0001

NUNAVUT WATER BOARD
FINAL CLOSURE AND RECLAMATION OF THE NANISIVIK MINE
JUNE 3, 2004 VOLUME 1
LOCATION: INUUJAG SCHOOL, ARCTIC BAY, NUNAVUT

PANEL:
Thomas Kudloo Chairman
Thomas Kabloona
Guy Kakkiarniun
William L. Lyall
Geoff Kusugak
George Porter
Lootie Toomasie
Charlie Inuaraq

BOARD STAFF:
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Phillipe di Pizzo Executive Director
Dionne Filiatrault
Stephen Lines
Patrick Duxbury
Ben Kogvik
Mishak Allurut Interpreter

COURT REPORTER: Tara Lutz

0002

INDEX

PAGE NUMBER

0003

(Hearing commenced at 1:16 p.m., June 3, 2004)
CHAIRMAN: Good afternoon. We are the Nunavut Water Board. I'm the Chairman of the Nunavut Water Board. We will be hearing presentation from the licensee and hearing presentation from Arctic Bay. And welcome Arctic Bay residents to the meeting.

And make sure you make your statements after opening prayer.

CHARLES INUARAQ: (OPENING PRAYER)

CHAIRMAN: Thank you, Charlie.

As you know, we are the Nunavut Water Board members. We have had meetings here in Arctic Bay more than once. And, as you know, the Nunavut Water Board is under Article 13 under Nunavut Land Claims to discuss the water licenses, and not salt water, fresh water.

The Nunavut Water Board has to have a hearing before they can decide on the license, how they will use the water and Nanisivik mine, before it closes. The Nunavut Water Board has to have a hearing. And I just wanted to make a short statement that as people of Arctic Bay, that we have to know your concerns, so express them freely. And if you have any concerns about the closure, that we want to know your concerns, and be free to

0004

express your concerns.

The license applicants, we will understand what they want and what they are requesting that open our ears and open our eyes, and we have to see the -- and if we are going to approve the license, we need to have the real facts in the application.

I will mention in a short statement that as

you are aware, the Chairman has to run the meeting, and I will mention that it is the final meeting and, in English, it is the final public hearing. And after that, it is doubtful if we will come back. But we have to understand, and your concerns that -- once, twice or three times, even though I keep mentioning it, but people of Arctic Bay are, and the applicants as well, we have to listen to them because they are -- we want to approve a license that is true and that.

As you know, I keep mentioning them in the previous public meetings, so I will make it short. Perhaps this will be the final remarks. But, Elders, any time you want to express your views or concerns, you are welcome.

And if you didn't sign your name, you can sign with Susie in the front near the entrance there.

And those of you that are here in the final

0005

hearing regarding the reclamation and closure plan, any questions?

UNIDENTIFIED SPEAKER: If we are going to speak to you, where do we go? We go to that table?

CHAIRMAN: Yeah, thank you for reminding me. If you want to make a statement, say your name and who you represent, or if you represent anyone then, or if you are individual or just resident.

And, also, remember that when I'm speaking, any statements or remarks are being recorded, and they have to transcribe the proceedings. And I don't want to go any further on this, because we know. But remember that, Elders especially, any time you want -- you feel like talking, you can speak.

Before I forget here, I should be back on track with the order of events, thank you. Excuse me very much, ladies and gentlemen, but I speak two languages, so I have a habit of flip-flopping or switching languages. The reason why I say this is sometimes it irritates people, but I speak both languages, and I am exercising my right to speak whatever language I want to. So much for that.

We are getting to that introduction, thank

you. I have to make the opening remarks on the

0006

Nunavut Water Board after that. I'm Thomas Kudloo, I'm from Baker Lake. I'm the chairman of the Nunavut Water Board for 18 years -- oh, 8 years. And to my right is Bill Lyall from Cambridge Bay, and Guy Kakkiarniun. And at the end, Thomas Kabloona from Baker Lake. And to my left, young one from Rankin Inlet, Geoff Kusugak. And you know this one, George Porter. And from Kugluktuk, Lootie Toomasie, and Charlie Inuaraq from Pond Inlet.

Nunavut Water Board vice-chairman Bob Hanson is not here, he is attending a family matter, and he is not able to be here.

And the Nunavut Water Board staff, Phillipe di Pizzo, he is the executive director, you will probably see him. And Patrick Duxbury, you probably know. He has organized meetings here. Dionne Filiatrault, and one of the staff, Susie, licensing administrator. And interpreter/secretary to the Board, Ben Kogvik. And Nunavut Water Board has an office in Gjoa Haven and have an office in Baker Lake as well. We try our best to -- and we work together in the office.

I am going to switch to English for a moment here. I'm going to move on to item number 1, give an introduction of the parties here. Obviously, we

0007

have got the applicant there, who we all know, and I recognize a number of people there.

Oh, by the way, I forgot to introduce the court reporter, I'm so sorry, Tara Lutz.

Anyway, if you could introduce your parties, please, there, Mr. Heath.

BILL HEATH: Thank you, Mr. Chairman. I was going to do introductions, but I will do it now and correct myself.

My name is Bill Heath. I am -- I actually wear two hats in these proceedings. I am president of CanZinco, which is the company that owns Nanisivik Mine, and I am also vice-president of administration for Breakwater Resources, which is the company that owns CanZinco.

Next to me is Bob Carreau, who many of you know from Bob's time at Nanisivik. And Bob is our corporate manager of environmental affairs. And next to Bob is Eric Denholm with Gartner Lee out of Yellowknife. Eric has been involved in this process pretty much from the beginning with us and worked on the Environmental Site Assessments at various stages.

Next to Eric is Murray Markle. Murray, many of you all recognize him, a long-time Nanisivik resident. When we closed Nanisivik, Murray was our

0008

safety superintendent, and when we went into a reclamation mode, Murray agreed to come back and act as our site manager. And hiding behind Murray is Jim Cassie with an engineering firm out of Calgary. And Jim, as well, has worked for us both while we were operating and since we have been in the reclamation stages.

CHAIRMAN: Thank you. And by the way there, I have been reminded that I neglected to mention my good friend and legal help, Bill Tilleman, legal counsel for the Water Board for the last eight years. I apologize.

I do believe we have got interveners here from DIAND, Mr. McLean?

CARL McLEAN: Thank you, Mr. Chair. Yes, my name is Carl McLean. I'm the manager of land administration for Indian and Northern Affairs Canada based in Iqaluit.

Also with me, I'll just get my list here so I don't mispronounce any of the names here. We have Stephanie Hawkins, who is with our water resources section; Constantine Bodykevich, who is our water resources inspector. We have Norm Cavanagh who is with Justice Canada, and Anusha Aruliah, who is also with Justice Canada, and that's all we have here.

0009

CHAIRMAN: Thank you, Mr. McLean.

Do we have representatives from Environment Canada?

COLETTE MELOCHE: Thank you, Mr. Chairperson. My name is Colette Meloche, and I'm the

environmental assessment and contaminated site specialist with Environment Canada in Iqaluit.

CHAIRMAN: Thank you. Do we have interveners from DFO? I believe so. DFO?

DERRECK MOGGY: Thanks, Mr. Chairman. Derreck Moggy from Fisheries and Oceans. I am a habitat management biologist, and I work out of Iqaluit.

CHAIRMAN: Thank you. Any other interveners? NTI, George?

GEORGE HAKONGAK: Thanks, Mr. Chair. I'm George Hakongak. I'm here with Nunavut Tunngavik Incorporated out of Cambridge Bay, Department of Lands and Resources. I am the manager of environment, water and marine management. Thank you.

CHAIRMAN: Thank you. Susan Hardy, GN. I knew you were hiding.

SUSAN HARDY: Thank you, Mr. Chair. The GN has a number of people in town today to attend the hearing. When we present, it will be myself.

0010

I'm legal counsel for the Government of Nunavut, Department of Justice; it is where I work. And I will be co-presenting with another agent from the government, Rhoda Katsak, who works for the regional office, Community and Northern Development for the Government of Nunavut. We also have Earl Baddaloo, the director of environmental protection; Bruce Trotter, environment specialist for health and social services; Doug Sitland, manager of capital projects, community government and services -- sorry, community government services. Louise Kilby (phonetic), sorry, are there -- Louise Kilby, manager of community development. David Itairan (phonetic) is here, he works with the airports division; that's our team.

CHAIRMAN: Thank you. Anybody else? Are we missing the hamlet of Arctic Bay?

NIORE IQALUKJUAK: My name is Niore Iqalukjuak, mayor of Arctic Bay. I'm here with several of my councillors from the hamlet of Arctic Bay that I wish to introduce you to. Daniel Aola, councillor, Sakiasie Qaunaq, also a councillor, Roy Takakuma (phonetic), yeah, over there, and also a

council member. And Liza Calaso, a councillor also. Thanks.
CHAIRMAN: Thank you, Mr. Mayor. Am I

0011

missing anything from anybody?
RAMLI HALIM: Thank you, Mr. Chairman. My name is Ramli Halim, and I'm working for Acres International in our Winnipeg office. I'm a consultant with the Nunavut Water Board.
CHAIRMAN: Thank you.
MUCKTAR AKUMALIK: I represent the Ikajutiit Elders' Committee. Please stand up, the members to their Inuit Elders' Committee. You probably see them. We are the Elders' Committee. Welcome to the meeting, and thank you for coming to Arctic Bay, and we will have a good meeting with good results. And try to cut down on the negative and back-lashing remarks, but be happy here.
CHAIRMAN: Thank you.
TOMMY TATATUAPIK: Tommy Tatatuapik. I am part of the Nanisivik Working Group, also a member of the Hunters and Trappers Organization, and I have meetings or consultation with the Water Board representative once in a while, so I will be representing this group.
CHAIRMAN: Anybody else?
KUNUK OYUKULUK: I represent the HTO. The wildlife ship brought in supplies, I guess, and I will be mentioning the ship, that we have to protect our wildlife, but Nanisivik and the

0012

Nanisivik habitat effort.
CHAIRMAN: Anybody else from the Elders?
KAUTAQ JOSEPH: Kautaq Joseph. I'm representing the Inuit Elders' Committee and also health committee for Arctic Bay, also caregivers' committee and also women's group. So these are my committees, thank you.
CHAIRMAN: Thank you.
QAPIK ATTAGUTSIAQ: I am just an Elder, that's all. Nanisivik, when it was starting exploration, I was with the IC Arctic Bay (phonetic). I am the wife of IC Arctic (phonetic), and I have been there

in the beginning, and I heard this is the last meeting to discuss Nanisivik closure.

I also represent the Patutik (phonetic) women's group, so I am a member to that. I went to meetings, and that. I'm an Elder. I'll probably have remarks, so I have been here from the beginning to the end of Nanisivik.

CHAIRMAN: Thank you.

TOOTALIK OYUKULUK: I represent the Radio Society, and some of our members are not here, I don't think. Thank you.

CHAIRMAN: Thank you. Anyone else? Any other organizations or individuals who wish to

0013

express? Tommy, am I right?

TOMMY KILABUK: Yeah. I will make some comments on the closure as we proceed, thank you.

CHAIRMAN: Thank you.

AKIKULUK SHAPPA: Akikuluk Shappa. I will make some comments, too, later on in the proceedings. I also represent the Radio Society. Thanks.

CHAIRMAN: Thank you.

MOSES OYUKULUK: Moses Oyukuluk. I will be making comments, too. Just to inform you that I will be making comments.

CHAIRMAN: Okay. Thank you.

SAKIASIE QAUNAQ: Sakiasie Qaunaq from Arctic Bay.

Since the beginning of Nanisivik, right to the end, I have been there also and have been involved with it, and I know -- recognize some of these people here, so I will be making comments too.

CHAIRMAN: Thank you.

SHEENA QAUNAQ: I'm Sheena Qaunaq, Economic Development Office. Thank you.

CHAIRMAN: Thank you. Is that it?

JASON PALLUK: I'm Jason. I will be making comments, too, about -- as an experienced

0014

worker.

CHAIRMAN: Okay. And you will always have a chance to make comments. As I said, welcome

to the meeting.

What I would like to do is carry on with our agenda here in item number 6, if I could introduce and identify interveners, associations and agencies, et cetera, which have intervention, but who have expressed a desire to speak at the hearing, and I think that's already been done. It has already been done, so okay.

The next item I would like to move on to is motions and objections. Are there any objections to this hearing? Mr. Tilleman?

BILL TILLEMAN: Thank you, Mr. Chairman.

We have all noticed by now that we have tried to teleconference Mr. Hanson, who is the vice-president of the Board. And we will continue to try to do that to ensure that he hears these proceedings. In the event that we are not successful with that, Mr. Chairman, we would propose that if he is to sign the decision, he will read all of the transcript before doing that, and that's our proposal. And, Mr. Chairman, I think if you might just ask the parties if that works for

0015

them; if there is any objections to that process, then they can come forward now.

CHAIRMAN: Maybe I will ask the applicant first if they have got any objections to that.

BILL HEATH: No objections, Mr. Chairman.

CHAIRMAN: Pardon me?

BILL HEATH: No objections.

CHAIRMAN: DIAND?

CARL McLEAN: No objections.

CHAIRMAN: Environment Canada?

COLETTE MELOCHE: No objections.

CHAIRMAN: NTI?

GEORGE HAKONGAK: No objections.

CHAIRMAN: DFO?

DERRECK MOGGY: No objections.

CHAIRMAN: Hamlet?

NIORE IQALUKJUAK: No objections.

CHAIRMAN: Thank you. So it will be issuing -- GN?

SUSAN HARDY: No objections.
CHAIRMAN: I'm sorry, you are out of my view there. Anybody else? Are there any objections from the general public? No objections. That's that.

0016

Is that to your satisfaction, Bill?
BILL TILLEMAN: Yes.
CHAIRMAN: I don't recall, but I will ask this once more, are there any objections to this public hearing? Okay. One more time, are there any objections to this public hearing? No objections.
And, by the way, there is legal counsel. If you can advise your role, provide confirmation and also the oath. Explain the oath, please.
BILL TILLEMAN: Thank you, Mr. Chairman. It is just basically before the parties give their presentation, then I would refer to the Board's rules are that they be sworn. So if, when we come to the applicant next and the interveners and so on, those parties will just have to swear or affirm their evidence, and that's all we call it.
CHAIRMAN: By the way -- thank you, Mr. Tilleman. By the way, I was reminded to inform everybody that whoever uses the microphone, we are to shut off the switch in order to conserve batteries; otherwise, you know, it takes forever to recharge the batteries.
Okay. Number 8 there, I would ask the applicant to make their presentation. That's item number 8, presentation by the applicant. And legal

0017

counsel, of course, will give the oath.
BILL TILLEMAN: Please state your name for the record and spell your last name.
BILL HEATH: William Michael Heath, H-E-A-T-H.
(WILLIAM MICHAEL HEATH SWORN)
BILL TILLEMAN: Please state your name for the record and spell your last name.
BOB CARREAU: Robert Carreau, C-A-R-R-E-A-U.
(ROBERT CARREAU SWORN)

BILL TILLEMAN: Thank you. Please state your name for the record and spell your last name.
ERIC DENHOLM: Eric Denholm, D-E-N-H-O-L-M.
(ERIC DENHOLM SWORN)
BILL TILLEMAN: Please state your name for the record and spell your last name.
MURRAY MARKLE: Murray Markle, M-A-R-K-L-E.
(MURRAY MARKLE SWORN)
BILL TILLEMAN: Please state your name for the record and spell your last name.
JIM CASSIE: Jim Cassie, C-A-S-S-I-E.
(JIM CASSIE SWORN)
BILL TILLEMAN: Thank you. Thank you, Mr. Chairman.

0018

CHAIRMAN: Thank you, gentlemen. You may proceed.
PRESENTATION BY THE APPLICANT:
BILL HEATH: Thank you, Mr. Chairman.
For those of you who were in attendance at the last public meeting, I tried to cram 25 written pages into 95 seconds. So, apparently, I have been demoted, and I don't get to talk very much today.
But we would like to start with an acknowledgment and a thank you to the Board for convening this meeting today and for convening this meeting in such a timely fashion. It is an important meeting for us, and it is an important meeting for the people of Arctic Bay. And we believe it is important that it happen as quickly as we could allow.
And if we could also take this opportunity to extend our best wishes on the birthday of the chairman.
We also would like to thank the Elders of Arctic Bay for welcoming us again. There are many familiar faces in the crowd. From time to time, we have had the opportunity to meet with the Elders, and we always appreciate and enjoy those opportunities.
We want to thank the various groups who are

0019

represented today and the presentations that they

will make in these proceedings. We would like to thank the mayor for his input and his council for their input, as well as their attendance today. And just as importantly, the general population of the hamlet of Arctic Bay, all of your -- all of your views and all of your wishes are important to us, and it is important that we hear them, as the Chairman has encouraged it.

