you Mr. Crowley. Saying to the Major: You can talk now.

Mr. Major: Thank you very much, I apologize I could not make it, because due to sickness, I was not able to make welcoming remarks on your opening day. So, much apology, because this is a very important matter. The Councils were aware of this public hearing. But I could not make to attend the meeting due to sickness.

So, I would like to welcome you to Iqaluit and to Iqaluit, Nunavut. Thank you.

Mr. Chairman: The next individual who is wanted to ask the question, I believe is Mr. Frank Pearce.

Would you be just asking question or presenting the evidence?

Frank Pearce: I will be asking questions about...Frank Pearce. I'll be asking a question, but maybe making a comment. Relating to a particular instance that took place here in Town.

Mr. Chairman: In this case you don't have to be swear in.

Mr. Hanson: Mr. Crowley, would you plea to state your full name and spell your last name for the record?

Mr. Crowley: Would you please state your full name and spell your last name.

Frank Pearce: My full name is Frank Pearce.

Mr. Crowley: And would you raise your right hand on Bible.
Do you swear to tell the truth the whole truth nothing but the truth?

Frank Pearce: I do.

Mr. Chairman: Thank you.

Frank Pearce: My question is to find out what provisions have been made to dispose of the fuel that has been spilled? I really to instant that place right outside the this very building that we are talking about. I just wanted to know what the provisions have been made for that?

Mr. Bedard: We discussed the other matter of the comprehensive waste management plan, which will include apportion in the new landfill disposal site. Which will accommodate contaminant soils. As well as the airport at this point time are constructing such a facility in line facility for the land farming of contaminated soil and has indicated that they will make spaces available to Municipality. Should they required? Thank you.

Frank Pearce: Space available for doing exactly what. What is the procedure here?

Denis Bedard: It's called land farming basically it's the duration the storage for contaminated soils.

Frank Pearce: I was going to relate about the instant by I think what he has said satisfies my curiosity on this matter and hopefully we will be able to facilitate this sort of thing rather quickly in the near future, because we had a little bit of problem. Thank you very much.

Mr. Chairman: Thank you Mr. Pearce. Next speaker is Mr. Paul Crowley.

Paul Crowley: I will make my remarks and my remarks should be very brief. I think I had a number of intervention out of stated my number of my concerns. As well as Marcel. The pictures that he presented I think do better job of explaining some of the concerns I have.

Most of my concerns are residents in Iqaluit have been made even stronger since I become a father. I might not be big deal to some, but to me it is. When a child is not yet two years old is breathing the air from dump, it worries me.

I think is excusable at this burning still[?]. I would ask the Board to considered not allowing it to happen anymore. We heard from the Town of Iqaluit that there is no other options but to burn until 2001, because there is only six months left of [?] dump. I think that is one way looking at it. There'll have to be other ways.

We examined some of those other ways being passing a by-law without force of contractors, commercial interest to separate the waste before goes into the

dump. By half tracking the By-Law process it, as much as they could go through within three months. That is still a lot shorter than burning until 2001.

I am not sure ways another site cannot be found within six months. I know there are [?] out so on, so forth. However, six months is considerable amount of time.

So, it's not the first time the issue comes up to Town, it's come up in previous at renewal, renewal of the new licence. That information should not be lost. I find it not acceptable that the Town continues with the same reasoning we must burn.

We have heard from some of the regulatory interveners that the burning is likely produce toxic chemicals such as furans and dioxins, you have heard from Mr. Mason that perhaps burning of the plastics produces cadmium and lead. I know effects of lead, having lived in the community of British Columbia. That effects of rather a very strong particularly in the children and that particular community IQ levels were much lower than in the surrounding communities that weren't effect by the lead.

As resident here that worries me. It makes the Town a lot less appealing twice to live in. As the Capital of Nunavut, I won't think that this is something that should be the first priority deal with immediately. As you step out for lunch, you smelled the smoke that it sets on you, it is not exactly that we can escape it.

