NUNAVUT WATER BOARD

FINAL CLOSURE AND RECLAMATION OF THE NANISIVIK MINE

JUNE 4, 2004 VOLUME 2

LOCATION: INUUJAG SCHOOL, ARCTIC BAY, NUNAVUT

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1	(Hearing commenced at 8:44 a.m., June 4, 2004)
2 3 4	CHAIRMAN: Good morning, ladies and gentlemen. The Nunavut Water Board hearing will now proceed. Welcome back.
5 6 7	Okay. Good morning. We are on to item number 9. I do believe that Carl McLean and DIAND, you had some questions or comments to be addressed

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8
         to the applicants? Thank you.
    9
         INAC QUESTIONS APPLICANT:
    10
       O CARL McLEAN:
                                   Thank you, Mr. Chairman.
             It is Carl McLean at Indian and Northern
    11
   12
          Affairs Canada, Nunavut Region. We do have some
   13
         questions on the CanZinco presentation.
   14
             Regarding CanZinco's May 14th, 2004
   15
         submissions to the Water Board, we are looking for
   16
         confirmation that what was in that submission will
   17
         be completed as identified. Specifically number 1,
   18
         commitment to revisit the NRCAN analysis using
   19
         current volume written of professional opinion on
   20
         future risk associated with mine stability issues.
   21
             And number 2, can they provide copies of the
   22
         opinions from the mine inspector, Worker's
   23
         Compensation Board and the other opinions that have
   24
         been imposed?
   25
             There was some mention yesterday in their
   26
         submissions that some mine openings are closed and
0152
    1
         they do have the approval on them.
    2
             Will they also be providing the science for
    3
         closure of the ventilation? So I will just ask
    4
         those few questions right now.
       A BOB CARREAU:
                                   To the three points, yes,
    6
         we are committed to the NRCAN analysis.
    7
             And I spoke to Mr. Murphy, we are going to
    8
         get our experts together later in the week,
    9
         following the hearing this week.
    10
             The approvals for the mining openings, when
    11
         Bill Heath was acting as general manager, we had a
   12
         letter that was sent to the Mines Inspection
   13
         Branch, to the chief inspectors saying these are --
   14
         these are our responses. We had an inspection that
   15
         said these are things that you have to do for these
         closures, and we responded to that saying these are
   16
   17
         our intentions. And there is no other
   18
         correspondence.
   19
             The way that the Workers' Compensation Board
   20
         works, they don't tell you you do something right,
   21
         they tell you you do something wrong. We haven't
   22
         heard anything saying the closure wasn't right.
   23
          We think we can provide this documentation.
   24
             To the last point, yes, ventilation will be
   25
         provided by the proposal on the closure of mine
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- 1 Q Okay, thank you.
- Next question is in regards to the landfill.
- 3 Can you confirm your commitment to include BTEX and
- 4 components in your monitoring for the landfills, in
- 5 addition to the existing hydrocarbon monitoring
- 6 program?
- 7 A Yes.
- 8 Q Can you confirm that your geotech analysis for the
- 9 west open pit and west open pit access road will be
- 10 undertaken in your May 14th letter to the Water
- 11 Board?
- 12 A Yes.
- 13 Q This is a question regarding concrete slabs by the
- present mine site. Do you have a list or a number
- of locations of the concrete slabs?
- 16 A Every concrete slab normally, I think that's one of
- 17 the smaller items that are -- we expect there will
- be some small items that will continue to come up
- as we proceed in the actual location of each
- 20 concrete slab. It has not been particularly
- 21 numerated yet. We have done the major ones. And
- we did submit a plan suggesting how we would test
- 23 to make sure there is no contamination. But the
- 24 minor ones, there are some that exist that we need
- 25 to catalogue into our list. And this would be one
- of the ongoing changes, I guess, to the plan or

- 1 additions to the plan as we come across these
- 2 things.
- 3 Q Will all concrete slabs be inspected in the process
- for the protocol, as for the larger slabs?
- 5 A Yes, some of the slabs we expect will be -- well,
- 6 there are -- there are some very tiny ones, like
- 7 the emergency generating station in town. These
- 8 ones will just come out. So if they are coming
- 9 out, they won't be treated the same, they will just
- 10 be removed.
- But anything that we propose to leave in
- 12 place will be the same protocol as for the larger
- 13 slabs.
- 14 Q Thank you.
- Next question to CanZinco is, What is the

16 scope for the runway and remediation, what's the 17 scope on top of the runway? 18 A Yes, we will be -- it is in the plan. It is our 19 intention to recontour the small shoulders there 20 and collectively the runway wiring. Basically 21 that's it. 22 There is some soil contamination that has 23 been identified in the ESA. 24 Q Thank you. 25 Just with regards to the schedule of activities yesterday. We haven't really had a 26 0155 chance to look at it in detail, but INAC is also of 1 2 the opinion that quarterly reports that we will be 3 submitting should include the implementation 4 schedule that's amended, because of the 5 understanding, I'm sure, that there will be 6 amendments as it goes. 7 The next question, in your submission 8 yesterday, you spoke about the possibility of 9 instrumentation being damaged or displaced. If 10 monitoring instruments are damaged or displaced or 11 changes to the instrumentations are required, 12 yesterday you said that the engineer will advise 13 CanZinco on this. In our opinion, any changes or 14 removal or amending any instrumentation would require the approval of the Nunavut Water Board. 15 A We have no reply. 16 17 O Okay. The next question, it is regarding your 18 statement about the footings of the dock. You said 19 yesterday that CanZinco does not own the dock. Can 20 you give me or us your understanding of what you 21 consider to be the dock? 22 A Two things I would like to say is that we have a 23 meeting scheduled for Friday, one week from today, 24 with DFO to discuss the lease of the dock. They 25 are coming into the Breakwater office. The land 26 manager from the Burlington office, and I believe 0156 their legal counsel, is going to attend the 1 2 meeting, and we hope to get some clarification 3 there.

But the actual footings of the dock are not

ours, that's what we consider owned by others. The

4

- 6 associated infrastructure, the loading facility,
- 7 the concentrate storage shed, those are ours. And
- 8 as we have mentioned, transferred those to the Wolf
- 9 Den, and Wolf Den will be removing those. And we
- will be remediating the area, and that is our
- 11 responsibility.
- 12 Q Thank you.
- Does CanZinco own the tank farm and
- 14 infrastructure?
- 15 A Yes, to the best of my knowledge, we own the tank
- 16 farm.
- 17 Q Just one last question. In our April 26th
- 18 questions regarding the question about
- 19 contingencies in the event landfill is not
- 20 performing as is expected or as inspected,
- 21 yesterday you said that the contingency plan is
- provided in the plan.
- We have seen small aspects of contingencies,
- but have you confirmed where in the plan the
- 25 contingencies for the landfills are required? This
- was also brought up at our technical meeting.