And we would also like to thank the various interveners for their input and their tolerance and patience with us over the course of the last, I guess, almost two years now, as we have worked towards this final project plan.

Just a couple of quick comments, Mr. Chairman, and then I'm going to turn the microphone over to my colleague, Mr. Carreau, who is going to take us through the final plan. The first is, and I alluded to this earlier, there is and there always seems to be some confusion between the distinction of what is Breakwater Resources and what is CanZinco Limited. From time to time, we tend to use them interchangeably, and we really shouldn't. But the reality is that the Nanisivik Mine is owned by CanZinco Limited. CanZinco is the applicant in this case. And when we are talking

0020

about the company, we are really talking about CanZinco. And I apologize to the lawyers in the crowd in advance for the occasions where I may refer to myself as a Breakwater employee.

My only other, sort of, housekeeping comment would be this: When we appeared before you two years ago, I think we said at the time that we were coming to you with a plan, albeit at the time an incomplete plan, which we have spent a lot of -- and largely to Bob's credit and Bob's team's credit, we have spent a lot of time and a lot of effort, and, frankly, a lot of money to develop it.

But the plans we came to you with two years ago was a plan that, I think we have said at the time, was predicated on hoping for the best and planning for the worst. It was a plan that said we hope we never have to tear down the infrastructure at Nanisivik. We hope we don't have to tear down the tank farm at Nanisivik. We hope that somebody

or some agency or some body could be found that could put Nanisivik to another use. And I think, at the time, we said that with all the optimism in the world, and I think you saw in our submission of a month or so ago that our optimism was waning, and I think we can come here today and say our optimism is pretty much extinguished.

0021

I think we now realize that, in all likelihood, our hoping for the best was just that, it was hope, but it has been unfulfilled hope. And the reality is, at some point in the not-to-distant future, I suspect we are going to have to grapple with dealing with all the infrastructure of Nanisivik.

So against that -- and I don't mean to be pessimistic, but against that background, I would turn it over to Bob Carreau.

Bob has a few opening comments, and then the presentation of what, I think, appears to be an excellent closure and reclamation plan, which we can largely attribute to Bob and the fellows he has had working on it.

BOB CARREAU: Thank you. General comments that I would like to make before I present the technical portion of the plan, it is just to clarify in our minds that closure and reclamation -- closure and reclamation of a mine, at least in the context of what we are discussing today, is normal and an inevitable process of mining.

And like many businesses where closure often means failure, closure of a mine is, in fact, a measure of success. It means that you have gone

0022

through all the stages of a mine, and you have reached closure and reclamation, at least a plan in closure plan and reclamation. If you didn't do that, you would be doing abandonment, and that's not the case with Nanisivik. We have reached this final stage, closure and reclamation, it is a measure of success. So with that being said, it is appropriate for us to introduce our presentation with a reclamation and closure plan, with some

discussion about the success in Nanisivik.

Nanisivik operated for more than 25 years. It was originally approved as a 10 to 12-year project, and it ended up operating for more than twice its planned life expectancy. This long life was a result of the responsible management of the resource which focussed on increasing of the reserves with continued exploration efforts, as well as the commitment to maintain feed grades at a sustainable rate over a longer term. Sustainable grades means not high-grading for short-term profit, but making it ongoing to last as long as it can.

Now, as a shareholder, you might want to high-grade on the land to get the most profits over the shortest time, but the philosophy was that it would be the maximum benefit for the employees and

0023

the maximum benefits for the community and the community of Arctic Bay for this to run as long as possible, and we did that.

In over its 25 years of operation, Nanisivik directly provided more than 5000 man-hours of employment in ten years, that's 250 -- that's 25 years, 200 people, that's 5000 man-hours. Immediate/direct support employment, things like teachers, RCMP, post office, airport, nursing station, that's provided an additional estimated 500 man-hours.

Now, indirect employment is not being calculated here but is considered to be very significant, having supported a mining operation with an average annual operating expense of $40 million per year.

Nanisivik was Canada's first mine north of the Arctic Circle and pioneered many practices, which paved the way for other northern developments. There were things that we perfected in Nanisivik are being done in other operations today and are only being done because they were perfected at Nanisivik.

During the feasibility and financing stage, many would-be supports said that obstacles imposed by the harsh climatic conditions and the remote

0024

location would make the operation fail. The proof is in the pudding. But despite this, the project went ahead.

The first deepwater port in the Canadian Arctic was built at Nanisivik. And with the closure of Polaris mine, it will be the only facility of its type in Nunavut.

The first jet airport in the region was constructed at Nanisivik, and this continues to provide a vital transportation link between northern locations and the south.

More than 50 kilometres of all-season roads were built, which included a 32 kilometre link between Arctic communities, Arctic Bay and Nanisivik, and included a link between Arctic Bay and the airport.

An entire townsite was built. Not a camp, but a townsite. Shared accommodations, rooms for the employees, private homes for families, both Inuit and Southerners; a fully integrated school teaching the first language Inuktitut, French and English; an all-denominational church, a nursing station, an RCMP station, a fire station, post office, rec centre with a full gymnasium, swimming pool. No small task.

In what was constructed to be a physical

0025

townsite, a place to house mine employees and their families, grew into a community in all sense of the word. Nanisivik, a place where people were mining, became a place for people to achieve personal objectives. Many people got their start in Nanisivik, they earned a handsome wage, they learned trades or skills that they could take with them to other projects. People came together as a community. Some brought their families, had babies, raised and schooled their children.

The gathering in the dome at lunch for communal meals. They participated in grand events such as the annual Midnight Sun Marathon which ran for more than 20 years, brought runners from all over the world to test their skill on the roadway between Arctic Bay and Nanisivik. Many of you participated in that, helping or, in fact,

participating.
Small things became cause for gatherings and celebrations. They gathered for school pageants, the Christmas pageants, the Mother's Day brunch, the spring carnival, and most importantly, the turn of the sun in February, which was always a big event.
Children were integrated in the school, Inuit and Qadlunnaq. Southern children studied culture

0026

inclusion in their classroom, learned how to scrape a seal skin, sew duffel mittens, light a kudluk and hear great stories from the Elders. And many adults learned the traditions of our Inuit neighbours, and in doing so, developed a love and respect for the land.
People came forth to Nanisivik for a few years and stayed for 10 or 15 or even 20. And by these measurements, the Nanisivik project was a success, and we shouldn't forget that.
Now, as we enter the final stage of the project, we culminate the success with the closure of the mine and the townsite. Closing a mine is never a happy event. And in the case of Nanisivik where this means the community will cease to exist, it is that much harder. However, as stated at the outset of this introduction, the closure of the mine is inevitable, and planned reclamation, it is the final milestone of that achievement.
So as stated by Bill, we are going to go ahead with the presentation of the plan now, so you will see what we have been up to for the last two years since we were sitting here and discussing the conceptual plan.
My presentation today is specifically for the Nunavut Water Board and for the hamlet of Arctic

0027

Bay. Our technical interveners have been cooperative, we have been working together, and we have been spending a lot of time over the last two years exchanging correspondence or sitting down at a table and working out the technical issues, so they know what's -- what I'm about to present here, they have heard it several times, but I think this

may be the first time that you will hear in detail, and sufficient detail to get a graphic grasp of what we intend to do.

The closure plan is actually twelve reports in all. It is 11 individual technical reports, and they all feed into one support summary. I have the reports in front of me here, and as I speak to each one, and I will -- these are translated into Inuktitut. The executive summaries are available in Inuktitut, and I hope you have seen them. And the records are available in their entirety. If you want a copy, we have CDs here, and I would be happy to share that with anybody after the presentation.

These are the 12 reports. The numbers on the left are the license items, these were requirements of the license. G3 is considered the reclamation and closure plan, the compilation of everything. G4 is the engineering design of the surface

0028

reclamation covers. I will explain each one of these as I go through them. G5 is the assessment of the surface cell and test cell taliks. G6 is the quarry development and reclamation plan. G7 is the engineering design of the West Twin Dike spillway.

How is the speed, Mishak, okay? I guess so.

G8 is the rock piles and open pits closure plan. G9 is the reclamation performance monitoring plan. G13 is the phase 2 and phase 3 environmental site assessment. G14 is the Human Health and Ecological Risk Assessment. G15 is the West Twin disposal area closure plan. G16 is the underground mine waste disposal plan. G17 is the landfill closure plan.

How is that for a complicated-looking schematic? What that means -- that's each of the 12 reports, and what we are showing there is that they all come together at the bottom in the reclamation and closure plan. What we are trying to show is that each of these proposal parts are funneled together into the one plan. So if you were to read just one plan, the last plan, you would get an idea of what it is we intend to do. If you wanted the specific details of that, you

would have to read one of the constituent reports.

0029

It is unlikely I have to tell the people from Arctic Bay, but it is always good to start with what it is exactly we are talking about, the location and the boundaries of Nanisivik and the terms, reclamation and closure.

The Nanisivik site, as we refer to it, is bound on the north by Strathcona Sound and on the south by West Twin Lakes. This is the area of influence, on the west by the stol port and the landfill site, and on the east by Kuhulu Lake and Oceanview.

Now, the natural boundaries are the topography of the area, the ocean rising up to 400 metres by the lakes. So everything from the lakes is flowing down towards the ocean. And on the east-hand side or the east side by Kuhulu Lake, we have a high ridge of hills, as anybody knows, that goes to Kuhulu Lake. And there is a watershed, Chris Creek, and that's the eastern edge of the watershed. And on the west side, there is also steep cliffs, on top of which the stol port is located, that binds the property on that boundary.

I paid a lot of money for these reports, so I'm going to pick every one of them up and show it to you. This report was developed by BGC Engineering, it is the quarry development and

0030

reclamation plan. And what this report talks about is the quarries, first off, are the sources for the natural materials used for reclamation.

At Nanisivik, we are not going to use synthetic materials; we are not going to use engineering materials that are not natural. What we are using is what we find on the land to try and duplicate the processes that occur naturally. That's the most successful plan for long term.

And the two materials that we are going to be talking about from quarrying are shale, which is what we are going to be using for an insulating layer and sand and gravel, which is surface protection against the elements.

We had a request from Arctic Bay to bring

some of this material, and we have done so. And during the intervention portion of our presentation, Jim Cassie is going to be speaking about these materials and be showing you exactly what it is.

A report addresses the following questions: Where are the quarries? How much material will be removed? And how will the quarries be left after removing the material in the long term? What are they?

Well, the development plans in this report

0031

are for three major shale quarries. I have a little plan I will show you on the next page. There is Mt. Fuji, West Twin and East Twin quarries, that's where we intend on taking the majority of the material. There is also a sand and gravel quarry, that's in between East and West Twin Lakes, and that's for the armouring material, the top material. And there is also the landfill quarry, to the lesser extent, and it will be used exclusively for the landfill, for what is commonly known as the dump.

So those of you that are familiar with the sites, you can see the East and West Twin Lakes. I wish I had a pointer. But in between East and West Twin Lake, there is an unlabelled rock which is, in fact, the sand and gravel quarry. Okay, see that? The other quarries that we are speaking of are the West Twin Dike or West Twin dam area, West Twin disposal area quarry, which is where we hope to get a lot of the material at the surface cell, the Mt. Fuji quarry, which is just east of that -- west of that, which we hope to get a lot of material for the surface cell, and the East Twin quarry down by East Twin Lake, where we will be hauling product material to the surface cell and the test cells that are

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there.

The landfill quarry is the other one I spoke of. We will be taking you through all the landfills. We may take some minor amounts from these other quarries, but they are insignificant.

They are to be amounts we are taking from the first three.

How much material? Well, we are talking about 1 million cubic metres of material. That's about 60,000 truckloads, so to do that, we expect that's going to take us about two years to do that. And we have identified -- in case there are contingencies, we have identified approximately twice that amount of material, so there is lots of this stuff available.

What about after we have taken it out? Well, this plan shows what the quarries will look like during the operation. There is drawings in here. And generally the areas will be contoured so that it will try and look like what the natural ground looks like. It won't be a big hole in the ground, it will just be smoothed over. The material that will be taken out will be more of a shallow ditch, and it will be contoured so that it doesn't hold water, and drainage, natural drainage is restored.

The next report was also put together by BGC

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Engineering. And I should say these were all collaborative efforts. This is the team, and a lot of support from people both at Breakwater, CanZinco, at the Nanisivik Mine, and their organizations worked on these as well.

This report is the test cell and the test cell taliks; it addresses what taliks are. I didn't know what taliks were three years ago; I hadn't even heard of them. Perhaps some of you haven't either. Where they are in Nanisivik, how they can cause problems, how we can expect them to behave, how we monitor to confirm how we expect them to behave and what the contingencies are.

So here is Talik 101. Talik is an unfrozen layer occurring within permafrost zones. So at Nanisivik, we have this, we obviously don't have this, we don't have the trees, but we are more like the area over here on the left-hand side of the screen. We have continuous permafrost that extends between 400 and 600 metres, and we would expect that we would have an open talik or maybe a through talik, which is an unfrozen area beneath the lake, beneath West Twin Lake. There is an -- sorry.

Beneath West Twin Lakes, there is an unfrozen area, and we would be moving a little bit more over to this area, although we won't have the bog. But

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there would be frozen material on top of West Twin Lake when we are finished our restoration and closure. So this then will become a closed talik. It may be open at the bottom, we are not sure, but this is what we are concerned about here, is this small jelly doughnut, unfrozen material.

Where are these? They are going to be underneath or they are now underneath the surface cell and underneath the test cell. They are also underneath the reservoir portion of the lake, but it really doesn't matter because that will stay natural.

There was a talik there before, there will be a talik there after. It is only if you cover the top of it that it becomes an issue with the long-term stability.

Now, how can the taliks cause problems? Well, as the surface freezes above the talik, then pressure will form inside it. And this pressure could be released upwards and crack the surface that we put, or it could apply pressure on the dam and maybe crack that or heave that, or it could squeeze tailings water out to the surface or in the reservoir. So we know that, and we plan for that, and we mitigate against that happening.

So how do we predict the behavior? Well, we

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drill into the two tailings areas, 49 holes in 2002, and then another 44 holes in 2002 and 2003. And some of you know about those because you were involved in assisting us. When we talk about drilling holes, it is the diamond drilling rig, so it is a big piece of equipment, and it takes a couple of men to operate and a couple of men to support. And inside, in each of these holes, we installed instruments that measured the ground temperature, the pressure, and you also collected water samples at depths and the behaviour. And then we monitored the instruments regularly, and our experts provided both of these, interpreted the

information and predicted the behavior. We predicted the rate of freezing, the pressures and the water releases.

So what are the findings and the predictions? Well, approximately 30 percent of the surface cell is thawed underneath, and 25 percent of the test cell tailings are thawed.

We estimate it is going to take seven to eight years for the surface cell talik to freeze to the depth of the Dike, and that's a significant milestone. In seven to eight years, once it is frozen down to the bottom of the Dike, that really eliminates a lot of the potential risk. We take a

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further 19 to 25 years to freeze solid, but it really doesn't matter in that time frame. If you have predicted what the water quality is going to be like, then you can plan for that, as we have done. So the bottom line is the last bullet, there is no negative impacts expected from the freeze-back of the talik.

How are we going to determine this? Well, we are going to continue to monitor. We have been monitoring at West Twin for geothermal properties since 1990, and we will continue to monitor with these new installations. We are going to check the progress and the behavior of this talik freeze-back. And we are going to continue to check that throughout the recommendation period and for a minimum of five years after, for a minimum of five years after.

The contingency plans are if cracks or heaves occur on the surface, they will be repaired. It is that straightforward. Excessive pressures would be relieved. If there was excessive pressures, those are -- that's not predicted, but if that did occur, it could be relieved by drilling and draining, getting the water out. And possibly we may have to do more frequent -- monitor for more variables or monitor for a longer period of time if behavior was

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different than we expect.