I don't believe any of the staff of the Town are doing there job, you know any ill intent that they are doing their best they can. However, less their hand is force to find another solution, it appears to me that they will continue the same track and have burning until 2001.

On the matter of sewage treatment plant, I'm happy to see that the new solution have been looked at. That's been said, I am very worry about the temporary solutions, that have been put in place in the mean time. In particular of tarping of the sludge cakes in the existing dump. With the weather we have, I am not just convinced, even though I am not technical person, I am not convinced that will provides this decision a conditions to allow for those cakes for meant as a whatever they do, composed as they are suppose to. So, I definitely have concerns about that.

Earlier today, I felt that I was watching the government at their worst. For Departments made up of a good meaning people would basically trying to dock the responsibility, that even though they are perhaps they do not have jurisdiction. No one, can figure out who has jurisdiction over some of these matters. And no one is willing to take the lead. And to me that is government at it's worst. And I would hope that the Water Board take the lead role in filling some of the gaps that have been identified.

I know a lot of these people, I know their well meaning, but when it comes to a point where the well meaning people are avoiding answering the questions, because they are not sure, they are not willing to take the extra step. I am worry about it. If we are going to have a risk between the potential law suit or potential health hazards, I know where I'll fall. Please make sure the potential health hazards are covered.

The last enforcement means that under the current licence the Town is unable to do whatever lights. Again, everyone is well meaning, however with all of the pressures that the Town has upon it, it's difficult to do their change practices such as burning and if regulators do not have the expertise to do it such as Territorial Health, then who will. And there seem to be that perhaps the Water Board will have to sort out who fill that gap, because without it, without some kind of enforcement mechanism allowed the certain regulator to cover that jurisdiction. I am not sure that I am confident that the Town lack any different than over the last four years that I have been here with dead lines are missed, plans are not submitted, the public is in the dark.

If the only enforcement is shut down the dump and sewage lagoon, there is no enforcement mechanism. We all live here, we all going to produce the sewage, we all going to produce garbage. There have to be other mechanism besides, closing the facilities, there is none currently. Whether is fine, that could be given, I guess given to the Town, when they are not operating this facility properly. Which then [...] other tax payroll probably end up paying anyhow, but at least someone then will have to say, [...], we didn't do this right and somebody is responsible and we will fix it. At least there'll be public issue. As suppose to someone in the bureaucracy saying we will never shut this thing down, we are not going to take them to the court, so we'll let the things happen or to make them change their practice. We've seen over the last days from too many Intervenors that they've let us been going back and forth with no action.

So, I hope that you'll consider putting in mechanism where are going to be real teeth to the enforcement.

Lastly I hope that the Water Board proceeds with the precautionary approach. When we are not sure of something with respect that the health problems, then we should deal with it.

We are not sure what's in that smoke, but we respect that there could be toxic material or it should be dealt with. We are not sure about that the sludge been able to composted in Arctic conditions. Well then, there should be a contingency plan in place, that really allow for the worse case scenario.

And I know the Town is trying to put together full comprehensive plan, and that is great I applauded in terms of comprehensive plan with regarding the waste management, that's great. While that is happening, that is also seems to me that

it's being use as excuse to continue with the same practices that are going on now, which I do not find it acceptable. So, I would urge you to perhaps nudge them along and get the things moving, because on their own, it doesn't seem to happened. Thank you.

Mr. Chairman: Thank you Mr. Crowley. Celestine Erkidjuk, you had a question?

Celestine Erkidjuk, did you raise your hand? Go-a-head and ask.