- 1 A On page 30, Section 3.8 refers to the contingency
- 2 plan. It is also linked. It says in there -- it
- 3 is described in the covers reports. I guess what
- 4 we believed to be a major possible problem is they
- 5 are linked to the stability. So the covers report
- 6 deals with contingency for cracking, for leaking,
- 7 for change of drainage from the median and
- 8 cracking. So all of those are dealt with in the
- 9 covers report.
- The contingencies, basically, are the
- increased frequency of monitoring. I guess there
- is some, "a high degree of confidence", that we
- expect this thing is going to perform as it has
- been in the past. We wouldn't expect that when we
- enhance the closure, that it is going to degrade.
- And so far, inspections by DIAND and numbers that
- we reported indicate that there are no contaminants
- leaching from this point.
- 19 Q Thank you.
- Mr. Chair, we have no further questions.
- 21 CHAIRMAN: Thank you, Mr. McLean.
- Water Board staff, do you have some comments,
- 23 questions to the applicant?

- 24 WATER BOARD STAFF OUESTIONS APPLICANT: 25 Q MS. FILIATRAULT: Thank you, Mr. Chairman. 26 Dionne Filiatrault. 0158 1 You refer mostly to the May 14th submission 2 as follow-up to the technical meeting. And in 3 Section 3, you refer to building materials and 4 pieces of the ESA. I'm wondering, you make 5 reference that results are going to be made 6 available. When should the Water Board expect 7 those results to be submitted? How long is the 8 analysis going to take so that we can reach a 9 schedule? 10 A BOB CARREAU: Some of the samples will be 11 collected today or tomorrow while Eric is on-site. 12 Gartner Lee did our ESA assessment, and he 13 has considered this a part of that project. 14 So four weeks, six weeks at the outset. But 15 our position is that this shouldn't hold up the approval; it could receive conditional approval. 16 17 And as we stated at the March -- at our 18 technical meeting, the possibility that PCBs were 19 used in these, we feel, are very, very low. 20 Q With regards to Section 4, when you discuss the
 - 21 analysis, BTEK analysis at the landfill site, does
 - 22 CanZinco still plan to do a full metal sweep as
 - 23 well? What locations are proposed for the
 - 24 monitoring, and what's the frequency those are
 - being proposed? And what is being proposed
 - 26 post-reclamation period?

- 1 A Page 14 of the reclamation and closure monitoring
- 2 plan shows a station in NML-26. NML-26 is the
- 3 seepage directly at the toe of the landfill, and
- 4 this will get BTEX analysis added too, in addition
- 5 to total metals and suspended solids and the rest
- 6 of the parameters that are listed there. And it
- 7 would be the same frequency as is listed in here,
- 8 but we are going to add BTEX.
- 9 Q Thank you, Mr. Chairman. It is Dionne Filiatrault.
- 10 With respect to the soil sample for at the
- 11 ANFO plant, is there a need for any BTEX analysis
- to be done in this area of the ANFO plant?
- 13 A The only storage there was fuel oil. There was no

- 14 gasoline storage or anything else there, so it will
- 15 just be fuel oil, and for ammonium nitrate and the
- 16 hydrocarbon contamination that is already planned.
- 17 Q In that same letter, item 12, with respect to the
- 18 planned submission of the abandonment restoration
- 19 plan, you indicated that any planned submission
- will be submitted as of November. And this is sort
- of not the impression that I was left with at the
- 22 end of the technical meeting where it was an
- indication that a full A&R plan will be submitted.
- 24 Maybe I'm wrong, and that's fine, but I just wanted
- 25 to know whether that -- it is a question to you,
- but also to the other parties, because is this

11

- 1 acceptable? Is this what we are expecting to get
- 2 from this as far as information requirements to the
- 3 A&R plan?
- 4 A Well, you have seen before the documents that make
- 5 up the A&R plan. It is not a question of rebinding
- 6 this and reissuing this, it is -- there is a fair
- 7 amount of information that would have to be
- 8 reissued. We think that it would be best to issue
- 9 one appendum, and that would contain all the errata
- and anything else, any supplements.
 - If there are any individual documents upon
- 12 receiving approval that were substantially changed,
- which we are not expecting, then we would change
- that component, to reissue that component.
- But our plan is to just issue something that
- will stand alone and be a public registry. That
- would have to be consulted as an appendix to this.
- 18 Q Thank you, Mr. Chair. I have no further questions.
- 19 CHAIRMAN: Thank you, Dionne.
- 20 Patrick?
- 21 Q PATRICK DUXBURY: Hi. Patrick Duxbury.
- Just one quick question with regards to a
- comment that was made yesterday by Tommy
- 24 Tatatuapik. He made a number of comments. And one
- of them I just wanted to clarify that CanZinco's
- trouble in responding to it is regarding sampling

- 1 across the Strathcona Sound, I guess, of the
- 2 contamination or impacts that come from and
- 3 directly over to the Strathcona Sound. I would

- 4 just like to get a response or clarification or
- 5 some indication that CanZinco does think it is
- 6 something they wish to respond to at this time.
- 7 BOB CARREAU: The ESA process, as we
- 8 spoke about during the presentation, is a standard
- 9 methodology, and part of that is doing some
- 10 literature research of what's gone on at the site,
- and then a scientific approach to where the impacts
- are. And the impacts are delineated to the area
- that I put up there on my second slide yesterday.
- 14 So it is not our intention. We feel that there are
- no off-site impacts, that the impacts had been
- 16 identified and sampled and quantified, and
- 17 remediation measures have been identified.
- 18 PATRICK DUXBURY: Thank you. I have no
- 19 further questions at this time.
- 20 CHAIRMAN: Thank you. Water Board
- 21 members have any questions or comments?
- 22 WATER BOARD MEMBER QUESTIONS APPLICANT:
- 23 CHARLIE INUARAQ: Yesterday, just to
- 24 clarify, I heard -- I thought I heard you say
- 25 hamlet and HTO will be kept informed, so is that
- how you will do it?