The next report is the design of the surface reclamation covers, also put together by BGC. The

covers, as you know, are required over the tailings, over the waste rock, over the open pits and the landfill, and this will eliminate negative impacts from these materials. There is a photo there showing shale that has been placed over tailings so far to control dust.

Now, this report presents results from the laboratory and from field testing for selected cover materials. It provides the grading plans, the drawings for the surface drainage with surface and test cells. It provides a geochemical characterization of shale and the tailings and how we predict they will behave, and it considers global warming predictions and extreme-temperature events, and those are different things.

Now, the cover design was verified through the test pad covers. And we looked at the first test pad at Area 14 in 1988. We monitored these, we monitored them. In fact, we continue to monitor them. But the ones that are used for our modelling are from 1988 to 1997. You can see them there. There is a test cover 1 on land and test cover 2 on the land that provided the most amount of

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information, and they verified that shale cover prevented thaw from entering the tailings. So that's -- the only portion that thawed was the shale, and it only thawed, it only thawed so far. The tailings never thawed.

So in the tailings cover, our field test shows that thaw depths in test cell 1 averaged .92 metres. So we considered the extreme warming event, which is classified as a 1-in-100-year event. And we also considered Environment Canada's high estimate of global warming, not the average estimate or the moderate or the low case, but the high estimate. And this determined the final cover depth of tailings of 1.25 metres. We are very confident, based on monitoring these things for all those years and adding this big contingency, that that will be sufficient to keep the negative impact from occurring.

Now, the waste rock landfill, open pits, mill slab covers are a little bit different than the tailings cover, because they have different properties. We are not talking about -- at the

mill, we are talking about very -- or the tailings, we are talking about very fine-grained material that is saturated. In these areas, we are talking about coarse material, waste rock, demolition

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degree, that sort of thing. So we feel verified in another case, and this is the best way to do these. Not modelling, but if you can test this in the field, as we were able to do for seven years, and determine that that's the way to go, you are not guessing with your model, you are confirming the modelling that that's what you are going to do.

So we built the field, the test pad in Area 14 in 1988, and the instrument -- instrumented it and monitored it regularly. And the same warming estimates were applied, global warming, 1 in 100, high estimate or worst-case situation, and we came up with a number of 2.2 metres for those areas.

Now, the depth difference between the tailings and the waste covers is, as I said, related to the physical properties, the material size and the saturation issue. So the plan, this plan includes the cover construction recipe, and what I mean by that, the method of how we will apply it, what the material would look like. It has to be a certain size, a certain type, it has to be a certain density when it is put in and how you put it in. The application of this has to be controlled. So it includes methods of ensuring the recipe is followed and the method is controlled. It includes a monitoring program to continue to

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assess the cover performance after instruction. And it includes contingency plans, the what-if plans; a big what if.

The next report is put together by Goulder Associates (phonetic) with input from BGC and the team. It is the West Twin Dike spillway. The -- I want to see the animation. There is the spillway coming in, the arrows. That's where the spillway is going to be. And this report is all about that, how do you build a spillway, how did you place a spillway, how did you decide what type of spillway, the size, the storm event, it is in here.

And we considered four different pathways, we just didn't pick that one. We came up with four and found one that had the best long-term stability. We made investigations on ground conditions to make sure that as you excavate this, you are not getting into an area of ice or loose material. You have to be in -- hopefully in bedrock or a stable material. And the pathway that we chose and the majority of the channel bottom in bedrock. The channel is 574 metres long, it is a big structure.

And this plan also includes the contingencies and monitoring. Now, the spillway is designed for flooding. If we get some huge flood, some huge

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snow melt, some huge precipitation event, it is something called the PMP, the Probable Maximum Precipitation event. And it is an event that is barely imaginable. It is defined as -- this is one of my favorite definitions -- an event that is barely imaginable. So it is a -- you can't design this thing for any stronger event. Down south, you may design -- because we have at some other mines for 1-in-1000-year event or 1-in-100-year event. And this is for the largest event that has been designed.

The result and channel width is 6 metres, and the spillway will be -- continued to be monitored throughout the closure monitoring period. But we will make sure that it is performing.

The next plan is the West Twin disposal area plan, it is the closure plan for the West Twin. It is a culmination basically of these, or a compilation of these other four plans that we have discussed already, and it brings together these components that we have talked about for quarry development, where you are going to get the material, the talik investigation, how we ensure that what's thawed and how it is going to behave. The cover design, how you are going to cover it, and the spillway and how you are going to convey

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the water, these were covered in here as well as a few new elements.

It considers the water cover on the reservoir portion, how we are going to protect the shoreline, how we are going to breach or break the Dikes that are already there, the ones that we don't want to be there after closure. The West Twin outlet, how water will be released; the East Twin discharge channel, how water will be released and will continue to be stable in that channel, and the general water quality predictions, those are contained in here. And this also includes contingencies in monitoring.

Now, the elements of the plan, just briefly, are the surface cell thermal cover, the test cell thermal cover, the spillway, the shoreline remediation, the reservoir water cover, the East Lake diversion and the outlet structure.

Now, that plan, the discharge water quality discussion has come up, and it was raised by the mayor of the hamlet council, and we will address that in our intervention. But briefly here, during operations, water treatment was not required at Nanisivik, and we wouldn't expect water treatment now that we have stopped putting tailings in Nanisivik, and back during the first year of

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closure it wasn't. We have done tests on fish, tests called acute lethality, and it passes. And what that is, is you take the water that comes directly, the undiluted water that's released from the lake, and you introduce ten fish, and you monitor those fish over a 96-hour period. And this is a test that is done commonly in mines, and it is now, in fact, required in the new mining metal effluent regulations. And the fish always survived.

Now, we expect the water quality is going to improve after reclamation, and it will stabilize quite close to what the background levels were before we came to Nanisivik. The water quality in the lake will be similar to when we leave Nanisivik.

Performance monitoring will continue throughout the closure monitoring period and will be reported to the Nunavut Water Board and will be available for review by the people of Arctic Bay.

All of this information is public information; it is your information and Water Board information.

And the contingency plan is identified to address non-performance issues, those are in here, the what-if question. What if this happened, and it will say.

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The next plan is the rock piles and open pits closure plan. This plan was put together by Gartner Lee. It describes the reclamation work for the rock piles and open pits. It deals specifically with waste rock. And waste rock is rock that is not ore grade, and that's rock that we didn't want in the mill. I think I mentioned before is when you go in to dig out the hole to get at the ore, the material that you pull out to get out of your way is what is waste rock, and that's piled at the portals when we enter the mine. It is going to be relocated underground, put back underground, or it is going to be used as backfill in the open pits. And if it is used as backfill in the open pits, it will be consolidated and covered with a 2.2 metre thick cover, and it will be a stable slope, something called a 3 to 1 slope, which is considered stable.

The open pits, where there is also some rock that should be -- that has to be dealt with, some waste rock, these will be backfilled and covered. We will be covering the sulphide, the material that contains chemicals or could generate acid rock drainage, these will be covered. And the waste rock in the pits will freeze.

Now, this is a photo of the west adit area,

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so you can get an idea of where it is that we are talking about when we talk about the west open pit and the west adit area. This is the area that you see when you come down the hill from Fuji into Nanisivik. When you look across and you see the openings in the mine, this is the west open pit and the west adit area. And this material is being reclaimed now and being drawn back into the pit or into the portal and will be covered. Anything evident at surface will be covered.

This is the east open pits when you are going around to Kuhulu Lake. There is a small vertical wall face with some exposed sulfides in there that will also be covered.

This is the K baseline portal area, and it is the last mining area that you see when you are going into Kuhulu Lake on your left. There is a small portal there, and there is some remnant waste rock there, that waste rock will be picked up and put in the open pit. Anything left there will be covered in place.

The waste -- the rock piles and open pits plan has something called a QAQC, that is construction -- quality assurance and quality control plan, and that's in here. We have steps to ensure that however we cover the pits, that that

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recipe is followed. And we have monitoring. Again, we are going to put instruments in there, we are going to measure ground temperature, we collect water samples, and we are going to inspect for erosion and physical stability for years to come. And that's part of the -- and there is a contingency plan as well, things aren't behaving as they are supposed to, then we have a contingency plan in place.

How are we doing, Mr. Chair? Are we doing okay?

The next plan is the landfill quilter (phonetic) plan, and this describes the closure plan for the landfill. What we are going to do is relocate some of the soil from the landfarming cell, which has got oil contamination, and we are going to put that underground. And we are going to reslope the existing dump, the landfill, just so we have positive drainage, and then we are going to put -- place a cover on this now. And the waste will freeze and will immobilize the contaminants.

Here is a photo of the Nanisivik landfill. And water quality and soil samples that we have taken today before the thing is closed, before -- while it still has an open face, samples that we have collected to date show no contamination. We

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expect this will only improve as we close it.
Again, inside here there is a quality control plan for construction, there is a monitoring plan that will continue throughout the reclamation and closure of monitoring periods. We will measure for ground temperature, water quality, erosion and physical stability. And there is a contingency plan of what ifs, our answer to them.
The next plan is the -- or report is the phase 2 and phase 3 environmental site assessment. This report was put together by Gartner Lee Associates. And the purpose behind this is to identify what contaminants are in the soil after you have finished mining and where are they and what are the concentrations, how much is in there, and how much actually contaminated soil is there, that's identified in here.
And there was a two-year program. We did work in 2002, which was considered phase 2, and we did work in 2003. The phase 2 report, which was the basis of the phase 3, was conditionally approved by the Nunavut Water Board. Phase 3 is before the Water Board right now.
Now, the methods that we use for an ESA, an environmental site assessment, are a standard approach. This is what you do at -- this is the

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approach that you would do for any ESA, and then it has to be specifically tuned for the site. So it is the same type of procedure that you would do at a gas station or a laundromat, but it is different, obviously, because there is different contaminants, then you have to tune in for the site. So it was tuned specifically for our site, that some of that requires reviewing all the documents that were at the site, the soil samples, taking soil samples, digging test pits and collecting groundwater seepage.
Mr. Chair, do you want me to stop to acknowledge a question or carry on?
CHAIRMAN: Yes, please, there is a question down there. You have a question?
TOMMY TATTATUAPIK: I'm Tommy Tattatuapik. I want to take a break, the interpreter -- take a short break.

CHAIRMAN: Okay. There was a bit of a difference in dialect there. I finally got it. The interpreter, let's give the interpreter a break, a 15-minute break.

(RECESSED AT 2:32 P.M.)

(RECONVENED AT 2:54 P.M.)

CHAIRMAN: We will get back in your seat, please, and we will reconvene.

0049

First of all, we apologize, we are short in the translator's equipment. We will make an apology here with regards to the hearing aids. We are running short of them because some of the batteries keep dying on them. Please accept our sincere apologies, there is not much what we can do about it.

Okay. Mr. Carreau, continue, please.

BOB CARREAU: All right. We were talking about the phase 2, phase 3 ESA. And just to wind up that discussion, that the findings of the report or the results of that ESA program is that it identifies where there is contaminated soil, how much contaminated soil is there and what the concentration is. That's contained in this report, and there are several plans that are delineated so you can look at it and get an idea of the areas that we are building in.

The next report is the Human Health and Ecological Risk Assessments. I believe many of the people from Arctic Bay are aware of this study. Patrick Duxbury and myself and Murray were here, and we made a presentation on behalf of the Nunavut Water Board explaining what had gone on to that date, until that date. And also many of the people, or some of the people in Arctic Bay were

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involved in a community survey portion of this study. This study was put together by a firm that is not here, it is Jay Swicher & Associates (phonetic), they are from southern Canada.

Our purpose of the Human Health and Ecological Risk Assessment is shown in two photos really. It is an assessment to make sure that there is no effects on either people or on the

ecosystem, on bunnies and other -- the environmental effect. So it answers what are the clean-up objectives of the soils. The ESA that we just saw identified, with the concentration of contaminants in the soil, the HHERA identifies what level can be left that there will be no negative impact.

So the studies initiated in 2002 by experts in risk assessment, Dr. Malcolm Stevenson and Dr. David Ray (phonetic), and it included a community survey which I spoke of, and this was -- we used the input from experts from Arctic Bay. And you are the experts when it comes to identifying what the land use is and what the value of the equipment components are. The people filled out the survey and used that information to continue the survey.

From the results, we identified a number of chemicals of concerns, and we -- and the importance

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to provide is a number. A concentration, that's what that number is, it is a soil concentration at which no detrimental effect is expected. No negative impact is expected because soil is coming in to a certain level, humans or environment. And that's really what is critical to this study.

This table is where those numbers were, but as you can see -- and I don't think those numbers mean a great deal to many people, including myself. But what is critical to me is that there is no impact once you have soil quality in these numbers, and that's what the Nanisivik plan includes, getting the soil concentration below these levels.

So after extensive review, in collaboration again with all the other shareholders and stakeholders, including yourself, the report was approved by the Nunavut Water Board in its introductory phase.

The next report is the waste disposal plan. The waste disposal plan was put together by Mr. Markle from the mine site. Murray is the mine engineer, and he is familiar with the underground, and he is very familiar with the site. With the report, itself, describes the plans for on-site disposal of waste materials. It talks about three major components are: Abandoned equipment, things

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like loaders or pumps, and it be cleaned, if necessary, and put underground. Demolition debris, which is things like bricks or cement or housing frames or structural steel. These are considered inert solids, and they will be put underground. And soil, and that soil that's contaminated with either metals or hydrocarbons, and these hydrocarbons are what stems from there.

Hazardous materials such as PCBs, which I did mention, or used batteries will be shipped off-site for disposal.

Materials for on-site disposal will be placed in the underground mine or the west pit where it will freeze. And more than twice the storage space is required -- is available. So we have twice as much as what is required as a contingency.

All the materials have been listed in the one table in this report, so you can have a look and see what the waste type is with the volume, what that type of material is and where it is going to be disposed of.

These are just some pictograms that Murray put together that show underground how we would dispose of the material. In the mine cavity, it would be, for example, trucks would be dumping into the benched areas, areas that have been mined, and

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then crawling equipment would push the material back in the cavity. Or else it would just be open dumps in the various areas where you wouldn't bother pushing them because there is lots of space.

This plan includes an assessment of the long-term physical instability of the mine, what happens after we leave. And this assessment was done by a senor scientist/engineer that works for Kamet (phonetic). And he stated that the risks are very low, that the risks of physical instability are very low.

This assessment is going to be updated and reviewed in consultation with the government and technical advisors, which people from EDA who are advising the GN and INAC, and this will be submitted to the Nunavut Water Board for approval.

An engineering design for sealing the mine will follow this assessment. And this, it is going to be -- to the miners that are present, it will mean something. This is a picture of the underground area that's included in this plan, and it shows where each of the material types will start and the volume amounts for each.

We are almost getting to the end. The monitoring plan, which is a very critical component of the reclamation and closure plan. It includes

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the monitoring and reporting requirements for each of the individual topic areas, this was put together by Gartner Lee, again in close cooperation with myself. There is also -- there is some components behind all of these. A very important point of this one was done by Jay Swicher & Associates, which talks about the environmental effects monitoring in the creek.

Now, the monitoring and reporting plan deals with water quality, ground temperature, pore pressures, erosion, physical stability and quarterly and annual reporting to the Nunavut Water Board.

There is two time frames that we talk about. We talk about during the reclamation period, where we are going to be active at the site doing work. We talk about the closure period, when we leave the site but we continue to come back to do monitoring to make sure that things are behaving as we predicted. And there is an annual review that will be done each year. We submit the report to the Nunavut Water Board, and with it, we submit an interpretation of the results we have been collecting, and this will help us determine if a site is behaving as we expect. This will include all the history that we have. We have collected

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data for 25 years, so we will be able to monitor to see if things are as stable as we predict it will be.

And there is a gradual reduction in monitoring, you sample less frequently, and you -- that sample was parameters as you -- over time,

because you have collected data, and if something is frozen and it has reached the area where you expect it to be, you may just sample the -- you may just monitor the one beside it. You may not monitor both of them anymore, because this one has already reached the stability that it expects, so there is a gradual reduction. And if, at any time, there is any indication that performance is not proceeding as expected, then there is a contingency, and that will include more monitoring for a longer period or more frequently and more parameters. It may include additional studies as required, and they may include remediation.