Celestine Erkidjuk: Yesterday, I mentioned that I am not originally from Iqaluit, but I do believe that this is my own home town now, because I've lived here for 30 years. And I know that I am one those people, because I've lived here for 30 years, I am tired of being responsible for those 4 Sites, because when the first dump site was established I lived here. And then they again created other three dump sites, the latest one is the one is that where the dump is located. Because, I myself spring, summer and during the year I have a vehicle, so I go all over the place and when there are green sceneries then Iqaluit is a very nice place. And also, but when you saw this light, we saw the worse case scenario when you looked at the pictures of the dump sites so forth. But it seems like the best part of this Iqaluit are being ignored. We seem to be concentrating on the negative areas of Iqaluit. Specifically the garbage around down town and landfill, etc., sewage lagoon yes, I am in agreement that the chemicals in plastics should not be burned, or Styrofoam should not be burned. I know that simply old clothing or papers, some should be burned I agree. But these stuffs that being burned at the dump should separated first. And this is my concern and the Town was proposing to have a new dump site located road to Nowhere, but I am definitely against that. And all of the local people, I am sure are against it and Brian Pearson was the leader of the advocacy group back then when we did not want the new dump site road to Nowhere, because that is a very unaffected area that we can go to, where there is no buildings or so forth.

But it's seems like this Iqaluit area it is smells like the dump site. So, if you want get out of town, you have to go way away from town. And I love Iqaluit and also I am in agreement with the new facility lagoon, sewage facility to force by the Town. Because I am, too bad the Board was not aware the sewage lagoon that was aaah...

(TAPE TWELVE: the end of Side B)

(TAPE THIRTEEN: Side A beginning is here)

Mr. Chairman: Are there any questions for Mr. Crowley? From the Board?

John Sadoway: I would like to ask to the Chair whether Mr. Crowley has an idea how the Water Board might create a fine structure or some sort of enforcement structure given that he has an understanding of the Land Claim Article that created the Water Board how the Water Board might go about, putting such a structure in place?

Robert Hanson: Mr. Chairman, I may, I don't know what my legal opinion here Mr. Hanson. Is it CBC asking this question or is this individual from community? Asking this question? I am just concerned if the question being asked is going to be on air to night?, is that on CBC? Is that making any difference? Okay?

John Sadoway: Mr. Chairman it's going to be a piece and CBC is also part of the public. Because it is an institution and it can ask a questions to interveners as well.

Robert Hanson: Thank you.

Mr. Chairman: Thank you. Phillipe?

Paul Crowley: I can try and answer the question to the best I can. It's Paul Crowley.

The Nunavut Land Claim is what confers power to the Water Board. The powers are that set out in the Land Claim are a very broad. The limitation that are set out to the Board's power, they also set out in the Land Claim.

The Land Claim is a constitutional document. The legal interpretation of constitutional document has to be a very broad and liberal.

Therefore it's my opinion that the Land Claim while not giving expressly the power, does not take it away and thus under the Legal interpretation, you have to assume that the Board has that power.

Certainly I am sure those other Lawyers and some in this room may disagree with that. However, I think in it's interpretation that the Board should consider and I believe, I certainly given up appropriate time, would be able to back up into a legal argument.

Under those powers then I believe it, it can create a [...structure]. It appears that it's a regulatory gap in any event. So, while that maybe subject to a challenge if a fine structure was created and a fine was given. I think that maybe it's risk that is worth taking in view of the lack of enforcement, accessibility that there is under the Water Licence currently.

And I believe that there are many good arguments that could be made at the Board would be using it powers properly.

Again this is my opinion at this point in time. It is not a legal opinion based on laws and research and I am not putting it forward as a legal position. It's my interpretation that I have at this point in time.

Mr. Charmin: Mr. Weber?

Lee Weber: Mr. Chair. I am sorry, I am just scribbling things down. Is Mr. Crowley speaking? I hope I'll hit the various points that he has made and also various points that I've been scribbling here. I agree with a portion of what Mr. Crowley have said. It's certainly the case that the Board draws power, at least the portion of it's power from the Nunavut Land Claim Agreement. That is the document which has it's first instance set the Board. It's also the case that the Nunavut Land Claim Agreement is a constitutional document.

I would agree in general way with what Mr. Crowley have said about need for a broad and liberal interpretation of the Land Claim Agreement. However, I think that there is difference between a broad and liberal interpretation on one hand. And an interpretation which is open ended, card wash, takes things to unrealistic extremes.