- 1 BOB CARREAU: Yes, we will be keeping the
- 2 hamlet office informed, and we will expect that
- 3 they will be sharing that information with the
- 4 Hunters and Trappers and any other interested
- 5 parties via a quarterly report and the annual
- 6 report.
- 7 CHAIRMAN: Thank you.
- 8 Are there any further questions or comments
- 9 to be addressed to the applicant with respect to
- their presentation yesterday?
- Okay. Next item. Item number 10,
- presentation by the interveners, and we start with
- the mayor, Arctic Bay Hamlet. Thank you.
- 14 BILL TILLEMAN: Please state your name for
- 15 the record and spell your last name.
- 16 NIORE IQALUKJUAK: Niore Iqalukjuak,
- 17 I-Q-A-L-U-K-J-U-A-K.
- 18 (NIORE IQALUKJUAK SWORN)
- 19 PRESENTATION BY THE HAMLET OF ARCTIC BAY:
- 20 NIORE IQALUKJUAK: I will be reading a letter
- 21 from the MLA. And before I start, the MLA

22 assistant is here. 23 My best wishes for protecting the community. 24 "As the Member of the Legislative Assembly 25 of Quttiktuq, I am pleased to extend to the 26 community and residents of Arctic Bay my 0163 1 best wishes for a productive meeting. 2 As the Legislative Assembly is 3 presently in Session, I am unable to be 4 with you this evening for this important 5 event. 6 I know that Arctic Bay is frustrated 7 with the lack of success in addressing the 8 needs of the community. Over the past 9 couple of years, we have heard many 10 announcements from the Government with respect to such issues as how the community 11 12 can take advantage of the existing 13 infrastructure in Nanisivik. We have been 14 disappointed that there has been little 15 forward movement on identifying alternate 16 uses for the site. 17 As the MLA for Quttiktuq, I am 18 committed to being the community's voice on 19 this issue. I will continue to speak out 20 on the need for the Government to work with 21 the community and find opportunities for 22 training and employment. Although we know 23 that the Government does not have unlimited 24 funds, we are entitled to be treated 25 fairly. 26 I have asked Mayor Iqalukjuak to 0164 provide me with an update on the success of 1 2 this meeting. As tomorrow is the last 3 sitting day of the Legislative Assembly's 4 present Session, it is my intention to make 5 a statement in the House on the issues 6 surrounding the mine closure. I will make 7 it clear to the Government of Nunavut what 8 the concerns of the community are and what 9 action we want to see accomplished. 10 Thank you." 11 Letter I wrote or submitted May 18th.

12	"First off, I wish to apologize for not
13	being able to attend the technical and
14	pre-hearing meetings that were held in
15	Yellowknife from May 4-6, 2004. I would,
16	however, like to acknowledge the efforts to
17	promote public awareness on the Nanisivik
18	mine reclamation made by Pat Duxbury, whom
19	is the Mine Reclamation Coordinator for the
20	Nunavut Water Board. His efforts to make
21	the public aware of the submission made by
22	CanZinco on the final Nanisivik reclamation
23	by meeting with myself, students enrolled
24	at the Arctic College pre-trades program,
25	Ikajutiit Hunters and Trappers
26	Organization, and also by holding a public
0165	
1	meeting are greatly appreciated.
2	Although I understand that the
3	information that I am submitting is
4	addressed to the Nunavut Water Board, I
5	also understand that there are departments
6	from other concerned parties within this
7	hearing. Therefore, I will address each
8	item as addressed by my council and by the
9	hamlet working group, as well as by the
10	general public.
11	The concerns that were discussed and
12	addressed at the public meeting held on May
13	11th, 2004 and by the hamlet council and
14	the hamlet working group held on May 17th,

The concerns that were discussed and addressed at the public meeting held on May 11th, 2004 and by the hamlet council and the hamlet working group held on May 17th, 2004 is as follows: Monitoring of the mine site to the year 2010 is considered too short compared to the DEW Line sites that are monitored for a period of 25 years. We ask for the same number of years, 25 years, in monitoring after the completion of the cleanup of the site.

In regards to the concrete foundation for the buildings, including the mill from the previous meetings, there were indications that the concrete foundations would be torn up and buried and the ground

returned to its natural state. However, it

is now stated that after assessments and that there are no contaminations underneath the concrete foundations, the foundations will be covered with shale and gravel. We ask that the concrete be torn up and buried underground, as previously stated, and then the ground covered with shale and gravel and returned to its natural state, as previously stated.

Buildings - there has been several alternate-use studies in regards to Nanisivik since the announcement that the mine will be closing. I will be addressing this subject in several paragraphs:

The part of the feasibility studies included moving 15 housing units in Nanisivik owned by the Government of Nunavut to Arctic Bay. These studies indicated that it would be too cost effective to move the units, and it is stated that none of the units would be moved to Arctic Bay, with the addition that the units were too contaminated. It was also then indicated verbally to me that due to the costs, the only way the GN would be

able to replace the units would be by the number of families that moved to Arctic Bay that were not able to attain housing.

To my knowledge, there have been a total of six families that have moved prior to and after the closure of the mine. And that includes two government employees that were laid off prior to the announcement of the closure of the mine, and these families would have to be in a state that housing would not be able to be allocated to them. Three of these families were already allocated a unit by the local housing association. None of the said units have been replaced, other than the already allocated units for Arctic Bay by the Government of Nunavut. Therefore, we ask that the GN allocate six units to Arctic Bay as per their indications.

20 Furthermore, due to the lack of 21 cooperation from the mine to do rental 22 deductions on their payroll from their 23 employers, the local housing association 24 has uncollected arrears from tenants that 25 are previous mine employees in excess of 26 \$197,417.32, that are a certainty of ever 0168 1 being collected by the local housing 2 association from their tenants or former 3 tenants, which makes it a possibility of 4 eight tenants being evicted from the public 5 housing units. In the event that these 6 tenants are evicted, what other housing has 7 been planned for these families by the 8 Government of Nunavut? 9 In addition to the decision not to 10 move the remaining units from Nanisivik to 11 Arctic Bay due to contamination, there were 12 a total of ten housing units that were moved to Arctic Bay from Nanisivik in 1996. 13 14 The concern is, what state of contamination 15 has this transfer of ten housing units caused to the citizens of Arctic Bay? 16 17 Furthermore, what assurance can our 18 citizens be given that these units are safe 19 to live in? 20 As part of the feasibility studies, 21 there was two alternate uses for Nanisivik: 22 One being turning Nanisivik into an army 23 practice centre, and then the other turning 24 Nanisivik into a training centre for the 25 whole of Nunavut. The people of Arctic Bay 26 had asked that Nanisivik become a training 0169 1 centre for the whole of Nunavut. That 2 seemed a certainty until recently where it was indicated that the training centre 3 4 would then be located in Rankin Inlet. 5 With that being said, CanZinco has 6 indicated that they will burn the units in 7 Nanisivik and remove the ashes to the 8 underground. Therefore, the residents of 9 Arctic Bay have indicated an interest that

they would like the possibility of salvaging the units and turning them into their own units or salvaging some of the material to make shacks or shelters out on the land. We ask that the buildings be made available to the residents of Arctic Bay or Pond Inlet to the time that the mine has to cap the underground entrances at the completion of the reclamation period.