Now, here is the water monitoring locations, and I apologize, I know this is very small, but the pink that you see in here is all the stations that will be -- and I believe there are about 30, there are more than 30 stations for water quality that we will go around during the closure plan, during the reclamation period, and then this gradually

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decreases over the closure period.

There is ground monitoring locations in the crustean (phonetic) area. And this is what is really key, is that there is something in the license called a Comprehensive Environmental Review, which is required by the Board in 2010. And this will be held up against the terms of reference that we will establish as a group, and I expect your input would be involved in that. We will determine what are the results that we are looking for to be able to say that Nanisivik has reached stability and it is safe to leave. So that has to be approved before Nanisivik gives up monitoring of the site.

And the last plan is the closure and monitoring plan -- sorry, reclamation and closure plan. This was put together, again, by ourselves, by CanZinco, by Gartner Lee. You can see a team again. It is an integration of all of these plans here, all of these come into one. And as I said at the beginning, if you are interested in reading one report, if you are interested in finding out what the concepts are in a little bit of detail, it is in here. There is Inuktitut translation in all of

these executive summaries in this report as well.
The overall objectives, in very general

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terms, is a return of the land to its natural conditions. We want to eliminate long-term care and maintenance so that the land is stable. And there is a photograph there of what the townsite looks like now. You can see the mill, you can see the background, and to the right, you can see what it will look like when it is reclaimed.

And at this point, I'm going to turn the microphone over to Eric Denholm, he is going to speak of the reclamation schedule.

Obviously you need to plan something of this size, this project of this complexity. We need a schedule so that the component parts fall into place in sequence, so to make sure that we don't do anything out of sequence. You can't close the mine before you complete demolition debris inside. So this -- you have a preliminary integrated information schedule, and it shows all the reclamation work that is going to be completed, and that will be done by 2005.

And there are several scheduling items that are still being finalized, but the concept is certainly in place and would be -- there is sufficient information for the Nunavut Water Board to approve. And the details that we continually refine as the work is underway is scheduling. And

0058

as you recall, we had a schedule to proceed with the hearings coming at 9 o'clock, but that was changed to 1 o'clock. Again, schedules change. You adapt as you go along, that's the hallmark of a good operation that you can adapt.

ERIC DENHOLM: Okay. Thanks, it is Eric Denholm speaking now.

This, of course, is too small to read, but I didn't put it up for a reason. This is -- just shows the whole schedule for 2004 to 2005. And there are a few things, industry things that we can see on, although you can't read any of it.

Across the top is the time, time is going from 2004 through 2005 across the top. And down

the left are all the individual tasks, all the individual things that need to be done to close the mine site. And even at this small scale, you can see that for some of these tasks are linked together, so one has to be done before another. And with this kind of schedule, this is a tool that CanZinco can use to think about that and make sure that as they are going forth with the reclamation work, they can keep track of what needs to be done and when.

For instance, if you look at this ground of tasks here, you can see that these go in a

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sequence, one needs to be done, the next gets done and the next gets done. The other thing that we can see, even at this small scale, these bars here. This is the work for summer of 2004; a lot of the work getting done during the winter. There are a few tasks that will need to be done during the coming winter, but to a large degree, it is going back to care and maintenance.

The summer of 2005, there is a quite a bit of work being done again. And at this point in time, right here where I'm drawing my mouse down, that's the end of September of 2005, which is scheduled to be the date of the final shipment from the site.

Now, very quickly, because we couldn't spend a lot of time on this, there is a lot of detail to each one of these line items. But very quickly, these are the categories and some of the work items that have been put into the schedule at this point in time.

Under the banner of Planning and Management, some general tasks, including what we are doing right here is approval of the plan by the Nunavut Water Board. Some tasks have been completed. We filed documents with CanZinco. There was a technical meeting in Yellowknife. We are having a hearing, and this is assumed that at some point we

0060

will hear back from the Water Board on findings of the hearing.

The contractor needs to be mobilized to the site, as per our plan. There will be a ship

scheduled this summer, a ship, as I mentioned, the end of next summer of 2005. And that is linked to the opportunities to ship hazardous materials, such as PCBs off-site. They will be shipped in 2004 or 2005.

There is some work to be done specifically with the quarries and the use of quarries to be used through this summer, and similar to 1995, produce the material for the covers.

The work to do with reclaiming the landfill site, the bulk of the work is scheduled to be done this summer. However, there will be a small area left open so that the garbage I indicated would be put in there. So the final, final closure of the little active area will be next. But the bulk of the work, as you can see, is scheduled to be done in the summer of 2004.

Similarly, the rock piles and open pits seems to be individual areas, Area 14, K Baseline, Oceanview, east open pit. This work is going to be relocating, consolidating and covering waste rock in open pits. The bulk of the work is scheduled in

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a sequential fashion for the summer of 2004.

The west open pit, some work is this year, but the final work of the west open pit is scheduled in 2005, in part, because the underground mine needs to remain open for the disposal of waste materials. And the west open pit, itself, could not be full reclaimed until the underground mine is closed.

In the West Twin disposal area, we have a number of tasks. You can see that some of the initial tasks be undertaken this summer by removing the ponded water, constructing the cover of shale with sand and gravel through this summer and through next summer.

The spillway from the surface cell to the reservoir for the summer of 2005, some work in terms of lowering water level in reservoir such that reclamation work could proceed in that area this summer. And the work at East Lake in terms of removing the structures on the road to East Lake, that will be next summer when those facilities will no longer be necessary.

East Adit Treatment Facility remains on a standby status until it is no longer needed, at which time it is also removed.

The underground mine opening will be open

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this summer. Waste will be deposited in the underground mine for the proposal. Late in the summer of 2005, the underground mine will be permanently closed.

Reclamation of the mine site and the contaminated soils of the mine site takes place through this summer and next, and so the townsite.

The dock area, primarily we will have reclamation of the dock area in 2005. The industrial complex, internal work in the industrial complex for the removal of equipment and then carry down to the business of the building itself, it will be through this summer. Some of that work can continue into the winter and into next summer.

Removal of contaminated soils will proceed after the buildings are removed in the summer of 2005. You can see here that later this year will be an assessment of the slab, as discussed at the technical meeting, resulting in a refinement of the remedial plan, as necessary, to conclude monitoring or mediation to the slab.

Finally, under the heading of "Monitoring and Reporting," these are items that are going on now and will continue through the two-year reclamation period shown here and the five-year closure period. They continue right off the right side of the

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screen.

So I hope that that gives you a very brief look at the schedule. This is a good planning tool for CanZinco to be used to carry out their plans.

BOB CARREAU: So this concludes our presentation of the plan. It is presented here for the Nunavut Water Board and the hamlet of Arctic Bay and other interested parties.

And the Nunavut Water Board's approval of this plan is requested so that we can proceed with the actual plan.

We also received on the 28th of May, and I

guess we will proceed with that presentation now.
Intervention, written interventions was agreed at the technical meeting in Yellowknife. We have seen written interventions from a number of parties, and we would like to reply to those formally, orally now.
CHAIRMAN: Please proceed.
APPLICANT'S RESPONSE TO WRITTEN INTERVENTION:
BOB CARREAU: As I said at the outset, this process began in 2002 and has been very iterative in communicating back and forth with many of the interveners and with yourselves.
Most of the technical issues, we believe, have been resolved, and I think that was finalized

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in Yellowknife earlier last month. But since then, there have been a few interventions, and we would like to respond to these last few interventions.
What we have done is just, rather than going through each of the letters that we have received, is we have tried to conceptualize each of the issues. And the issues you see in black here is the interveners or parties that raised these issues. Some of them have come, so they will have the opportunity to respond and all of the interveners that raised that issue.
One of the ones that came up on several interventions, is seven years monitoring adequate? We would like to respond to that, is that it is a living document, and we haven't made that clear. But our intention is, is that it will be continuously reviewed. But we have done a lot of work in the last two years, a lot of engineering. We have used a lot of site experience and feel very confident that we can predict how the site is going to behave.
If it behaves differently, then we will consider monitoring the site longer. If it behaves as we expect, then we expect that in seven years, we are going to be able to present the Nunavut Water Board a final report showing that it has

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remained stable and no impacts are expected.
We have already -- since the bullet here says

here we have already been monitoring for decades. So when it is in comparison, we feel it is not valid to do mine sites. The DEW Line sites, many of these have just been cleaned up. So we are talking about a new process.

Nanisivik tailings have been put in the lake for 25 years, we have been putting material in our landfill for 25 years. We have been monitoring it throughout the process. What we are doing here is a continuation and improvement on what has been done. So we are not starting -- we started 25 years ago. And we feel within the next seven years, that will be analigated (phonetic) to monitor on.

There is an issue raised about the concrete foundations to be covered, and it was raised by the hamlet and Acres and INAC. We have made a commitment to inspect the physical condition of two concrete slabs and investigate if potential for contamination is indicated below the slab. We will inspect the slab, if it is cracked or the places that we have seen is cracked, we will dig, or we will do an intrusive sampling that will allow the cut, and we will sample below and see if there are

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any contaminants below.

Now, if any contamination is found, then we will have a look at what the options are for remediating that. Either we will treat it like tailings, where it will be covered with enough material to keep it frozen or a landfill where it is covered with enough material to keep it frozen or waste rock where it is covered in enough material, or it will be removed.

We feel -- we would also like to point out that by exposing the contaminants, and I believe our technical interveners are on board with this and agree, that exposing contaminants to the environment, trying to move these things that are largely benign would, in fact, introduce greater risk.

So the mill slab and the contaminants there will be frozen under 2.2 feet of thermal barrier cover. The concentrates storage shed cover, our plan is to cover that with .5, because it will be

clean, just as the rest of the site is cleaned. So there will be no hazard there. What we are trying to do is just put a cover down for esthetics.

Jim Cassie is going to speak to this. We have brought in some samples of shale and sand and gravel. And Jim doesn't need a microphone, as you

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are about to find out.

JIM CASSIE: I will just use this and put my back to the people at the table.

Jim Cassie speaking. I trust that everyone can hear me across the room. I didn't bring over the tailings, but there are tailings over there if you wish.

There are samples here, of course. This is the shale material, you can come and feel it and touch it, if you wish. An geologist would call this, we use the term very -- well, very easily breakable, it breaks apart extremely easily. It results in a whole bunch of small fragments, as you can see, and this is the material that we are proposing to use for the insulating cover. It breaks down easily, and it becomes relatively fine grained, assuming because -- so that's the point of this. So this goes over top of the tailings and basically prevents the tailings from spreading around to the environment. That's its role, and it does it quite well.

As you can see, come and feel, it has some finite nature. It has some particles, which it has variable colours. It is a light-grey colour to a very dark grey, to even black occasionally; so that is the shale. And people from Nanisivik, and

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probably out here as well, there are extensive exposures of shale in the general area.

We have another deposit, and we call it the Twin Lakes sand and gravel, basically an eroded sandstone. There is also a sedimentary rock, the same as the shale is, but because of the chemical processes, this is an extremely durable rock. It is made out of quartz, which is a silicon dioxide, same as your glass windows are made out of. It has been kind of recrystallized because of the

geological processes. You can come and feel it here as well. It is sand and gravel. And you will see over here, we have got some particles that are up to cobble and boulder size, quite large sized, and the range of those particles will be used.

This material, if you wish and if you have your glasses on, you can try to attempt to break it with a hammer, but I would bet that no one in this room possibly could ever do that to this material. It is so durable and so hard. So this Twin Lakes sand and gravel goes on top of the shale to protect it, so it doesn't seep. The shale, of course, people know, blows around in the wind. This will stop the shale from blowing around. It will stop the shale from being eroded by the water processes.

So each of these materials have a certain

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purpose. And for the purpose we are proposing here for the mine, they are well serviced for that.

So I will leave my introduction, and if later on anybody wants to come and look at samples and discuss it more, I will leave that to you.

BOB CARREAU: Thanks, Jim. That was -- we brought that up because it was raised specifically by people of Arctic Bay who asked us to bring samples for the people of Arctic Bay.

So as Jim pointed out, later if anybody would like to come up and discuss a little bit more of what the recipe looks like, we would be happy to discuss it with you.

It was also asked, Is it feasible to transfer tailings to the underground mine? This issue was raised by the hamlet of the Arctic Bay. Just to give some perspective of what we are talking about, some relativity to, move the 20 million tonnes of tailings into the West Twin disposal area, it took 25 years, and it took a pump operating at a designed capacity on a 24-hour-per-day basis, seven days a week, 350 days of the year. This would be a big operation.

The majority of the tailings now are frozen into place and would not be possible, as suggested, to reserve the flow and just let them flow back

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into the mine. And thawing and separating of the tailings we think would impose significant risks. And it would also impose risks to the permafrost in the mine.

Drilling and blasting and hauling of frozen materials would simply not be economically feasible.

Underground tailings, if we would put them underground, it would be absolutely the frozen materials. But we are taking -- we are leaving the tailings in place, and we are encapsulating them in frozen materials. It is a very similar process.

I understand what your concern is, but I think what we have proposed here offers the same level of safety. And it is important to remember that tailings are ground waste rock. They are not something else, something that we imagined to be some type of industrial discharge or massive chemicals. You take the rock, you break it down, you take the zinc out, you take the metals out, which are contaminants of concern, and you get a 95 percent recovery of that. It is the economic process, you put the reject out there.

Water sampling at Twin Lakes, this was an issue raised by the hamlet of Arctic Bay, and it was, Will we continue to sample at Twin Lakes, or

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how would we continue to sample and ensure that the water is safe? I would just like to assure you that samples are collected every day, every day when the water was released in the tailings area into West Twin Lakes. This doesn't happen. I have been accountable for mining, for environmental impacts at other mines, and some jurisdictions you are only required to sample once a month. We sample every day, and it is only released when the water quality is acceptable.

Now that the mine is closed, we are not putting tailings in that lake anymore. Intuitively, understandably, we only expect the water quality to improve. And, in fact, it did improve this year.

Water quality has never been an issue in Nanisivik, and we have never had to treat, so we don't expect to have to treat when we shut down or

now that we are shut down.

And samples are not only collected at the discharge point, but they are also collected down the creek. And this will continue throughout the closure monitoring period, and this information, as I said before, is available to the people of Arctic Bay, and so is all of this information.

There was a question raised by the hamlet

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council and INAC about PCBs and the ANFO plant. We have committed to shipping out all of the PCB wastes, and we expect to remove those this year on a ship, from the site. Those are in transformers. They are in a regulated storage area, an approved storage area. That container will be shipped off-site this summer. The active transformers will be stored and then will be shipped in 2006, and this is because Wolf Den. Another operation has purchased these and is going to be using them at another off-mine operation. So I think that's a good thing. At least some of our equipment will continue to have a legacy in the north and be able to make a positive contribution. And these transformers, which are very safe, will be used to generate electricity.

Samples underneath the PCB storage container, where they are stored now, will be collected, and we'll make sure that there is no contamination. If there is contamination, that will be taken care of.

The samples from the ANFO plant, which is ammonium nitrate and fuel oil plant, will remain our explosives. We will analyze them for ammonia and other nitrogen compounds, and we will clean up the area if there is some, again, found.

There is -- there was a request raised by the

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hamlet of Arctic Bay about the contingency plans for failures after reclamation. I think everybody understands what contingency plans are. They are the questions that we ask, what if this happens? Well, in each of these reports, there is a section for contingencies where we ask ourselves all the possible "what ifs." What if this was to happen? What if it was to -- what if we were to have global

warming? What if we were to have a flood? What if we were to have a crack in the surface? And there is answers for all of those things. So each of the -- we have already anticipated the what ifs, and CanZinco will be responsible for the contingencies until the long-term stability of the site has been determined.

There was a question raised about the monitoring at Kuhulu Lake, fish monitoring. And this came up originally at the HHERA presentation, and Mr. Duxbury came here in Arctic Bay, and I was in attendance and Murray was in attendance. And someone asked us about fish. Although it is outside of the water license, it is outside of the impact area, we agreed to test the fish that are in Kuhulu Lake. And we did this in 2003, and the fish were found to be healthy. The fish are healthy. They are not contaminated with metals from the

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mine. They are similar to other fish that are in land-locked lakes in the Arctic.