Yes, the Land Claim Agreement is constitutional document and yes, it creates and give certain powers to the Board. However, neither the Land Claim Agreement nor any other law that aware of makes the Nunavut Water Board Legislature. I think it is a very important to maintain the distinctions between the different elements of our society, we got legislatures, we have tribunals whether they courts the bodies like the Water Board. They got the different spiritual responsibility and they have to respect the responsibilities of one another.

I don't want to say like I am wet blanket for ever shining away with the message that the Board has to be mindful of the boundaries of it's jurisdiction, but I afraid that when I heard comments such as some of them have been made in the last five and ten minutes. I do it a very at least feel obliged to issue a caution. Especially when the questions come up on the fly, people don't have any ready answers. Those people may be bureaucrats, they maybe lawyers for bureaucrats, they maybe people who are lawyers and bureaucrats like me. It's a very easy to wear out the term bureaucrat I'll try [...] lawyer and say effectively, there goes those guys again, giving us to run around.

The fact an answer isn't clear or that I don't have the answer in my back pocket right now. Doesn't necessarily means that there isn't answer. Giving necessarily means there isn't other body already charged with the responsibility of attending for certain of the concerns. There have been force ably expressed here in the course of the last two days.

It might be mentioned for instance then here again remind the board members of this distinction that I've made between the legislative body and body such as the board which is tribunal. It might be mentioned that one of the things that is in the works right now is the Nunavut Water's Act. That Nunavut Water's Act thusly Nunavut Water's Bill intends to set up full administrative and enforcement mechanisms specifically for waters in Nunavut and I would emphasize, set up an enforcement mechanism. That is something which the Parliament of Canada is presently turning his mind too. It's something which is Parliament of Canada has already turned it's mind to in the Northwest Territories Water's Act. It's the matter for a Legislature to concern itself with.

I don't think it is time now to take a static presenting a full sludge legal argument. I am not in the position to do so. But I would emphasize that this is a matter that Parliament has dealt with. And I would strongly urge the Board to consider the possibility it would be over stepping marks. If it's at itself up as in a effect legislature. Northwest Territories Water's Act provide a certain enforcement mechanisms.

I don't see that the Nunavut Land Claim Agreement makes this board a legislature and gives it's the power. Even on broader Liberal leading of the Land Claim Agreement, I don't see the Land Claim Agreement gives the Board a power to start drafting enforcement mechanisms. I would also reiterate the point made in the morning session, namely that any provisions in Water Licence which on it's states gave it to DIAND inspectors the power to impose fines. Simply might not stand up, I would say that there is a very large possibility that would not stand up. That is only one of the problems which would be created by including the condition in the Water Licence.

Excuse me, I just wanted check my notes here and see if there was anything else specific that I had mind to mention.

I think that is pretty much it, Mr. Chair, Members of the Board. The one other small point that I just don't want to leave hanging there. Mr. Crowley suggested that it has to be assumed that the Board has the power under the Nunavut Land Claim Agreement to do things, like drafting a set of enforcement and mechanisms. Quite frankly I don't see the base raise as such the assumption.

I think that the Board would on thin ice if it took that sort of assumption as the point of departure and proceeding from there. Thank you very much sir.

Mr. Chairman: Thank you, thank you. Rebecca Mike, you had a question?

Rebecca Mike: Thank you Mr. Chairman. My name is Rebecca Mike. I do agree with Mr. Crowley, because the certain government agencies did appear take lead role, who should be the enforcement agency. I think the responsibility of the Board under the Land Claim. The way I understand the Land Claims, I do

realize there is legislation and there are legislators. However, in the Land Claims Agreement, we are the last [...?]. When it comes to the Board created under the Land Claims where your limitations are, however I am not a lawyer. There are provisions the way I understand it, Boards are established under the Claim are have half delegated powers of the Federal Minister. So, in light of that I would encourage the Board to consider the certain terms and conditions attached to the licence. And perhaps also makes RECOMMENDATIONS or what the inspector of DIAND should do with your legal advisor to look into that. I think I would encourage the Board to go in that pass, thank you.