There are several units that can be divided into two or three sections, and also have the capabilities of being towed to our community. There are also units owned by the government that are trailers. We ask that these units be made available to our residents.

I indicate this, as all the residents

feel that just burning the units without offering them to the residents beforehand would just be inexcusable. The waiting list for the housing association is long, and just burning the units in Nanisivik is just too unbearable to the residents of Arctic Bay.

Samples of said shale and gravel - residents had asked that a sample of the shale and top gravel be brought into the hearing to be viewed by the public to give them a general idea as to what will be used to cover the dumpsite and the Twin Lakes site. This will enable the public to review beforehand as to what material is to be used before the reclamation begins.

Monitoring of the site - with the monitoring of the site, it was asked that one of the locals be hired as a site monitor. The local youth committee also ask that a youth be hired as an assistant to the mine monitor as a part of the on the site training program. A part of the duties of the said monitor would be to report to the general population as to what is being done at Nanisivik during the

reclamation of the mine site and during the monitoring period.

Transferring of the tailings from the tailings pond to the underground - during the mining of the ore, the tailings were transferred uphill to the Twin Lakes. Residents had asked that if any studies were done as to what the cost would be to transfer the tailings from the tailings pond to the underground, as the tailings would then travel in a downward slop from the tailings pond. It is asked if this would be more feasible to transfer the tailings from the pond to the underground then just burying the tailings pond.

Water sample at that time Twin Lakes residents felt concerned as to the water samples at the Twin Lakes. The question was, has it been considered that the water located at the Twin Lakes been considered of ever being transferred underground? And has the Water Board ever done any water samples directly from the tailings pond to see if it is contaminated? If it were contaminated, would there be a way to treat it to a level that it would be safe for the

general public or the surrounding wildlife? The main concern too was, who can the general public contact that has stronger powers than the Nunavut Water Board if there is such contamination with the water at Twin Lakes?

PCB contaminants - throughout the lifespan of the mine, it is known that PCB contaminants were stored in the grounds of Nanisivik. We ask that these contaminants be removed from the grounds and properly disposed of. If these contaminants are not removed, we ask that proper signage be erected to warn the public of the dangers that exist within the grounds in all languages that will be understood by the people that may walk the grounds.

18 Residents also asked that there be 19 periodic tours be given to ordinary 20 citizens as to what reclamations are being 21 down or a tour of the site during the 2.2. reclamation of the mine. 23 Major concern of the council was also, 24 if there is a contingency plan in the event 25 that there are failures during or after the 26 reclamation of the mine site. Who will be 0173 1 responsible to repair any inefficiencies at 2 the time the monitoring of the site has 3 been exhausted? 4 There was also a concern that there 5 may have been differences in the severance 6 packages between Inuit and non-Inuit at the 7 closure of the mine. If this were the 8 case, we ask that an explanation be given 9 as to why that may have been the case. 10 Infrastructure-wise - most of the 11 infrastructure that was built during the 12 life of the mine was built mostly in 13 Nanisivik. The government owns a 14 multi-complex building that housed a 15 recreation complex with a swimming pool, 16 weight room, lounge and gymnasium, a 17 nursing station, an elementary school 18 office space for government workers and 19 RCMP members The council and the people of Arctic 20 21 Bay have asked for a community hall for 22 several years, only to be denied one year 23 after year. More than half of the 24 population of Arctic Bay is currently under 25 the age of 25 and lacks any recreational 26 facilities. Burning or tearing down of the 0174 1 multi-complex that houses the usable 2 recreational facilities is, in the eyes of 3 many, another insult to injury. We ask 4 that a recreational facility or a community 5 hall be allocated to Arctic Bay in the very 6 near future. 7 Aside from the multi-complex building,

there is a gravel airstrip shared between our community and Nanisivik that has the capability of handling 727-100 series jet airlines. There is also a road that leads from our community to the airport, the Nanisivik townsite and the deep-sea port.

Since the mine will no longer exist, the duties of supplying emergency equipment will probably be handed over to the municipality of Arctic Bay. With the airport being 28 kilometres from Arctic Bay, our major concern is that our fire department would be too late in responding to any incident that may occur, as the response time will undoubtedly be up to at least an hour. Furthermore, with the pumps being at the front of the fire truck and with the majority of the year being cold, the pump would surely be frozen which would

add more time to our fire department to respond.

Feasibility studies - there has been several feasibility studies done since the announcement that the mine would be closing. Working groups have also been set up to determine what types of training or economic benefits can be gained by the residents of Arctic Bay. Although the intentions are greatly appreciated, we have yet to see any of the benefit for our community.

There have also been questions about small appliances and furniture, as to when they would be made available to the residents of Arctic Bay.

It is also felt that most of the surrounding area may be contaminated by tailings that has been blown by the wind. It is asked that tests be done around the vicinity of Arctic Bay with the findings reported to the residents of Arctic Bay.