We will continue to water sample at the inlet into Kuhulu and outlet out of Kuhulu during the reclamation closing period. And we will sample for metals, total suspended solids and pH and temperature. Those things may not mean a great deal to you, but it would mean something to Environment Canada, who have raised these issues.

Is 1.25 metre cover sufficient? This was an issue raised by the hamlet of Arctic Bay. In one word, yes. The proposed cover is an overestimate. We determined through field testing, not through modeling and working at a chalkboard and scratching our head, but we field tested this at Nanisivik, and then we confirmed it with monitoring. 1.25 metres is more than adequate. It takes into consideration things like global warming or extreme heat events that happen once in a hundred years.

If we were to just cover what we needed, it would be .9 metres, .9 metres in our test kept Nanisivik frozen. So we have added all the worst-case information, and we come up with 1.25. We are going to continue to monitor that. I have been monitoring this since 1988, and we are going to continue to monitor that throughout the closure

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and reclamation period, and that information will be made available.

There is a request for a comprehensive schedule for reclamation activities. Eric just made a presentation on that. We do have a schedule. It is considered somewhat preliminary in that we are adjusting this thing as we move towards the closure date, the approval date. We expect there may be some requests for some modifications.

We have had requests even since yesterday when GN arrived on-site to include some of their infrastructure in our implementation schedules, so there would be some adjustments. But I believe the major components are laid out in a way that would allow the Board to approve a plan because it is a logical sequence. And as I have pointed out, every schedule gets adjusted. This one would be the same.

The general covering soils, this is an issue raised by Acres, in areas where contaminated soils have been removed, no covering is required. We will try to restore the land to its pre-mine use. And only the two concrete floors, the concentrate shed and the mill, will those be covered? All other areas will be contoured after excavation soils, that we provide a safe land surface and to

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restore the natural drainage, where possible.

Sealing of the underground openings, we spoke to this. This is an issue raised by Acres and INAC. An engineering design will be borrowed for sealing the underground openings, will be provided for approval by the Board. We will provide this by November 30th, 2004. This doesn't prevent anything from going ahead. It is the last step that has to occur at the mine site, and that will only occur in 2005. The plan we present will include close monitoring program for stability, and have an updated assessment of the surface stability.

I would just like to point out that as part of the present reclamation process, and it is required under the Mine Safety Act, some underground openings have already been closed, were closed during operations. These have been

inspected by Mine Safety and found to be accurate.
The instrumentation contingency plan closure period is an issue that was raised by Acres. A professional geotechnical engineer, and, as a matter of fact, a geotechnical engineering firm continues to provide recommendations with CanZinco with respect to the type and number of instruments. If instruments are damaged or destroyed, then we will be advised as to whether the instrument should

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be repaired by CanZinco. So these will be treated each as they come up, if they come up.
Reclamation of the town industrial complex and dock areas, this is an issue raised by Acres, the GN, NTI. Our plan is to remove all of the CanZinco structures, any structures at the discretion of their owners. GN has indicated that they wish to discuss incorporating their structures with CanZinco for the tear-down, and we are meeting with this, and we will be discussing this with the GN during the course of these proceedings, over these few days.
A preliminary schedule has been provided already and a database management system is in place to track volumes, source locations and disposal locations for waste materials. We believe the people of Arctic Bay will be involved with this in its monitoring and reporting process.
East Adit Treatment Facility, this is an issue raised by Acres. It is more, How does that figure into our plan? At the treatment plant, we should have a look at that, perhaps, while we are on-site with some technical people. And it will remain on a standby status until it is demonstrated that it is no longer needed. We will make that known when status is no longer needed, and it will

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be approved by the Board if it is acceptable.
A report on the East Adit Treatment Facility includes a wrap up of the water quality information collected, background water and all throughout the history of the operation will be provided.
Monitoring Strathcona Sound, there is an environmental effects monitoring plan, and I showed

you earlier. This is right now in front of Environment Canada, and they are approving it. It is required under the Fisheries Act and the other Mines Act regulations. And we have proposed in that study to include sampling in Strathcona Sound, so that is part of our monitoring.

Mine roads is an issue raised by Acres and DFO. The restoration of the water crossing will be performed in a manner to prevent erosion, so we will make sure that there is no solids being washed into wherever we move a culvert or a bridge. And a causeway across Twin Lakes Creek will be removed, that's the one out to the potable water area. And a drivable service will be provided across the West Twin Creek that will allow ATV access to the east adit of Kuhulu Lake and Oceanview areas for monitoring. This is the way it was before we came, and this was the way it was in -- back in 1992 when we put that culvert in. We will remove that, and

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there will be a floor in that area, so you can drive through the shallow waters and carry on.

CanZinco is obviously not committing to provide maintenance or long-term roads for private vehicles, but we will return things the way we found them. And if there is some information on some roads that you would like left in place, then you would be required to -- whoever would like them left in place would be required to get approval. And we would be more than happy to leave those in place, for example, the road to Kuhulu Lake. But under the Act, under our license, we have to remove those.

The water monitoring in the landfill, this is an issue raised by Environment Canada and INAC. All parameters for gasoline, diesel and oils will be analyzed in the reclamation period. We have done this in the past, and we will continue to do this. And so far it indicates that there are no requirements. We realize there are some fractions, there are some other fractions, different types of oil have been proposed for sampling, and we will add these. If elevated concentrations are identified, we will also sample further afield to try and delineate where the impacts are. A

contingency plan is included in our plan.

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Other questions from INAC and DFO include copies of quarterly and annual monitoring reports, and we will provide these to the hamlet council of Arctic Bay, the quarterly and the annual. If you would be interested and if INAC requests, we could send a copy of that information.

We would just like to point out that CanZinco does not own the dock. So reclamation, if required, since deciding the dock will not be in place, will be of the responsibility federal government.

The physical stability in reclaimed areas was raised by DFO. All the reclaimed areas, including the Twin Lakes Creek, are part of the proposed monitoring inspections for assessment of physical stability. There will be a geotechnical engineer on site annually to inspect these. As well, we expect to have people in Arctic Bay, somebody from Arctic Bay to do a report. A visual inspection, if there are problems off-site, then we would expect that constant communications would be notified.

The quarry buffer zone is an issue raised by DFO, and we will maintain a 50-metre buffer zone between all quarries and all adjacent water bodies.

Thank you

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CHAIRMAN: Thank you. Okay. Are there any questions from the interveners to be directed to the applicant? Maybe I'll start with Arctic Bay.

HTO QUESTIONS THE APPLICANT:

TOMMY TATATUAPIK: I am Thomas Tatatuapik. Thank you, Bob, for your comments. I don't have a lot of time; I am leaving tonight. So representing the HTO, the HTO have concerns, although you responded to the concerns, but I think I will proceed with the concerns they have.

One of the concerns is the tailings, when it is draining to the ocean, that it might affect the microorganism in the ocean, that it might be harmful to the micro-organisms. And that there

should be a report or if there is any studies, then the report should be submitted, a copy of that should be submitted to HTO for their information so that they can see for themselves what kind of study were done. And so that was the one -- one of the major concerns, that the tailings or the contaminants might be going to the ocean.

And since there is runoffs in the springtime, the contaminants or the metals might go in the water down to the ocean.

Also, although you already mentioned the

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Kuhulu Lake, they want to okay for seven-year monitoring period, that they want to continue studying the fish in the Kuhulu Lake during the monitoring period, that it should be part of the monitoring activity.

Also, after the mine is closed, the -- there was a concern on the other side of the Strathcona Sound that they don't want just a mine area to be monitored but that there should be. When the mine was operating, the smoke created dark matter, I guess, in the surface, and my -- you know, drift around, wind blown. So they said just that the area across the Strathcona Sound, the land should be tested for -- like, small games live there, and if there is caribou, they live there too, and fish. So that area should also be included in the monitoring.

And last one, from the HTO, the creek, as you mention, you would do studies in the water quality, but we still have concern over that. That not just the Nanisivik should be -- mine site, there is other areas that might be affected, like closer to Arctic Bay. There is a creek going to Arctic Bay area. Maybe in these creeks there should also be studies or monitored, that the water going -- like, although we suspect it is okay, but we have to be

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sure that it is okay.

And for these reasons, in the past, the -- well, there is families that travel in that area for camping and so on, so they will continue using that area for their camping. So we want those

areas to be monitored as well.

And the monitoring reports or studies, reports each year that you do a study, we want to copy of the reports to be given to the HTO so that we can tell what was done and where it was done.

So these are the main concerns for the monitoring, and we want them to keep monitoring. And these are our requests.

Personally, I have my own concern, thinking of not Arctic Bay people, just personal concern. Now, this month on the 16th, I'm going to a meeting in Parks Canada, and it is a parks -- we have a new park north of Arctic Bay, and I think the infrastructure in Nanisivik could be very useful in the parks for tourism, I guess, the roadway to the airport and roads, and I think they -- I would want buildings in Nanisivik. And I think when I go to that meeting, Parks Canada meeting, I will mention that there is buildings available in Nanisivik and that we will try, and somehow if the Parks Canada can obtain a building, that we will need a building

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for sure as we improve the Parks Canada visitors, and so on. If you are the ones -- like, we want a list of the buildings that will be demolished, which buildings will be destroyed, let's say, and so that we can kind of say we want this building or we want that building.

Also, my own concern, in the beginning of the exploration, they did exploring by dog teams. Akchigo (phonetic) and Levis were the two people that went around with the dog team, and Akchigo was involved when they found the minerals, I guess. And so I'm requesting that Nanisivik make a monument maybe on top of the Mt. Fuji to put names of the people who discovered the minerals, who were the initial people who were part of the discovery of the minerals. That there should be a monument or some kind of a cairn or some kind of -- to put down their names, who they were and also include the Inuit that worked there. So after the closure of the mine, at least our -- our next generation, they can see how the Inuit were involved in the exploration and the development of a mine. So that maybe there could be a concrete monument or

something like that to recognize the participation of the mine development, and that they will...
Arctic Bay people will have other concerns

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too, but as for myself and representing HTO, those are my comments and remarks. And thank you for allowing me to speak.
CHAIRMAN: Thank you.
(RECESSED AT 4:00 P.M.)
(RECONVENED AT 4:20 P.M.)
CHAIRMAN: We will stop at 5 and then try again at 7 p.m. just to make sure that we are all in the same waiting up there. We are proposing to stop the hearing at 5, go for supper and then resume the hearing at 7 this evening until 10 o'clock.
Most of us staying at the mine, we have to drive all the way out there, have supper, and then drive all the way back. So if we can resume the hearing at 7 o'clock this evening until 10ish.
And, Mr. Tilleman, by the way, you have Exhibit number 1?
BILL TILLEMAN: Yes, sir. That's what I would propose, is that we would mark as Exhibit number 1 the CanZinco presentation. And we will have a copy, which we now have, and if there are no objections, we would like to suggest that.
And Exhibit number 2, if we could get it in a hard copy in the next few days, I don't know how easy that would be, but that would be -- since the

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Board doesn't have the software to make something. So that would be our suggestion is to file Exhibit 1 as the electronic copy of the CanZinco presentation, and number 2 would be a hard copy of the presentation. Thank you.
CHAIRMAN: Thank you.
EXHIBIT NO. 1:
CANZINCO PRESENTATION, ELECTRONIC COPY
EXHIBIT NO. 2:
CANZINCO PRESENTATION, HARD COPY.
CHAIRMAN: Just for your information here, we have got to the interveners, and I have it set up in my mind here, if you don't mind, the

order of events would be, Arctic Bay first. We will take questions. Arctic Bay, second would be NTI, third would be GN, Susan Hardy, and then the fourth would be DIAND, fifth is Environment Canada, last but not the least, DFO, okay? All right. Thanks. Tommy?

BOB CARREAU: Mr. Chair?

ARCTIC BAY QUESTIONS THE APPLICANT:

TOMMY KILABUK: My first presence will be for those of you that talked, the thing that you were showing. There was a section there that you were showing that some part of the land would freeze under the lake for that diagram. And my

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question is, Where is the time that you estimate? I believe it is two years, is that correct, or am I wrong on that point? Seven years. Okay. My question was regarding that, if there was a seepage on the Dike or on the 1.25 metre that you were talking of the pressure intake is, will there be equipment there to do the work later on if there should be seepage on that?

BOB CARREAU: Mr. Chair, I would just like to -- before I answer Tommy's question, just -- I would like to answer Tommy Tatatuapik's questions as well.

Thank you for the question, Tommy. It is a good one. We anticipate that there will be some water coming out, so we had planned to have some water come out of the talik, and it is in the plan. It gets pretty complicated of course for me, but we rely on our experts to do this. It considers a mixture of water in the reservoirs, so you have some water that's coming out of the talik and mixing with the water that's in the reservoir, and the one we are concerned about is the discharge from the lake. And the numbers show that the water wouldn't be -- have an impact. It would be -- there is such a small amount that comes from the land portion.

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If there was some break on the surface, we are going to have equipment on-site for a couple of years, and then we are considering leaving a couple

of pieces of equipment on-site for some of the five-year closure plan. If there was a problem and it need a larger repair, we would call on a contractor, we would call on Moses with some of his equipment. If it was huge, which we don't expect, CanZinco would be responsible for mobilizing it, bringing equipment back to the site.

TOMMY KILABUK: The other question I have got, Bob, is that I don't know if you touched base on the dump. Will the dike and the landfill be running, or is that the way that's going to be left alone? Have you got more dikes, things like the dump? Is there further development going at the dump or what?

BOB CARREAU: Yes, there will be more development at the dump, we are just -- we have to -- we haven't built the cover yet. So what we are going to be building there is the cover that will encapsulate the entire dump inside permafrost, and we will continue to monitor downstream to make sure that there is nothing that leaks. Nothing is looking at it right now, and we would make sure that nothing leaks out of there after we are

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closed.

TOMMY KILABUK: Thank you.

CHAIRMAN: Thank you, Tommy, Mr. Carreau.

Okay. I'm moving on to...

AKIKULUK SHAPPA: Thank you. I'm glad. I think you are all Inuit Water Board members. You understand more of my concern.

As you mentioned, that they are monitoring, in English, monitor. The monitoring period or location that the tailings, the longer it takes, it will have to be shorter into -- shorter time to monitor. They said seven years to monitor, but I said it is older. It will have to be more frequent monitoring, that it is dangerous for animals if it drains to the ocean.

I think they will have to set aside funding or, I guess, security that we hear about the global warming, that the permafrost will eventually melt. So the contamination of the tailings, there will be a risk of melting the permafrost, so the frequency

of the monitoring will have to be shortened, that not just seven years, but more than seven years. I think it is harmful.

And the other things that were mentioned that those PCBs were mentioned that they will be shipped

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out, so other materials would have to be included in the materials that are shipped out.

As Arctic Bay residents, we will stay here, we will continue to live in the area, and we will rely on animals for food. We are used to eating the animals, and we will continue eating the animals. And if there is anything happening to the animals, any effects, it is humans, because we rely on them.

So, yeah, your operation of the mine is closed, but it is important that as Water Board, we have to be very careful in terms of reviewing the documents and the condition. And as Board members, that I would suggest that the monitoring period be extended beyond seven years. Thank you.

CHAIRMAN: Thank you. I just received a note here that we would like to provide the opportunity to have comments, questions.

Are you prepared to answer comments, questions now, please?

BOB CARREAU: Thank you, Mr. Chair. I will answer the first couple of points raised by Tommy and the other comments.

Tommy's concerns regarding the micro-organisms is a very good one. It is a scientific question that we have -- we have

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proposed an environmental effects monitoring plan that does micro-organisms and any sample right outside of the tailings discharge area. We sample way upstream so we know the immediate effect of the discharge, so that will be done. And we can send the results.

As I said, we plan on sending all the results to Arctic Bay and the hamlet council, and we would be pleased to share those with the HTO. We don't anticipate sending samples, results directly to every concerned party, but we will send them to the

hamlet council, and they can be shared with all the citizens.

There was also a question about Kuhulu Lake and fish monitoring. What we have done is we have taken a sample that compares water quality with fish tissue quality. And, intuitively, from the scientific perspective, you would expect that if that relationship shows that the fish are healthy, if the water quality isn't changed, you wouldn't expect the fish quality to change either. So we will continue to do water quality monitoring, but we think unless there is a negative turn, because all of this monitoring is, of course, uses our resources, the resources that we have earmarked for doing the reclamation work at Nanisivik, for doing

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the job. We could expect that water quality monitoring would be satisfactory, and the correlation would be clear to the Board and require results.