Mr. Chairman: Thank you are there any further questions? Thank you very much Mr. Crowley.

Robert Hanson: Mr. Chairman Mr. Hanson. There is an exhibit something the Municipality would like to bring in to evidence, I understand. Perhaps you could deal with them one of the time, so we could give them individual numbers for the exhibit please!

Denis Bedard: Yes, we do have two exhibits to present to the Board at this time.

The first exhibit is a letter from Iqaluit Airports, signed by Mr. John Graham, Airport Manager providing us with approval to occupy the land with the Sewage Treatment Plant has been build on.

Robert Hanson: That'll be Exhibit # 18?

Margaret Keast: 17.

Robert Hanson: 17? 17?

Mr. Chairman: Yes.

Denis Bedard: The second exhibit is the Solid Hazardous Waste Management Report, Produced by Garry Hanky, which we discussed this morning.

Robert Hanson: That'll be Exhibit #18?

Mr. Chair, if I may answer. Any other information the people would like to enter in as Exhibit at this time.

Margaret Keast: Fisheries and Ocean. Just for the record, when I am in my intervention yesterday, I had also reference 1998 report by Hanky. I don't have that report, that particular statement was pulled from the document that I submitted the Waste Water. I just wanted to clarify that. I am going to research for that, I can provided at latter time, thank you.

Mr. Chairman: Thank you. Okay, we are getting near the end here. Other questions address to other parties by the Water Board Members?

Are there questions address to other parties by the Town of Iqaluit? Thank you.
Other question address to other parties by Interveners?

Dionne: Thank you Mr. Chairman. This is a reference one of the Exhibit the Town of Iqaluit was going to submit with reference do some the Water Quality Lead[sic?] that was reference to PAS and PCBs. And there are justification for request that from the Licence.

It's my understanding with discussions and formerly they do not have this information available for us today, but that information can be made available through out the following in hearing. The Town may want to confirm that.

Denis Bedard: Yes, I have standing originally that you wanted the sample results? Which I have front of me. The justification that you request can be produce at latter date. That I don't have front of me.

Mr. Chairman: Thank you. Okay, are you ready now for Closing Remarks of Interveners?

CLOSING REMARKS BY THE INTERVENERS

Mr. Chairman: Beginning with Environment Canada! Ann Wilson?

Ann Wilson: The transcriber didn't hear it, NOT LOUD ENOUGH.

Mr. Chairman: The second one is a Baffin Regional Health Board! Nicole Ritchie, any closing remarks?

Nicole Ritchie: No!

Mr. Chairman: Thank you. Third one is Government of Nunavut, the Sustainable Development! Mr. Robert Eno?

Robert Eno: Sustainable Development. Just one minor closing remark in that is directed to the Town here. I just want to reiterate something that I have mentioned in my intervention. But of course that open burning has been the emphasis of the meeting predominantly but going back to composting, I'd like to again urge the Town of Iqaluit to do the Pilot Scale Project, further the composting proposal for both the cakes that come from the new facility and for the sewage that we have, the sludge. It has to be treated once they close that open facility. As I've said earlier this is the time to iron out the bugs, that's the Pilot Skill Project, not when you are full production. I just urge the Town to be prudent in that regard and deal Pilot Skill Project. Thank you.

Mr. Chairman: Thank you Mr. Eno. Dionne?

Dionne: My apology Mr. Chair, I am just wondering if we already by pass the ability to ask questions to another intervener. We were suppose to get clarification from DIAND with respect to these screen decision and comments made in that?

Mr. Chairman: We've already gone packed it.

Dionne: Okay.

Mr. Chairman: Any closing remark from Department of Fisheries and Ocean?
Margaret Keast?

Margaret Keast: Not from my Department. I do such as public, I don't know if you want that down?

Mr. Chairman: Okay, yes!

Margaret Keast: This is just my comment for other member of the public, I just think a members of the public that have showed up, the few that they should be commented. Having been in this community since 1991 and heard the complaints through out that time. It's disappointing to see their own members have that turned out. And I hope that this will change future hearings in any other communities. Thank you.