The Water Board and the mine officials approached some of the first inhabitants of Nanisivik at the time the mine was starting

26	productions. Pictures of the surrounding
0176	
1	lake bottoms were shown to have growing
2	vegetation to indicate that the water was
3	safe. Hair samples from the individuals
4	were taken, but to date, these individuals
5	have yet to hear the results done by the
6	Water Board from the time that these tests
7	were done, and we would like to find out
8	what the findings were.
9	Under the Strathcona agreement, 60
10	percent of the regular positions of the
11	work force were to have been filled by
12	northern residents within three years,
13	which was never enforced. Council is
14	disappointed that this was never enforced,
15	indications that it was hard to hold
16	employees is inexcusable. Counsel ask that
17	once the reclamation begins, the work force
18	for the reclamation be 60 percent northern
19	residents.
20	It is also asked that tests be done on
21	land locked char on the other side of
22	Nanisivik for any contaminants. If there
23	are any contaminants, it is asked that the
24	public be made aware of which fish and what
25	lakes are contaminated.
26	The shale cover of 1 metre with a
0177	
0177	aggregation of 25 matra of gravel at the Tryin
1	cover of .25 metre of gravel at the Twin Lakes is considered too small. It is
2 3	feared that this cover will be blown
4	through time, thus exposing the tailings.
5	It is asked that the shale cover be
6	increased to 2 metres with a cover of a
7	half metre of gravel.
8	These items that we submit to this
9	hearing are items that have been compiled
10	from public meetings, hamlet council
11	meetings and hamlet working group
12	meetings and namet working group
13	Thank you.
14	CHAIRMAN: Thank you.
15	Would those be considered to be Exhibit