Tommy also raised a question about potable water samples, and I am not sure of -- or, sorry, creek water samples in areas where others are camping, and I am not sure of every area, but we do note from looking at the watershed, and we have done this, that certain streams west of Nanisivik flow into Marcel Lake. And the water quality in Marcel Lake is tested by the GN, and those results would be available. And we have seen them, and if water quality is good, and I think you can -- we can rest easy, Tommy, that there is no contamination in the other streams. There are some high natural mineralized areas, but there is nothing detrimental in that.

But you should consult with the inspector that comes on-site, ask your representative, I am not sure who does your sampling, maybe Constantine, for all I know. But there is some sampling that is done on the potable water.

The last two comments Bill Heath will respond to.

BILL HEATH: Thank you, Bob. In

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response to the last two issues that you raised,

Tommy, with respect to Parks Canada, I think we said -- I think we have said in this forum and others on a number of occasions, we certainly -- we certainly have knocked on a lot of doors of a lot of people in an effort to find reasonable homes for the infrastructure and the buildings at Nanisivik.

If Parks Canada -- and, frankly, we haven't talked to Parks Canada, and we haven't talked to them at all. If Parks Canada has any sort of interest in assuming some of the infrastructure in Nanisivik, we would certainly welcome the opportunity to talk with them. That's not to say we can find an agreement in there, but we certainly would be prepared to sit and have a discussion with them. And that is addressed with respect to the first issue.

The second issue, I think -- and rightfully so, I think at every one of these meetings and every forum like this, we certainly take an opportunity to thank the people of Arctic Bay for their contributions to Nanisivik. We acknowledge that without the contributions of the people of Nanisivik, Nanisivik would be a very different place. Sorry, without the people of Arctic Bay, Nanisivik would be a very different place.

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And you are right, Tommy, I think there has to be -- something concrete that can be pointed to that says the people of Arctic Bay have made a contribution and should be acknowledged. We have talked internally about ways of doing that, and we haven't settled on anything yet. But as we get closer to the end, it will be an important thing for us.

Thank you, Mr. Chairman.

CHAIRMAN: Thank you.

Don't forget to say your name.

OLAYUK KIGUTIKKAQ: I am nervous, but I have to say -- I have more than one comment.

It was mentioned, he was the first person working during the exploration and he was one of the discoverers. I know in 1956, knowing that time, but he passed on before when the mine was operating, and his wife is still alive.

And I haven't seen any benefits, I guess,

from the company. Perhaps the wife is getting allowance or benefits. And we hear of people getting recognized for compensation or -- she is now over 80 years old, and have you ever considered how or -- to recognize her husband's efforts or participation in the exploration?

How I know that he was involved in hiring

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people, local people, and he got us a job in '65, her husband. He used to take explorers or the prospectors with him. And they fell in the water one time, and the prospector was rescued, I guess, when he see -- he went down, swam to the prospector when he was drowning, so, you know, if he did not think of saving the prospector, he would be gone. But he was concerned about the prospector, so he saved his life.

So, if possible, because we have different regulations and regulators and legislators, that somehow if there is a way to recognize or to compensate that effort, because we don't have any -- in written history, we don't have that record in the writing.

And also I have participated in the mine activity that there is being marriage and other social problems were created by the use of alcohol. And alcohol was a factor in disrupting the social life. And they were young and they were probably enticed to drink, so there has been a number of accidents related to motor accidents related to alcohol. So I think these were never mentioned or that they -- the company never apologized for those, but we -- they are -- they were -- when they were mining, operating, they were a small town that

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were a neighbouring community to us. And we have never heard them apologizing to the community for disrupting their social life in terms of providing alcohol, so why -- as an example, when we are trying to restrict alcohol import to the community, it seems like the company just disregard the community's effort to restrict the alcohol import. They just allowed them -- the people to buy alcohol, so I think this -- my statement should be

written down somewhere as part of the history that Arctic Bay people not only benefited, but also that they were disrupted and that they -- there is no infrastructure or buildings that were given to Arctic Bay.

So I think one way of soothing, I guess, the people would be to give them a building, at least one or two.

Let's say that you are saying that you would monitor the site for seven years, so -- and these are my comments.

CHAIRMAN: Thank you.

BILL TILLEMAN: Mr. Chairman, when we say people say their names, and the last few people we didn't get on the record.

And also another thing, sir, is that Nanisivik or CanZinco will be pleased to talk with

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Parks Canada, and I am afraid we don't need to recognize that right now, so it may not get done. So the thing with Parks Canada shouldn't affect the water license.

CHAIRMAN: Okay, thank you.

Remember to say your name. We are being recorded, and the recorded will be -- whoever is transcribing, because they are not looking at the person, they will need to know who is talking.

BILL HEATH: Mr. Chairman, if I could, I suspect that there are going to be some people who are going to make statements to which we don't feel the need to respond, and I suspect there are some that are going to ask us questions to which we do feel a need to respond. And the last, and I understood, the last lady who spoke was very eloquent and stated her position, and we don't feel the need to respond to it. But if we could be just afforded that opportunity on a case-by-case basis, we would appreciate it.

MUCKTAR AKUMALIK: Don't be afraid of me, I don't have any teeth.

These people representing Nanisivik, they never gave me teeth from the stones that they dug up. We were told not to smoke, and smoke seemed to smell better and better.

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First of all, that's just my general comment. As Inuit Elders' committee, the Elders' committee, there is only four members, and we will be -- there is only four people left in the community who were involved in the beginning.

We were living in the Inuit way of living in the Arctic, and they were not relying on government handouts or any other handouts, but they were relying on the animals from the land. And that time when they were Inuit, they had meetings about animals or about wildlife. And they knew the social -- social fabrics, I guess, in living in the society.

And each community had their own leader, and the leader would be responsible for their people. And wildlife animals were afraid of humans because even though they relied on them as food -- but now the Qadlunnaq way of making food is they -- we are eating the same food now. But since then Inuit lived on the land, from the land.

And when Inuit relied on the animals, and the animals were afraid of the humans, so they kept -- every day, every day they look for food that time.

And the Inuit, as an example, oceans and the land is the farm for the Inuit, and it is like a farm to us. And they always had to catch or -- I

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mean, the animals.

And when the mine started, before they started shipping to other countries, there was only four people left who started the initial exploration, and their seal skin boots were wore out, they had holes in them.

And I was working four months, and I got paid $300, and that was a big amount of money, but I realize now it was small amount of money. But the whole summer we walk around staking, we made good lines and every 300 metres or so. And we made right-angle turns, and we put stake. I think I was making $3 a day. And we went home in the evening, and we start six in the morning, start walking and my dog -- okay.

My dog was given -- tied up in there, and they put wiring -- wire around the neck and killed

my dog, and I -- I found my dog along the creek.
So when the mine -- before the mine started operating, we worked all summer and right to the fall, and my brother's wife Karpik (phonetic) and her son, there were three tents there. We had our family with us, my brother and myself, we had families. Although they were cold in the tent because they were always freeze-up time -- and now today it is -- you know, Jimmy, Jimmy Marshall was

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saying that he want to dump the tailings directly to the creek, but we rejected that idea. And then I used to be in the committee to those previous companies, and Jim Marshall, when we rejected his proposal to drain the tailings to Kuhulu Lake, I guess, and those companies, the previous companies -- and, you know, these last companies are following the guidelines of what people want or under the regulation, but the previous company did not really consider the regulations and guidelines.
When the ship started coming in in the last 25 years, when the ship start hauling the concentrate, the -- it is going to -- the storage shed on the beach was used, you know, it is probably most likely contaminated, even beneath the concrete slabs, I guess. And that also the landfill site is located on top of the hill, and I know that in PanArctic Oils, the company drilling oil up there, they make a ditch, they put all their old equipment and they just cover them.
But I want some kind of an apology, I guess, from the company because they did -- they did their own activity without considering what the Arctic Bay community wants. And, you know, they didn't even ask the community how they feel about their activity, whether to, you know -- Arctic Bay

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residents were concerned that -- they were anxious for an apology, I guess, and they all just leave the area without apologizing to us.
But during that meeting one time here in Arctic Bay with the Water Board and the company Nanisivik, we were all here, and I had requested an apology from them, but there has been no response

since then that it is our neighbour community, Nanisivik is our neighbour, and there is a road to Nanisivik, and they just contaminate the area and leave the area. So in the springtime, in March, the snow melts faster.

And Nanisivik continued to dump tailings. As I worked there for seven years, I know that the tailings keep draining to the ocean. Arctic Bay residents, we have a small creek in our landfill site, and then we got charged for that, like, small creek coming from the landfill site, and somebody warned the hamlet not to have any creeks running from the landfill. So the tailings have been draining water for 25 years, and nobody has ever complained about that or nobody has warned the company on that. So they made money from the area, from the land, and at least even a letter of apology. And the only thing we -- that was contaminated land.

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And last March I went to Winnipeg for a meeting on environment, global climate change, I guess. And they kept saying that it is going to get warmer, that it will melt faster or earlier. During the meeting in Winnipeg, I thought Nanisivik, they just close it down, just cover it, that landfill just cover it without making a ditch, because there -- the landfill is on top of the hill, that they just cap it off and, you know, that would be my concern, is that exposed.

During the meeting in Winnipeg, there were ministers who were making statements on the change, climate change. So I will continue to have the concern that if we are getting warmer, then, you know, even the glaciers are melting now, so they are getting smaller. Glaciers are getting smaller, and in the fall when it is supposed to be freezing up, it takes longer to freeze. And our ice thickness used to be six feet, now less than six feet thickness, and there is no real ice like frozen ice. It is all looking like it is all warm.

Like as an Elder, I am speaking on behalf of the Elders' committee, that these are my statements.

That buildings that are in Nanisivik, the

small ones, we like those. If they can be moved

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here, we want them moved here. We want to keep them as we have the equipment to transport materials. And people are starting their own business in the community and building new things, so people who are starting business should be offered a building, at least given a chance to up and claim a building. And so even if not the building, there should be $2 million as a competition package or some kind of way of the company, I guess, apologizing. So I know it is not possible to do, but these are our requests.

Thank you.

CHAIRMAN: Thank you. It is 5 o'clock, we stop now, come back at 7 o'clock. Okay?

(RECESSED AT 5:04 P.M.)

(RECONVENED AT 7:10 P.M.)

CHAIRMAN: We will move onto item 9, Hamlet of Arctic Bay.

NIORE IQALUKJUAK: I'm Niore Iqalukjuak, mayor of Arctic Bay.

First one during the reclamation work, are you going to employ local people from Arctic Bay?

BILL HEATH: I'm sorry, Mr. Chairman? We are a little slow on that, on the update there. We missed the question.

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NIORE IQALUKJUAK: Once you start reclaiming, where and how many employees will you have once it starts?

BILL HEATH: Bill Heath responding. It is difficult. It is difficult, as we have said in the past. And at the risk of sounding repetitive, it is difficult for us to assess how many employees there are going to be.

You know, as we said earlier, we hoped all along that we will be able to find a solution that will allow us to preserve much of the infrastructure. Now it looks like it is not going to happen. So in all likelihood, we are going to engage a contractor to do the work for us.

We have certainly talked to the contractor

about utilizing, as much as possible, trained residents of Arctic Bay to do work. And, you know, whenever we use extra employees or more employees, we try to come to Arctic Bay.

There is a contractor who has now started on-site who is -- will be on-site for some time, because he is doing the work -- the clean up of the mill operation. And they are relying quite heavily, I believe, on Arctic Bay. And the contractor that we have engaged, although we have not talked numbers, they will be using Arctic Bay

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for employees as well.

Q I guess my second question is in regards to the buildings and the infrastructure, is it your understanding now that they will have to be burned down or whatever? Will you make it available to the rest of the Arctic Bay or to salvage any of the materials?

BILL HEATH: Bill Heath again.

What we said the last time we were here still holds true, and I think we have been consistent on this throughout all of the various meetings we have had and throughout all the submissions we have had, and that is that with respect to the infrastructure, if we couldn't find an agency or a buyer who was interested in assuming the responsibility for the infrastructure, that we would, as best as we could find, and assuming that, of course, there is still some value to it, that there is still some use for it some place, that we would do our best to find that use, and it would most likely be a use in Arctic Bay.

I think that Murray has been in touch with the head office to say if and when the time comes when we determine what it is that is surplus to our requirements, we will set about establishing a procedure or a protocol that allows -- that allows

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that to happen in an orderly fashion. You know, we have talked to some people, and I think everybody would understand that the last thing that we would want to have happen is there is just a free-for-all that people are coming in and helping themselves to

what it is they want or they need. Whenever -- when the time comes, and it will come, I will want it orderly, want it to be safe, we want it to be in the best interest of the people in Arctic Bay, but we are just not quite there yet.

Thank you.

CHAIRMAN: I'm sorry, I don't know your names.

Q LEAH OQALLAK: I'm Leah. I'm the opposer to the tailings -- tailings pond. I'm really against that. As I check those gravel and sand and gravel and shale, the shale will be the first material to be on -- to be laid. That black shale will be the first material? That's her question.

A BILL HEATH: Sorry, Mr. Chairman, we seem to be having some problems with the translation.

The layman's answer of the question though is, yes, the shale is the bedrock in the material.

Q And I check the material, the shale, when I put it in the water, the fragments like small sands tends

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to float like in the fragments, so I think the black one, when I put it in the water, it sank to the bottom right away without any of it floating. Whether -- I don't know if you are trying to just cover it with the black shale, and I think the intention for the shale is to go in between the big rocks. Is that the intention why you were using the shale?

JIM CASSIE: Chair, Jim Cassie again. Hopefully everyone can hear me again without the microphone.

The lady had a question, and I think she was concerned that the shale here was potentially going to fall, I think, into the openings of the rock. If she was thinking about the rock fill where we have big rock piles, and that is true in that a little certain amount will certainly go into the voids and will have to fill those spaces, and nominally that has been accounted for a little bit. Some of it will go into the rock fill to cover those openings in the rock, that will happen for sure. But it will be placed in there, packed in there so that it is not going to continue to fall

and make, you know, an irregular surface. It will be tight in there.

Now, of course, we are also going to place

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shale on top of the tailings. The tailings are, of course, a very fine grained material. Most of the tailings, of course, at depth are frozen, although during the summertime, some will be thawed a little bit. And we do have to be careful a little bit, that when we place this, this material here, it doesn't move all this around. But we think we have a procedure, which is in the cover report, to try to prevent that from happening, and we will basically check that this material doesn't get mixed with this one when replacing them. We will check it to make sure that that doesn't happen. So I hope that addresses her question.

Q Yes, you answered.

The boulders or the big rock there with a hammer, you mentioned it is hard to break, that will be the armour material, sand and gravel?

A Yes.

Q Them black one, shale bottom and the sand gravel would be on top, right?

A Yes.

Q I understand the location Nanisivik and the -- so it is my -- still my concern that I heard a good side that you will be monitoring it, that's good.

And if it was in the past when we were Eskimos, you would just leave us hanging. But we

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are closer to Qadlunnaq, so at least you are listening to it now.