Mr. Chairman: Thank you. Any closing remarks from DIAND?

Peter Kusugak: I just wanted express my appreciation that I was asked to come here and future matters that I want to have closer working together. I think this will open us to work closer together, thank you.

Mr. Chairman: Closing remarks from Mr. Mason Mason.

Marcel Mason: Thank you Mr. Chairman. A very brief comments, this is first time that I've participated sitting in on one of these particular hearings or functions. I must say based on what I've heard through out the last couple of days I am fairly skeptical. The individuals and bodies that I assumed had enforcement and regulation authority do not seem to have that. The organizations that would appear to have some enforcement authority seem either reluctant to use it or I'm not sure whether they should or not. And this makes me very skeptical about the whole process. Unfortunately, I see in four years or five years, whatever the length of the Water Licence turns out to be, many of the same parties setting around discussing many of same issues.

Based on that I would urge the Water Board to take proactive stands, I would urge the Water Board to, if they issued the Water Licence put into that licence, some fairly stringent conditions and I would even urge the Board to put into that approved licence [...] suggested penalty for noncompliance. While there maybe gabs and holds who doesn't and who does not have authority to this item or impose a penalty for that item. I think possibly the whole issue could be brought to ahead if the Water Board do proactive stands. Any insert in the licence these conditions and suggestions penalties. And I am trying forced the issues so that for five years from now, we are all standing here discussing the same issues. Thank you.

Mr. Chairman: Thank you Mr. Mason. Any closing remarks from Paul Crowley?

Mr. Crowley: No!

Mr. Chairman: Thank you Mr. Crowley. Any closing remarks from Rebecca Mike?

Rebecca Mike: No!

Mr. Chairman: Any closing remarks from Michele?

Michele Bertol: No!

Mr. Chairman: Thank you.

FINAL CLOSING STATEMENTS

Mr. Chairman: Final Closing Statement from the Town of Iqaluit?

Denis Bedard: Mr. Chairman, I'll keep this brief. The deadline is coming quickly. I wanted to thank the Board, Water Board Staff, Regulatory Departments [...] the public that attends meetings.

From the Municipality's perspective, we felt that we've been meeting with a lot of constructive comments. The Municipality maintain for position of improving the areas that has been discussed over these past two days. Including the Water Treatment Plant, which will expand in future years. The Sewage Treatment Facility which at the present time has been constructed and expected to be completed this year and improvements to the way it disposes the solid waste. It's committed to the public, council in terms of improving these systems. I just want to reiterate that fact.

The Municipality again thanks you for your final closing. The municipality reiterates again, it's asking for six year renewal on it's water licence. We feel

this will give us ample opportunity to complete the plans in place in preparation for the next renewal process. Thank you very much.

Mr. Chairman: Thank you Mr. Bedard. Closing remarks from the Water Board? Again I wish to state that. My sincere apology sir.

On behalf of Nunavut Water Board, I will make the closing remarks.

Again I wish to state that your comments, concerns and RECOMMENDATIONS are important. I am at the Nunavut Water Board, we'll consider them when we are making our decision.

After we adjourned this hearing the Board will meet to review the written and oral evidence presented during the hearing process.

We expect to make a final decision and eventually issue a licence within about a month. A copy of licence, transcript and the hearing will be automatically send to those who have been intervened in the hearing process.

I will ask anyone who is obtain the copy at least a documents to leave your complete name, mailing address with Rebecca Becker. She is setting at the back seat there. The licence administrative for the Nunavut Water Board.

And I wish to thank the interpreters Micah Arreak and Leah Idlout for doing such a tremendous job. I understand that their job is very, very difficult. Even though I speak two languages 100%, I cannot interpret, because I don't have the capability to do that and I compliment my interpreters.

And the Hearing is adjourned, please stand up for the closing prayer. Kono Tattuinee

CLOSING PRAYER BY KONO TATTUINEE.