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16
         number 2 and 3? And 4. 2, 3 and 4.
   17
                                 Thank you, Mr. Chairman.
         BILL TILLEMAN:
            What I would suggest, sir, is that number 3
   18
   19
         would be filed as the MLA statement to the Board.
   20
         And so, if that's okay with everyone, we will mark
   21
         that as number 3. And then the rest of it, we have
   22
         in the submission already.
   23
         EXHIBIT NO. 3:
              MLA STATEMENT TO THE NUNAVUT WATER BOARD
   24
   25
                               Okay. Thank you. Does the
         CHAIRMAN:
         applicant have questions or comments?
   26
0178
        BILL HEATH:
    1
                              We are fine, Mr. Chairman.
    2
        We are fine.
    3
        CHAIRMAN:
                              Thank you.
    4
            Now, we have a request by the interpreter to
    5
        take a break. We will take ten minutes.
    6
                      (RECESSED AT 9:33 A.M.)
    7
                      (RECONVENED AT 9:51 A.M.)
    8
        CHAIRMAN:
                              Okay. Welcome back.
    9
            In case you haven't registered, please
   10
         register with Susie there.
   11
            Okay. Before we proceed, does anybody have
   12
         any questions or comments to be addressed to the
   13
         mayor of Arctic Bay? Okay.
   14
            The next intervener is NTI. George?
   15
         PRESENTATION BY NTI:
   16
         GEORGE HAKONGAK:
                                     Thank you, Mr. Chairman.
   17
            Chairman, Board members, members of the
   18
         community. My name is George Hakongak. I am the
   19
         senior advisor of water and marine management for
   20
         Department of Lands and Resources for Nunavut
   21
         Tunngavik Incorporated.
         CHAIRMAN:
   22
                               Okay. Just one moment. We
   23
         will have to swear you in. Okay.
   24
         BILL TILLEMAN:
                                 Mr. Chairman, thank you.
   25
            We are just -- one of our Board members isn't
   26
         here. Normally we would just stop if one of the
0179
    1
        members can't be here, but if it's okay with the
    2
        parties, we suggest just moving ahead. And we will
    3
        promise and come back and have him confirm, through
    4
        you, that he will read this portion of the media so
    5
        he is up to date. If that is all right with you,
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sir, and we ask the parties, and if there is any
    6
    7
         objections, we do have to stop.
    8
        CHAIRMAN:
                               Any objection? No? All
    9
         right.
    10
         BILL TILLEMAN:
                                  Please state your name for
         the record and spell your last name.
   11
    12
       A George Hakongak, H-A-K-O-N-G-A-K.
   13
                       (GEORGE HAKONGAK SWORN)
   14
         GEORGE HAKONGAK:
                                       Thank you. Thank you, Mr.
   15
         Chairman.
   16
             My name is George Hakongak. I'm the senior
   17
         advisor, environment, water and marine management
   18
         for the Department of Lands and Resources of
   19
         Nunavut Tunngavik in Cambridge Bay.
   20
             To begin, Nunavut Tunngavik Incorporated
   21
         would like to thank the Nunavut Water Board for the
   22
         opportunity to participate in the hearing for
   23
         CanZinco's reclamation project plan for the
   24
         Nanisivik mine site and for Nunavut Tunngavik to
   25
         present.
   26
             I should also clarify that before we begin,
0180
    1
         in our written submission, we have Breakwater
    2
         listed as the proponent. And after speaking with
    3
        INAC and Bill Heath, it should be saying CanZinco,
    4
        rather than Breakwater.
    5
            Nunavut Tunngavik Incorporated has
    6
         recommended and reviewed the Nanisivik mine's 2004
    7
         reclamation and closure plan. The comments
    8
         provided this afternoon were written from Nanisivik
    9
         mine's reclamation and project application by
    10
         CanZinco. The review carried out is focussed on
    11
         gathering the information submitted by CanZinco to
   12
         determine the location and the effectiveness of the
   13
         proposed measures to ensure responsible
   14
         environmental stewardship.
   15
             In reviewing the submissions by the Arctic
   16
         Bay hamlet and the series of interveners have
   17
         recommended terms and conditions for the NWB by the
   18
         NWB and reclamation project plan.
   19
             As stated in our original submission for the
   20
         July 2002 public hearings, the main issue from the
   21
         NTI point of view is: To effectively ensure
   22
         reclamation of the entire mine site and address the
   23
         various interests. To have an alternate use of
```

24 mine facilities will require a comprehensive plan 25 for the reclamation, this will involve the 26 proponent, the Government of Nunavut, Department of 0181 1 Fisheries and Oceans and the community of Arctic Bay in coordinating their efforts. Only in this 2 3 way will the reclamation of the Nanisivik mine site 4 be possible, yielding the maximum benefit for the 5 community and the people of Nunavut. 6 NTI understands that the site implicates 7 multiple jurisdictions and responsibilities, and as 8 such, the current plan only addresses those parts 9 of the site that fall under the responsibility of 10 CanZinco. However, we believe it is important to 11 reiterate the point that effective reclamation of this site will require a comprehensive plan. 12 13 integrating the different jurisdictions and sites, 14 including the mine, mill, tailings, landfills, the 15 townsite and the road network and the dock facility and associated infrastructure. 16 17 We request that all parties come together to 18 develop an overall plan for the decommissioning of 19 this site in an appropriate manner to ensure the 20 safety of the site for future uses. 21 Having stated this as a starting point, we 22 turn our attention to the specifics of the plan 23 dealing with the responsibilities of the proponent. 24 CanZinco. 25 A review of the documentation provided in 26 the various reports and supporting documents that 0182 1 makes up the "Nanisivik Mine 2004 Reclamation and 2 Closure Plan" was carried out by NTI with the 3 technical assistance of AMEC Earth & Environment, a 4 division of AMEC Americas Limited. This review 5 focussed on the ability of the measures proposed in 6 the plan to achieve the objectives of long-term 7 safety and stability of the mine site. The review 8 addresses various aspects of the reclamation 9 closure plan in complying with best practices for 10 Arctic environments in the context of multiple-land use for the future. 11

In this review, NTI has identified the

following issues that require clarification and

12

14 elaboration to ensure that the objections stated 15 above are met: Monitoring issues: 16 1. Frequency of monitoring issues during 17 five-year post-reclamation period appears 18 low. 19 2. Duration of monitoring is short. 20 Many processes active on the site would not 21 appear within this time frame. 22 3. A much longer closure monitoring 23 period is strongly recommended to 24 adequately assess the impacts of the 25 reclamation and closure activities. 26 The frequency of monitoring appears to be 0183 1 appropriate for the two-year reclamation period. 2 During the five-year closure period, the 3 monitoring frequency is reduced to once or twice 4 during the summer season for all forms of 5 monitoring, which is considered to be very 6 infrequent. Assessment of the practicality of more 7 frequent readings from instruments during the 8 five-year period is recommended, especially during 9 the warmer periods of the year. 10 Doing more appropriate and frequent readings would give the proponent a better understanding of 11 12 what is happening during the reclamation period. 13 This would allow the proponent time to react in an 14 appropriate fashion. 15 NTI believes that every effort should be made 16 to provide employment and training to Arctic Bay residents to participate fully in the reclamation 17 18 and monitoring process. 19 A significant concern resulting from the 20 reclamation closure plan is the very short duration 21 of monitoring before the comprehensive review 22 planned for the year 2010. Many of the processes 23 active on the site that could lead to adverse 24 environmental impacts would take decades to 25 manifest. Some of the processes are: Freeze-back 26 of the taliks in tailings, acid rock drainage and 0184 degradation of the shale material in the 2 reclamation covers.

The intent of the 2010 review is to provide

predictions of the ultimate success of the reclamation and closure works, based on the five years of monitoring records currently planned to be at infrequent intervals.

It is strongly considered that it will be impossible to predict the ultimate fate of the reclamation measures at the mine site in 2010, given the complex interrelated processes taking place, particularly within the tailings facility.

A much longer closure monitoring period is strongly recommended to adequately assess the impacts of the reclamation and closure activities. The concern for NTI is that the long-term liability for the site could be prematurely released from the mining company based on predictions that eventually turn out to be inaccurate. For example, in the DND Environmental Agreement for the DEW Line sites commits to a three-phase monitoring program. And these are just -- this is just an example that we have written down: Phase 1, 5 years plus, confirm equilibrium achievable. Phase 2, 5 to 25 years, verification of equilibrium achieved. And Phase 3, at 25 years, verification of the effectiveness of