I even thought that the miners, when they are preparing for anything, they don't regard cost of getting anything, they just bring them anything that they need. So I thought half of the tailings would be pumped out, or at least a quarter of it would be pumped out water, or the tailings, at least. So at first I thought that was my concern, but they kept saying it would be costing too much. So since you keep saying that it is going to cost a lot, then I am a bit happier now that you will be monitoring the site, that's what is holding me

back.
But the tailings, it is a buff, the level of the water lake, and the land tends to or the lake water tends to soak land and that material is -- you know, the more material that you put on.
Niore's idea tends to seep out, so I think for that reason, you have to have good monitoring on the site. And we were taught that it is going to freeze or is it going to -- like, does it freeze solid in the wintertime, or is there a talik, I guess, in some areas?
BOB CARREAU: Bob Carreau. Yes, the plan is for it to freeze solid so that the -- right from

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the start, we are going to be introducing frost, every year there is going to be more frost coming in, and it is going to protect the tailings from moving, from migrating.
There will be no water penetrating through the cover into the tailings and discharging chemicals. The water is going to go down into the shale, in the frozen area and then migrate on.
Q So if you leave the site, then did you have some chemicals that prevent it from freezing when you were operating the mine?
A No, there are a lot of tailings that aren't frozen now. As we said, there is only 30 percent of the tailings that are thawed. What kept the tailings from feezing when we were operating it is that it was warm. It comes out in at 11 degrees, and you are putting out about 2,000 tonnes a day, that is a large heat -- a large heat source. So the area that was just freshly deposited was obviously not.
Q If you are telling the truth, then I will be happy that it will be frozen solid and that if you add more, you will build up freeze. So if that's the truth, I am happy because it is a big area. It is a big area to cover.
If you are lying in a small way, then I will do my own surveying, monitoring and make a call, so

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you will know my concern.
My big concern that tailings, because even when you showed me the material, I still don't -- I

still have doubts. Like I see this material, it is waterproof, that even on this kind of material to be on top so that it becomes waterproof, but I know it would cost a lot of money. And that if a woman were sewing this material to put on top, they would make money.

And also, I want to know because the mining areas are -- they leave this material in mining operation, is there hazardous materials like PCBs on the site right now?

A Yes, there are some PCBs on the site right now, and as I mentioned in our presentation, the PCB wastes are in a regulated container and they are safe. They will be shipped off-site this summer. And the PCBs and transformers, the PCBs and transformers will be continued to be used. These transformers are generated now at the site.

Q There is mining operations all over the world, and they use -- okay. Tailings, in other countries or when they have the mine, do they usually normally leave tailings, like just cover it? And is that normal way to have a mine?

A Yes, personally I have responsibility for seven

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mines, for the environmental issues at seven mines around the world, and at each one of those operations we leave the tailings, we cover them either with water or material, and this is the only jurisdiction that we actually put permafrost in the cover, which is even better.

But it is always the times, you don't leave -- you don't move the tailings, you leave them on surface and cover them with water or with material, something that is going to stop water and oxygen from going through and meeting with the chemicals in concern.

Q I see. And if you are going to be careful with the tailings, I agree with your plan. But if you are just going to leave it, I will be concerned because we have wildlife, caribou, rabbits and ptarmigan, and we rely on those as food. So if they get contaminated because they live on the vegetation, and caribou, they live on the vegetation, so that's why it is my concern.

Also, so am I lying that the material that you are going to put on to cover it -- and then

that means nothing will seep out when you cover that? The black shale there, if you cover that, so can you confirm to me that the shale will keep the tailings from seeping out?

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A Our tests, the tests we did at the site confirm that it stops water from going through. There is no water going through unless it is frozen. It will take -- when we put the tailings or the shale on this summer, it is going to be thawed, so it is going to take some time for it to -- it is going to take at least one season to get permafrost to cover -- to make a cover. And in the meantime it will be like it is now, that there is a receding water gone down the road, and water is contained, it is not released as it meets the criteria. And next year will be the same with the water in the season, make sure it won't be upsetting the structure.

Q The people in the front, are you Water Board? Are you Water Board members? Some members have not made any comments, so I am asking the Board if the company is telling the truth that it will be preventing tailings from seeping out or not.

WILLIAM LYALL: I guess the reason that you haven't heard me speak is I am here to listen to each side of the story and to go back and analyze what have we heard, to do the best that we can to prevent any seepage of any material.

And I want you to know, all of you, that we are not your enemy. We are here as a Water Board to try and do the best we can to protect our land,

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and to protect our land in a way that other countries in the world haven't protected theirs.

I have been on the Northwest Territories Water Board for seven years, and there are mines that are just left without even doing any kind of the restoration to them. There are some in the Northwest Territories, but to my knowledge, there is no mines that have been left alone in Nunavut so far.

And every one of the mines -- as long as there is a water board of Nunavut, those mines will be made to clean up any mess that they left behind

or going to leave behind there.

This has never happened before, it is riding on every country that they don't get this type of thing, but there is other countries that do not clean up what they work with.

This Polaris mine and Nanisivik mine certainly are going to be cleaning up, to the best of our ability, as a Water Board; so I promise you that. As long as I'm on the Water Board, we will try to prevent -- adhere to what we have put on paper. And every single piece of information that we have, we will try to put it on paper so that the land that's left as much as possible the way that they found it.

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And I think one of the things that you hear about the tailings, what I'm not hearing is how high, how deep they are going to put it, but I know what it is because I have read what they say they are going to do. And it is three metres in between some of it, there is -- if I could show you by doing this, I think you would be more understanding of what the tailings themselves could be, could be frozen forever if a thing like global warming doesn't happen up here.

And then I -- I personally -- I say that global warming, if it is true, then more likely there will be seepage. And I tell you right now, there is the new mine cleanups that are happening, the covers that I have seen so far are not seeping.

So we, as the Water Board of Nunavut, are your friends, and we are going to try to do the best we can. Like I said, for them, for the mining companies, if it was up to me, they would clean as much as possible the place that they work with.

That's my input, and I'll make more comments if need be here during the hearing. But I like to hear, I guess, our legal advisor to give part of the answer to your question.

So, Mr. Tilleman, can I have your comment, please?

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BILL TILLEMAN: Thank you very much.

The Board, again, is here to listen to

everybody. And the Board is not from the company. And you people are now asking questions of the company. And then tomorrow morning the Board will hear from the government, from the Fisheries and Environment, from NTI, from the hamlet, and then we are here to close this meeting tomorrow night.

But whenever that is, the Board goes home, and then it decides who they believe. And we have reviewed the notes, and we have reviewed the pictures and the slides and the discs and the everything, books, that you have already seen today. So we have reviewed what's been filed. The Board decides at that point in the next month who to believe, and then it writes a decision. And that decision will then amend the water license that is in place, so that's why they are here today.

The Board members don't usually talk unless they have questions to clear up things, to help them better understand what decisions they are going to make in a month. So that's why they are here right now, they are listening. They can say whatever they want, but they probably listen more right now because they really want to hear everyone

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today and tomorrow, and then it would be the time for them to form their opinion.

CHAIRMAN: Thank you, Mr. Tilleman.

Q LEAH OQALLAK: So I suggest that for Nanisivik, just for the tailings, that what we just talk about tailings, nothing else. That's my suggestion, just the tailings there.

That first material, that shale, black shale, I think that if there is global warming, that it is going to heat up since it is dark material, it would be warmer to the touch, that black shale.

A BOB CARREAU: Just say that again?

Q That first material, that first layer of shale, the land, when it is melting, the black shale is now going to melt the permafrost. Like, sand tends to warm very fast, so my -- that's my question, whether the shale will not melt the permafrost.

A Those are all very good questions.

You are right, the black material absorbs the heat more than light material, and that's also one

of the reasons why the particular armouring material is selected, because it is light in colour, because it reflects more of the heat. So we will have a lighter-coloured material on top, and we haven't factored that in to the 1.25 metres, so that adds a level of conservatism, that we

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consider it all behaving like back shale. And, in fact, the top layer is going to behave differently, it is going to absorb less heat.

And we have calculated with the warming effect, so that's calculated in there. Global warming, as you mentioned, is a concern, and so we had, as I mentioned, included modeling that takes the worst-case scenario that Environment Canada offers you now over the years, we include that in the mine. And like any engineering we do, that's the best you can do, it has to be based on some scientific data, and that is based on sound scientific data.

Q So even I suspect that we have not been told by the heath department or anyone why we have the skin conditions, skin -- like, we haven't been told what the reason is. People go out to hospitals with skin -- skin lesions or something. And I suspect that through maybe eating from rabbits and small game, maybe they are getting the skin condition. But we have not been told by any health department, so I just kind of -- that's just my suspicion.

So snow bunting, little bird landed on the tailings and it died right away, and it got -- I got scared that I saw the bird die, so that's why it is my big concern.

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So I say next time you come in, I'm going to dance in front of you to show that I was dancing to no more tailings, because I'm very concerned about the tailings. But I ate too much, so I cannot dance right now. Yeah, I was going to dance for sure.

I'm getting old, and my memory is not -- my memory is not very good. But tailings is one thing that keeps in my mind.

I even wrote notes and a letter to Water

Board and either my grandson or my -- they took them, but I wrote a letter which I neglected to mail, but I wrote it down. And written material is better.

Thank you for listening to me, thank you everyone for helping us, and thank you for informing us.

And we were told in the past that the Hudson's Bay Company were the only Qadlunnaq, they said we are Eskimos. Why were you just walking around like dogs? And that's how we were treated before, and because I was able to speak English.

And I am glad to see that we are getting people to inform us and listening to our concerns and questioning us about our concerns, so I am glad. And that's it.

0120

This is your final meeting. My question is, Is this your final meeting?

A Yes, this is our final meeting.

Q So take care. And thank you for listening.

BILL HEATH: Thank you.

CHAIRMAN: Remember to say your name.

KUNUK OYUKULUK: I am Kunuk Oyukuluk from Arctic Bay, from HTO, Hunters and Trappers Organization.

I have two comments. Nanisivik is not a concern to me. Two of us, we are responsible for the hamlet -- hamlet council, and we get support from the hamlet even when the company leaves. We will still get information from the hamlet and the HTO. So I'm not too concerned, because we will get assistance through monitoring, and so that's my first comment.

And as HTO representative, the HTO are concerned about the environment and wildlife, and they are responsible. So our concern is when Nanisivik started operation, it was not mentioned, my concern was not mentioned; I don't know why.

Because Arctic Bay have been impacted, that shipping -- ship, it brings in supplies, I guess, for Nanisivik like equipment and supplies for Nanisivik. They would haul equipment by ship.

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In early spring, when it was still March or May, when there is still ice, they would break the ice. And because it is our wildlife area -- and so my concern is that seals, we rely on the seal meat; and they have a breeding ground on the ice, that the ship went through the breeding ground of the seals.

And in July when Arctic Bay residents were out Norwhale hunting, the ship also went through the hunting ground, the hunting area. And during the Norwhale hunting, Norwhales would be scattered away by the ship. So every year they did that through the ice. For that reason right now, today, at least today Norwhales and seals -- I'm using two times, two winters that I have noticed the hunting area is no more seals around. There is hardly any seals left. I think the ship did that. Same with the Norwhale, before the shipping -- before the ship came in, there were -- we have a point there near Arwak (phonetic) to where our father and Achaka (phonetic) were the leaders, and they used to let us wait for the Norwhales in the ice. But now there isn't even -- we can't even see those Norwhales anymore. And until the ice starts breaking, they finally start going in the area, but my -- the ship does that. Those people did not

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mention that. I think the Qadlunnaq have a policy that only if they read it, they can believe it.

So the shipping caused depletion in the wildlife and -- but they did not mention that. So I think that's how Qadlunnaq operate, that they only believe something in writing, and they -- we lost a Norwhale population and seal population.

And hunters in Arctic Bay need more assistance because we rely on animals to live on or to feed us, so we need more assistance. So I need more help so that our generation -- next generation, that they will have to have food to eat. And because we were brought up from the country food, so -- and they are best food and makes you stronger, and we will be weaker population on other kinds of food.

So these are my concern, I'm Kunuk Oyukuluk. Thank you.

Q JASON PALLUK: Thank you. Thank you, Chairman. Thank you for allowing me.

I'm not from Arctic Bay originally, I'm from Clyde River. I want to make a comment that Water Board -- before Water Board came in -- like, I usually talk loud in a public meeting. I worked in -- and Arctic Bay is in Nunavut, and I want to represent by my comment, and thank you for allowing

0123

me to speak as a Nunavutmiut.

So my question to the company or to the applicant, to the company representative, as a Nunavut resident that there is one area where -- like in Nanisivik, in 2005 the mine site will be reclaimed. So my question is the land and ore contaminants or the tailings, what I think -- I work -- I used to work in the environment area that I used -- I was part of the cleanup, and my question is during your reclamation work, what will happen to the oil and diesel fuel that's on the surface on the land; what will happen to that?

A BOB CARREAU: Any oil, any diesel that's on the land, the soils will be picked up and put underground and be put in the lower lens of the mine where it be won't have an opportunity to flow because it is below the portals. And it will eventually be absolved in the permafrost process, it is part of the -- in the underground mine in Nanisivik.

Q The reason why I ask is I used to work during the cleanup. I saw where I want to be -- okay, let's say look at the size of the community hall, how high would you cover it? And let's say if you have to cover the area of the community hall, how much layer would you cover? Then if you put the oil

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that's on the surface --

TRANSLATOR: Okay. I think he is asking if you will put some material on the bottom, after you take the oil out from the surface and put the -- another layer, clean layer on top?

A Once we remove the contaminated soil, then we will contour the surface so it looks like the surrounding area.

And I'm not sure if you were asking if how much material -- you were asking how much, for us to show you in the community hall? Perhaps you could clarify that?

Q JASON PALLUK: My question, let's say, for example, through when I was working for the clean-up work, looking at the size of the community hall, if you make a ditch, the material would be --

TRANSLATOR: Okay. He is using an example from the mine site that he was involved in the cleanup where they put -- they dug out, make a ditch. They put material, waterproof material and then they put the soil materials and then made the cover, so he wants to know if you will be doing that.

A Okay. I understand. Bob Carreau.

We have -- while we were operating, we had something we called a land farm. And it is

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correct, what we did was we dug a ditch, and it was about half the size of this room, and we lined it with the material, and we put in a hydrocarbon-contaminated material because it biologically cleans itself. Biologically, bacteria gets in there and breaks down the hydrocarbons, and the soil is eventually cleaned. But because we -- that takes many years, and because we are shut down now, we are taking this soil back, and we are taking the liner up. We are putting all of this material underground, and the area where it was will be recontoured and covered because it is part of the landfill cover system.

Q The Arctic Bay is closed to the mine site. And as a Nunavut resident, I want to use that as an example, what I did when I was involved in the cleanup.

The fuel is going -- when the fuel is going to be cleaned up, then I would just say just you put the contaminated soil in a waterproof, like, ship. Sometimes it is late coming in, so that's why if you are going to use that system, then make a ditch. After the ditch is made, then put the lining, waterproof lining so the contaminated soil would be laid in that lining and cover it and put another lining on top, then the top layer would be

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covered, so that would be my suggestion.
While you are waiting, too, for a ship to come in -- like, sometimes ship doesn't come in, so not just leave it the way it is. And if you leave the contaminated soil the way it is, I would not like it.
Also, I used to work for environment. Barrels or drums were -- if you are going to use drums or barrels to contain this material, then, like, use one with a lid that you can take the lid off the barrel with -- contaminated soil would be put into a container and then shipped out.
So I used to work for environment, these are my ideas how to do it, because I'm concerned on behalf of the people here.
And so those are my comments -- that because it is in Nunavut, and we have to keep the -- our land in Nunavut clean, so -- and they did clean up in Clyde River area.
And you probably know Peter Puniak who worked in Nanisivik before, and he has told me of how they should clean up, because he worked at Nanisivik.
So also when you are working at Nanisivik for cleanup, then I would suggest that you be aware or be concerned of Arctic Bay residents when they are requesting anything, that you at least -- you

0127

listen to them and consider their request, and because people -- they will be here, they will be observing your work, so that would be my suggestion that -- and I'm glad that I was able to speak to you.
I was not happy one time at -- before the ice breaks up, ship would come in. And as Nunavut residents, our wildlife should be protected. And so if there is going to be a ship before breakup, then I would suggest that you wait until it is open water.
So these are my comments to support Arctic Bay residents. So thank you for allowing me to speak.
And last comment is Nanisivik mine will be closed for final closure, and I know Peter Puniak

from Nanisivik, he used to work in Nanisivik. Maybe he should be recognized too somehow.

CHAIRMAN: Thank you. Let's take ten minutes and give the interpreter a break here.

(RECESSED AT 8:08 P.M.)

(RECONVENED AT 8:25 P.M.)

CHAIRMAN: Ready to go?

Q SAKIASIE QAUNAQ: My concerns that are expressed, tailings -- all the tailings is a concern.

0128

And I have worked in Nanisivik during the loading. I have helped when they were loading the concentrate when concentrate is spilled out sometimes on the conveyor belt, it would spill outside. The ship would go into the ocean, so big amounts sometimes would spill to the ocean. So the concentrate in the -- along the beach, there is sculpins and cod fish along there, and they are okay. And the company does the studies.

We have not heard of any report of animals dying as a result of these spillage of the concentrate, so I'm not sure if it would be a concern or hazardous. Because if it was hazardous, there would be reports of animals dying when they are loading on the ship. Sometimes when the conveyor belts would block, it would spill.

So I think -- I could see sculpins and cod fish along in the area of the spillage, and there -- it doesn't seem to affect them. So I think the company will continue to monitor the area. And we have never heard of any reports of the effect on the animals, so that's just my comments.

I think the big concern should now be a big concern because of the studies that are done. And in 1976, they started operating mining, and since

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2002, it had operated every year. And ever since then there was a number of years there should have been dead animals around if it was hazardous. So now when it has closed operation, they just leave everything still now, it is not moving around. So to me, personally, I think they will be cleaning up

that.

But my concern, I saw the lake -- it used to be a lake naturally, but it was -- they put a Dike, so only one side of it was being pumped into. So they wanted a different location to dump the tailings. But it was exposed after the tailings was on land or it was exposed, but it is a big -- it used to be a small pond, but now it is a bigger pond now. Perhaps, you know, it has added big level, and someone suggested to pump it out, and I think it would take more than ten years to pump it all out. And I know the bottom of it is frozen, and they try the concentrate and they haul it to the storage shed, so that area in the storage shed, sometimes it is very high. And even sometimes when the concentrate even freezes, so just that they had to dig out the frozen concentrate. So the number of years being there, it is going to freeze for sure, and it is going to take a long time to dig it out.

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So my only concern would be that Dike, because it is gathered in one area, and there is a number of puddles or ponds in the area, creeks or rivers.

When the water is freezing or receding and they burst out, you know, we can see the frozen river sometimes in -- where they burst out, they would leave some areas open. So when it is freezing, when it starts freezing, it bursts upwards. So what I am thinking is when you cover the tailings, the slope area will keep one area open water or keep it so that it can drain down slowly to the, I guess, retention pond or something.

And last year there was a meeting, the boss was away, I think, and there was another boss here, and he said that -- how thick the material would be. And then we heard later on that it would be one metre thick in the shale. And if it is only one metre, then I think only one metre would somehow eventually expose the tailings. So we saw the material that will be used because it compacts and the armour material -- the sand that's used at the airport for the airport cover material. The

black shale there is used as compact material because it has been used the whole time the mine is

0131

operating. If you are going to contour the gravel, you know, at least keep some areas as portals. And I would suggest more than one metre thickness.

And it was mentioned that we heard that -- okay. I'll make other comments later on, maybe tomorrow, but -- because I heard that they have good plans to clean up. Thank you.

Q MOSES OYUKULUK: I am Moses Oyukuluk. I have a question. That shale that we saw, sand armour, are you going to mix sand with shale, or are you just going to use shale? Are you going to mix those two materials or just one material at the time, one shale and one sand?

A BOB CARREAU: No, we won't mix the materials. We put the shale down in layers so that it is saciassimation (phonetic), it will be compacted. We will put it down in layers and then put armour on top.

Q Maybe the one in the glass, the reddish material, is it added with any other material? That reddish, that gravel there you got there in the glass bottom, are you going to remove the sand and just use the gravel?

A No, we will use the material as we find it. It is graded, as they say, so there is a certain variety of grade sizes in there. There is some small

0132

pieces and some big pieces, and that makes it the most stable for erosion protection. So we will use it as it is natural on land, as mentioned.

What we are trying to do is duplicate natural processes that -- we know that process works. It is a very good armouring material, so that material is going on top.

Q Yeah, my concern is that if it is too sandy material, it will just go into wind blown -- be blown by wind. There is too much sand. And humans -- it will be only one metre thickness. I think it is too thin for me. I think two metres would be more appropriate.

When the mine started, I used to work in

different gravel areas, and I know that the -- it is about two metres down, the permafrost, so I think two metres would be more sufficient to keep it frozen. And it has been a lot of years when they operate, more than 25 years or almost 25 years, and it's a big area to clean up in two years, only two summers to fall.

I don't think it will be completely reclaimed in that time, two years. I would suggest that it can be possible to be more than two years. That's my suggestion.

Our request for training for heavy equipment

0133

operator and get apprenticeship program going, let's say, for mechanic, because we didn't get any funding for that. The community, we wanted that training, but government or somebody was not supporting us. And I heard the Legislative Assembly, they don't seem to be supporting us either.

And I know the Nanisivik company have helped the community a lot in terms -- more than employing 40 people from the community, and we lost those income to the community. And some problem -- some people are, you know, are desperate for work. So that's the impact on the community, that we lost that jobs, those incomes. So I think we were trying to request those training opportunities, and at least four or five years they should do the work.

I know the community has benefitted from the mine operation through employment, and I think government, to my eyes, is not willing to help us. So I think Nanisivik alone has the burden of providing benefit to the community.

So as I mentioned, it operated more than 20 years, and sometimes the numbers of employees from Arctic Bay would increase and decrease, so it fluctuated, but it benefitted the community. And

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after the mine closed, we lost that.

I will make other comments, we have tomorrow too, so I'll try to make my comments short.

MARY ATTAGUTAALUK: I am Mary Attagutalluk.

You mentioned that we should feel free to express our concern. My concern is the dome or cafeteria, I guess, or dome, that they have the utensils and cooking -- cooking ware and cooking stoves, and it should be contributed to the community. Utensils, I guess, that big pots and stuff like that should be given to the community and not just destroy them. It is not going to look -- at least give us those kitchen pots and utensils.

If we talk negative on any subject, then it stays negative. But we have to work together and look at the positive side of the mine site, of the mine and not to dwell on the negative side.

But I also mention the positive side of it that the -- we need to work together, and the Water Board needs to be satisfied as well, and the community needs to be satisfied. So not just to -- as people which should not just think about the bad side of it, but also be optimistic in terms of the outcome that can happen in the closure. So that's my comments.

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CHAIRMAN: Thank you, Mary.

TOOTALIK EJANGIAQ: I am Tootalik. I have attended public meetings when Patrick is having a public meeting. I watch presentations.

We mentioned earlier that this -- we will have a chance tonight to make our presentation. And the infrastructure buildings that are not going to be used are being demolished. I got upset one time because Patrick didn't allow us to express our concern that time, but I am happy now that we can talk about our concern.

So my comments will be on the infrastructure and buildings. And in Arctic Bay, we are the only communities without cabins or hunting cabins. Other communities have cabins. And as Inuit, we have no savings in terms of bank accounts. Like, we spend money right away, we don't save money, so we don't have any savings to purchase cabins.

So these buildings, materials, although the plan is to demolish them, but I will be upset if they do that, if they just demolish them. So I will work hard to get it through the court to try

and get those material.
So I want the company and Water Board and the people here and that, the Water Board is here to listen to us.

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So I want my suggestion -- would be if we have to move the building here, we heard it will cost too much money because they relocated ten units from Nanisivik to here. And as Inuit, we -- when we want something, we go for it. So if we can -- like, even myself, I can go up there and dismantle a building. And because it is very close to -- we can load onto a sled and just haul them here, it is possible to do that. But I think it would be -- people are open to grab them. Me, I might be left behind, so that might upset me too.
So I think some buildings are useless up there, it is better to demolish them. But the usable materials -- and I know the smaller dwellings -- like in other communities, they have hunting cabins, and you can transport them. So I think it should be considered, and I think they...
Houses up there have household furniture and appliances that can be used, so if that doesn't happen, I will be upset for sure.
So that's my comment, that we should be considered of getting building materials and the household items, that there must be a way for us Arctic Bay residents to gain those materials.
TOMMY KILABUK: Thank you, Chairman.
So I heard that there was a Government of

0137

Nunavut representatives, is there anybody here from the Government of Nunavut? There.
CHAIRMAN: There is legal counsel Susan Hardy, and the other one, Earl and Rhoda.
Tomorrow they will be making a presentation.
TOMMY KILABUK: So my question, the reason why I am doing -- is that listening to the people's concerns, the houses that were being moved here is a concern that it would cost too much. And the Premier recently said the houses are contaminated and, therefore, they cannot be relocated here, so I don't really believe the reasons.

Like, if the people that were working in Nanisivik, they could have -- you know, if it was dangerous to the health, then they would be dead by now. But Murray is still alive, he worked there a long time.

And I think in some way we are being ignored. Like, I still argue with Murray, because he is still alive. So in some way, they say it is a hazard. But as Inuit, I need to understand the Government of Nunavut, their reasoning behind their unwillingness to give the material or buildings.

So I think I suspect that they don't want to spend money, and perhaps that's the reason why they don't want to give us the buildings, is because the

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funding.

CHAIRMAN: Tomorrow government will be making a presentation.

TOMMY KILABUK: And if so, I can say that I want two buildings before they are burned, and I am able to take it apart and move it. I am willing to fix it.

And before the government decides to throw anything, put aside two buildings for me.

QAPIK ATTAGUTSIAQ: I'm Qapik Attagutsiaq. I will talk about the old days first.

My husband Attaqutsiaq, I say Attaqutsiaq, worked in Nanisivik, and he got injured one time. And after today when people are getting the Workers' Compensation, I finally thought about how maybe -- because that time he was not qualified or did not get any Workers' Compensation because he never got any payment for the injuries. So in 1981 he got injured, and he didn't get any Workers' Compensation, so what I'm -- my question is, can -- because he was not given a Workers' Compensation that time, and because he -- something fell on him and he got injured or he fell down and got injured. And because that time there was no Workers' Compensation, I guess -- and because today we hear people getting paid for being injured, so I thought

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maybe if somehow they can be retroactively get compensation for that.

So my comment is that I don't think he ever received any Workers' Compensation, and his pay increase never -- or his paycheque never increased. And he stayed on the same level of pay during the whole time, and more than 20 years he worked for the company, so these are my concerns also.

Moving on to a new item, the buildings are being mentioned that they will be buried underground and demolished, so we are -- we have housing shortage in the community. And young people are increasing in numbers, they are starting families, and they are not able to have jobs.

I want the young people to learn a trade in construction. At least some -- bring some building material so that young people can learn to build a house. And, also, it is very close to Arctic Bay, it is easy to transport material here, so it is possible to do that.

And so a human body can do activity when it is young, so anyone -- any young person can handle hauling material here.

So I'm more than 80 years old, so our young people here should learn to construct a house and use those materials from Nanisivik to teach the

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young people.

CHAIRMAN: Okay. What I would like to do is just go back to item number 9, questioning of the applicant by parties respecting the applicant's presentation. I do believe that we have Arctic Bay hamlet to ask a question to the applicant. Do I see anyone wanting to ask the question to their presentation?

Does NTI have any comments or questions about their presentation that they made earlier this afternoon?

GEORGE HAKONGAK: No comments or questions.

CHAIRMAN: No comments. Thank you.

Okay. Does GN have any comments or questions with regard to the applicant's presentation that was done earlier this afternoon?

I hope you can see what I am doing. I am going back to item number 9, giving the community of Arctic Bay a chance to question the applicant. I'm going back to item number 9, questioning of the

applicant by the parties representing the applicant's presentation. So they have finished their presentation. Susan?

GOVERNMENT OF NUNAVUT QUESTIONS THE APPLICANT:

SUSAN HARDY: Thank you, Mr. Chair.

I just wanted to ask just one question, it

0141

has to do with signage especially around the tailings area. Is there any plan for your end of your stay here then the Board has approved closure, that there will be some signage for at least the first part of reclamation, give a sense of what that was and why we should stay away from that area? Are there -- that was the first kind of part A to the question. And part B, Are there other areas that should be signed if there is some materials that should be stayed away from?

BOB CARREAU: Well, we haven't given it a great deal of thought. If signage is required now in the license, and signage is being maintained now through the license. It is, as we pointed out, in respect of the water quality will be no detrimental to people or to wildlife when we finish.

The thing about signage is that it is temporary, and it gets knocked down or it starts to get ratty. Signage and fences generally won't work for long term, so we are hoping to stay away from it. But we follow the directions from the Water Board. We are keeping signage posted during the current license period.

SUSAN HARDY: Thank you.

CHAIRMAN: Thank you. Carl McLean and associates, do you have any comments or questions

0142

with regards to the application?

CARL McLEAN: Thank you, Mr. Chair. I am Carl McLean. And we will defer our questions until we give our presentation tomorrow. Thank you.

CHAIRMAN: Fair enough, thank you. Environment Canada?

ENVIRONMENT CANADA QUESTIONS THE APPLICANT:

COLETTE MELOCHE: Thank you, Mr. Chairperson. Colette Meloche.

I just have one quick question in regards to

propane. In your preliminary schedule for the reclamation activities that were shown during the presentation, you had indicated that the final shipment off the site is to occur in 2005. However, in a previous written response to the Environment Canada questions, you had indicated that propane, any remaining propane will be shipped off-site in 2006. So I was just wondering, dealing with the propane, when any remaining propane would be sent back to the supplier.

BOB CARREAU: Good catch. 2005, would be shipped off-site in 2005.

COLETTE MELOCHE: Thank you.

CHAIRMAN: Thank you. DFO, any comments, questions to be addressed to the applicant's presentation?

0143

DERRECK MOGGY: Derreck Moggy with Fisheries and Oceans. I think tomorrow in the intervention I would like to put my comments in at that time.

CHAIRMAN: Okay. Thank you.

Okay. As I stated earlier, I was hoping that everyone would agree that with regard to the interveners, I am hoping that Arctic Bay will be the first to make their presentations; secondly, NTI; thirdly, GN; fourth, DIAND; fifth, Environment Canada; last but not the least DFO, that's everyone agreed? Is that okay with everybody? Ramli?

RAMLI HALIM: I am Ramli Halim from Acres International. I think I was going to put a presentation and an intervention tomorrow, so I am hoping that would be the last one.

CHAIRMAN: Thank you. Thank you, Ramli. Arctic Bay?

SAKIASIE QAUNAQ: I forgot one question. During those open pit or the portal in 1969, they made -- in 1979, it is very big, we can see the exposed clay cliffs. And they said they will return it to their natural state. So in order to return it to a natural state, it is going to take a lot of fill. So are you actually going to put gravel in that open pit area, return it?

0144

BOB CARREAU: Yes, the intention is to backfill. There is still a significant amount of waste rock on surface. There is also some interdemolition debris that will go in there and make up the volume, and then it will be topped with shale. So it will be close to the natural topography that is out there now.

Q The other question, in the middle, the big pipes or some of it is the piping. I think, you know, the ventilation, I think it refers to the ventilation in the mine, that one could easily go in, so that should be covered properly, too.

CHAIRMAN: Thank you. Mr. Mayor? What I would like to do is give the NWB legal counsel to make a comment here.

BILL TILLEMAN: Thank you, Mr. Chairman.

And so in summarizing where I think we are, sir, is we are to the point where DIAND wanted to take tonight to think about its questions and start first thing in the morning.

And also if it is okay with the Board, then the staff also has a few questions to ask, which we would prefer to do that first thing in the morning. So perhaps then it would be a good time to call it a day, and then we -- recognizing that the -- reminding the applicant that they are still under

oath.

We will start first thing tomorrow morning at a time that you decide. And whenever that is, we will get back and start first with DIAND, and from there we will go straight to the staff. And then when that is done, if the Board has any final questions, then we dismiss the applicant. And then we can go to the next first presentation from the hamlet. That would be my advice to you, Mr. Chairman.

CHAIRMAN: I will accept your advice. I would recommend we start at 8:30 sharp tomorrow morning or earlier. Does 8:30 sound okay? All right. We will see you all at 8:30 tomorrow morning.

HEARING ADJOURNED AT 9:10 P.M.

0146

CERTIFICATE OF TRANSCRIPT

I, TARA LUTZ, hereby certify that the foregoing pages are a true and faithful transcript of the proceedings taken down by me in shorthand and transcribed from my shorthand notes to the best of my skill and ability.

Dated at the City of Edmonton, Province of Alberta, this 8th day of June, A.D. 2004.

Ms. Tara Lutz,
Court Reporter

0147

EXHIBITS ENTERED IN THE NUNAVUT WATER BOARD HEARING
JUNE 3, 2004

PAGE NUMBER:

EXHIBIT NO. 2:

CANZINCO PRESENTATION, HARD COPY.... 86:10