remediation. NTI is suggesting that a similar approach be applied to monitoring of the Nanisivik mine site.

In general, the contingency plans for potential failure modes range from increased monitoring through increasing levels of intervention, which is an appropriate approach to contingency measures.

The ultimate contingency for water quality is to treat any water that is not acceptable for release. This and many other contingency measures are really maintenance solutions, not permanent fixes and bear a considerable commitment of time and expense, possibly for the foreseeable future.

With the assistance of the residents of Arctic Bay, interveners such as DFO, GN, INAC, the reclamation and monitoring program objective can be reached at a mutual understanding where all parties are satisfied with the process.

In closing, NTI is in support of the proposed reclamation project plan. NTI is encouraged by the progress made in the development of the reclamation

23 and closure plan and requests that the Nunavut 24 Water Board incorporate the NTI's issues, as well 25 as monitoring directions and directives by other 26 regulators into the terms and conditions for 0186 1 acceptance of the reclamation process. 2 In addition, NTI encourages the performance 3 operatives and undertake a stewardship role within 4 the letter and spirit of the NLCA. 5 Once again, thank you for providing NTI with 6 an opportunity to participate in the review of the 7 CanZinco reclamation process plan. We look forward to hearing of the Nunavut Water Board's decision on 8 9 this matter and proceeding. 10 Ouana. 11 CHAIRMAN: Thank you, George. Any questions or comments from the 12 13 applicants? 14 BOB CARREAU: We would just like to thank 15 NTI for their comments, and no response at this 16 17 What we would like to point out is that we received the May 28th letter on May 28th and 18 19 responded in our presentation here, so that 20 information and our position on that has been 21 presented to the Nunavut Water Board in regards to 22 that. 23 CHAIRMAN: Thank you. Any questions 24 or comments from the other interveners? Thank you. 25 Any questions or comments from the general public? No. 26 0187 1 Any questions or comments from the Water 2 Board staff? 3 WATER BOARD STAFF QUESTIONS NTI: 4 Q DIONNE FILIATRAULT: Thank you, Mr. Chairman. 5 Dionne Filiatrault. 6 I just want to confirm what NTI's position 7 is with respect to GN's submission that we are 8 going to be hearing later as regarding the material 9 and all the infrastructure. And based on your 10 submission, it is that NTI is requesting that a 11 comprehensive plan for reclamation for that 12 infrastructure be done. I just want to get a

- confirmation of their position on whether or not
- that plan is still needed at this point.
- 15 A GEORGE HAKONGAK: Thanks, Dionne.
- I'm not sure I can answer that question right
- at the moment. But I think with the
- infrastructure, we have been hearing a lot about
- 19 that. But if that infrastructure can be utilized
- in the benefit of the residents of Arctic Bay, that
- 21 would be something that we would have to --
- something that we would have to confirm with our
- 23 director.
- 24 Q In the submission, you also suggest that the -- you
- 25 need more frequent readings from instruments during
- the five-year period is recommended. For the Water

- 1 Board to be able to consider this request, we need
- 2 more information on what areas you are talking
- 3 about and what frequency you are proposing. We
- 4 need more details on exactly what specific details
- 5 you are requesting.
- 6 A Thank you, Dionne. We would have to -- we would
- 7 have to consult with the director on that.
- 8 MS. FILIATRAULT: Thank you, Mr. Chairman.
- 9 No further questions.
- 10 CHAIRMAN: Okay. Thank you.
- 11 PATRICK DUXBURY: I have no comment, Mr.
- 12 Chairman.
- 13 CHAIRMAN: Thank you. Thank you,
- 14 George.
- 15 LEAH LEVI: Regarding the equipment at
- 16 Nanisivik, I have a comment on the equipment.
- 17 Nanisivik's, yeah, furniture or house -- household
- items were welcome to the community. And they were
- in demand since some people have no means of
- 20 getting furniture, that the -- seniors, when they
- 21 get their pension, it is not enough to purchase
- 22 furniture.
- Also, the tools from the mill, I don't want
- 24 them to be thrown away, I would want -- I just want
- one big tool and big files that you have there, so
- I would like one of the big files.

- 1 All the tools, I don't want them to be
- 2 buried. You know, the young people here, they are

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3
        lacking the equipment or tools to make something.
    4
        And if they have the tools to do activities...
    5
            And we hear people on the radio saying they
        are looking for this kind of tool, and some people
    6
    7
        want certain items, so the -- especially the tools
    8
        from the shop should be given to Arctic Bay. Just
    9
        that I just don't want them to be thrown away.
   10
         That if they are -- if Nanisivik provides the
   11
         tools, then people can go up there and take tools
   12
         they need.
   13
         QUAMYUQ OYUKULUK:
                                       We are alternating
   14
         speakers. And after NTI -- like, I think we have
   15
         to be better organized in terms of who the speakers
   16
         are so that allows each intervener to speak before
   17
         general public is allowed to speak.
   18
         CHAIRMAN:
                               Okay. Next intervener is
   19
         GN, Susan Hardy.
   20
            I just want to confirm with everybody here,
   21
         Jeff is back here.
   22
            And if we can have legal counsel swear in the
   23
         other legal counsel there.
   24
         PRESENTATION BY THE GOVERNMENT OF NUNAVUT:
   25
         BILL TILLEMAN:
                                 Please state your name for
   26
         the record and spell your last name.
0190
    1
        EARL BADDALOO:
                                  Name is Earl Baddaloo.
    2
        Last name is B-A-D-D-A-L-O-O.
    3
                      (EARL BADDALOO SWORN)
    4
        BILL TILLEMAN:
                                Thank you. Please state
        your name for the record and spell your last name.
    5
    6
                                 Rhoda Katsak, K-A-T-S-A-K.
        RHODA KATSAK:
    7
                      (RHODA KATSAK SWORN)
    8
        BILL TILLEMAN:
                                Thank you. Please state
    9
        your name for the record and spell your last name.
   10
         SUSAN HARDY:
                                 Susan Hardy, H-A-R-D-Y.
   11
                      (SUSAN HARDY SWORN)
   12
         BILL TILLEMAN:
                                 Please state your name for
   13
         the record and spell your last name.
                                  Bruce Trotter,
   14
         BRUCE TROTTER:
   15
         T-R-O-T-T-E-R.
   16
                      (BRUCE TROTTER SWORN)
                                 Thank you, Mr. Chairman.
   17
         BILL TILLEMAN:
            Please state your name for the record and
   18
   19
         spell your last name.
   20
         BRENT MURPHY:
                                  Brent Murphy, M-U-R-P-H-Y.
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21	(BRENT MURPHY SWORN)
22	BILL TILLEMAN: Thank you, Mr. Chairman.
23	SUSAN HARDY: Thank you, Mr. Chairman,
24	Elders, people from Arctic Bay, managers at
25	CanZinco, our federal colleagues and experts.
26	You have been introduced before to myself,
	,
0191	
1	I'm Susan Hardy. I'm a lawyer for the Government
2	of Nunavut. And I also happen to be the person on
3	our team this week whose memory goes back to the
4	beginning of GN's involvement with this file across
5	a wide range of issues, this is why I am being
6	sworn with the rest of my team today.
7	The presentation will be given mostly by
8	myself and also Rhoda Katsak, who is agent here
9	with GN but not a lawyer.
10	Rhoda works with the regional office in Pond
11	Inlet for Community Economic Development.
12	The review of the closure and reclamation
13	plan has taken a very long time. And GN has a
14	complicated mandate, as you know, to perform during
15	this review process.
16	Looking back to 2001, 2002, we advocated as
17	the Government of Nunavut to conduct one
18	comprehensive review process, that included Water
19	Board issues and NIRB issues in 2002. And for us,
20	it means that we are also not conducting an
21	additional review process for abandonment and
22	reclamation of leases. We are having our concerns
23	brought forward in your process and resolving them
23 24	here, and that has made us a very strong voice in
25 26	the technical hearing process, with concerns to be
26	resolved in that process across a wide range of
0192	
1	issues.
2	I can only imagine now I think that was a
3	good decision, that comprehensive review. I can
3 4	
5	only imagine how much more complicated it would have been to resolve the technical concerns that
6	are raised by the closure of Nanisivik.
7	In all the areas the GN is touching, if there
8	were review proceedings happening under many roofs,
9	this would have been very difficult. So we are
10	glad that that consideration was given.

11 Also looking back to 2001, 2002, especially 12 to the interim reclamation plan that was filed in 13 2002, we want to acknowledge that the plan that we 14 are looking at today is -- represents a great deal 15 of work and expense for the mine and is much improved, from the GN's prospective. 16 17 We do have some small issues that are being 18 confirmed as recently as last week and the 14th of 19 May, but we are generally satisfied that if and 20 when the -- generally as it has been described here, the result will be a reclamation by 21 22 Breakwater which brings the area to an acceptable 23 area of environmental quality in the areas that we 24 are concerned about generally, and also 25 specifically, for the water quality. 26 Because our mandate is complicated, we have 0193 tried to focus our presentation here on water 1 2 quality issues, and that is our central and key 3 focus in talking to you today. There are some 4 other things going on, though, that affect the mine 5 closure, and they are in our presentation, as well, 6 in a second area. 7 RHODA KATSAK: People of the GN, other 8 parties. The role of GN is different compared to 9 NTI or other parties, for instance the Water Board 10 and/or -- sorry, DFO and DIAND, they are the 11 organizations, and then also the -- they are 12 responsible for water management. The NTI is 13 responsible for -- and they have different -different responsibilities like wildlife or land 14 management, environment and also health issues. 15 16 So GN is responsible for different 17 categories, such as health, and so we have to be 18 concerned about the environment. 19 The Breakwater have submitted a plan for 20 reclamation, and that we requested that they do it 21 properly and that's -- and the -- since they made 22 profit out of selling the minerals or the metals, 23 then -- so that's their role as the mine, is to

And GN have reviewed the plan, reclamation

plan to make sure it is appropriate and that it is

2425

26

make profit, so...

not hazardous, and our presentation is on the environment.

The community and social development and the economic development is also the responsibility of the government, and we have to appreciate the residents of Arctic Bay for that, for doing studies. They do studies on economic development, socio-economic development, I guess.

And the buildings or infrastructure at the mine is not going to be handled by GN. But the GN is looking at the needs of the community, what the people want, not like the infrastructure is a second to the social life.

And the Government of Nunavut have dealt with the socio-economic needs of the community. And we were given a deadline of July to submit a plan, I guess, on -- and we are hopeful; we are hoping that we can work with the community of Arctic Bay residents to improve on their social -- that the impact of Nanisivik mine should be positive to the community.

22 SUSAN HARDY: Susan Hardy, Mr. Chair.

The GN regulators are regulators concerned about the environment. We want to be sure that the Board and the community are aware that we have pursued many environmental concerns on their behalf

1 2

since 2002.

In some areas that have been a focus for our attention, I am sure that I can surmise the other parties got tired of us at times, but we had many concerns to be resolved.

To do our reviews and assess concerns about the environment, we relied on the knowledge of the government staff of -- that you see here, Mr. Baddaloo and Mr. Trotter, wherein were concerns relating to environmental health and human health that's affected by the environment. And we also had expert assistance of Mr. Murphy, who is an engineer from EBA Engineering.

The Government of Nunavut and the federal Department of Indian and Northern Affairs have shared Mr. Murphy's services, and that is Brent Murphy. His services and expertise have been very helpful to us in some of the complicated areas that

this plan is dealing with. One area where we had concern and the community has also been expressing a concern even today and yesterday, was the tailings covers. We have been present during several technical review hearings where the engineers discussed the very most detailed points of those concerns, and we participated in that and had many of our concerns resolved there. One of the things that we would like to be clear about is certainly the GN would see there being a danger of moving tailings, as opposed to leaving them contained where they are, this would

leaving them contained where they are, this would be a very dangerous activity to do. Our experience at the mine site ourselves is that when tailings are free of their contained environment, they do more harm. So we are very pleased with the Board's proposal to close those, although the community still had questions about those.

The other thing that we thought we could add to the technical side of the discussion that has been going on is that in Nunavut, there is a precedent of this kind of act, dealing with the tailings as they lie, that's in Rankin Inlet. The structure is not identical, but our engineers are telling us that the shale material that's proposed here is actually a better insulator and that this is a superior engineering structure to the Rankin Inlet structure, so that is giving us some comfort. And I have used that example to express it in a more simple way.

So subject to the monitoring results that the Board will be receiving over time, the work done since 2002 is resolving the concerns that we

1 2

expressed about many chemical or physical forces that we were concerned might reach this cover. We are convinced that as long as the monitoring is done effectively, this cover and the other requirements will be met.

Our concern about the spillway was about its location and whether there might be a bad impact on the dike. As you know, the dike needs to hold up

very well to these tailings containers, and the structural changes that have been made since 2002 are effective in preventing those kinds of damages.

So, again, on advice from the engineers and having participated in those meetings over the last few years, we are generally satisfied that with the monitoring that is proposed, this plan is sound and safe.

Soil contaminated by the tailings was a very strong concern for the GN. We did our own report to make sure we had our own good understanding of what was going on in terms of the effects of the soil, partially because we are an administrator of some of land that's affected, most of the land that's affected. That report was submitted to the Board in 2002. We have a version printed off in case anyone hasn't seen it who is here today, so it is available

So we worked with EBA Engineers, including Mr. Murphy, to prepare our soil sample study, and the results of that study showed some elevated metal levels, what you would call hot spots, concentrates out of metal.

At Nanisivik, in some of the areas that we are concerned about that seemed to us likely to have an impact on the water and needs some special attention, those results have now been incorporated into the plan as part of the research that they are relying on. And, in addition, CanZinco undertook last fall to specifically remove the most problematic concentrations or hot spots. So that matter of concern to us was addressed by them over those two years, and we are content with their proposal to address that.

The last two issues on this slide were still being discussed as recently as May, and they are connected. The concrete pads, we think, do need additional testing just to be sure what we are covering and that it is an appropriate proposal to use the cover. The testing of those pads and proposal to cover them, again, may be the best option, rather than closing up things. And the additional testing is needed to be sure that covering them is the right way.

But the proposal to do testing around those areas for materials, including hydrocarbon PCB, and then to cover them as long as that testing confirms it is appropriate, according to the terms of the plan, we agree that it should be happening.

Of all the regulators that will appear before you today, the Government of Nunavut has a special concern and mandate to be careful for the public health. And this was a particular concern for us in the Human Health and Ecological Risk Assessment, which is a special report that the mine prepared for that specific area. And also in their Phase 2 and 3 ESA reports, which is how they propose to respond to safeguarding health issues.

When we received the first draft, Human Health Ecological Risk Assessment, it was a first attempt, and it contained some ideas from the engineers about diet and health and lifestyle that were based on the south, grocery stores; the way you would be living in the south, not how people live and eat in Arctic Bay. The version now incorporates more data gathered in the north, locally in this area, and it is more reflective of Arctic Bay people and their state of health as well. So we were pleased that that change was made.

We were also concerned about the Human Health and Ecological Risk Assessment that some of the background data might not be appropriate. It was gathered in 1985, and some mining and some pollution had already happened in 1985. That was especially low around the road and dock area, between the line at the dock.

And to resolve this concern, the mine agreed to delete the data that had been collected in that affected area, so that the numbers affected by pollution in 1985 were gone from the sample, and they were working with a more unaffected sample. And, again, this is their response that we are accepting.

The GN has also been concerned because lead levels were high when we looked at buildings and

- soil in Nanisivik, especially because children's
- bodies absorb lead very easily compared to adults.
- 19 The HHERA identified toddlers, especially as a
- 20 population group that would be of concern in
- assessing risk, and we agree with this. It is the
- children that would be affected by exposure to
- 23 lead.
- And lead is known to be harmful to children
- 25 if they are exposed to a long-term exposure, such
- as living on a site or with an object that's

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contaminated by lead all the time through constant

The other kind of exposure that would be dangerous to a child, because they are putting their hands in their mouth, it is an acute ingestion of lead, so they are -- some things that are contaminated with lead, this is also bad.

So our studies of the houses and the soil and the buildings at Nanisivik showed levels of lead and certain other metals which could be dangerous to the health of children who are living there for a long time. Especially in the soil, we found areas where the lead, as I said, was concentrated in the other metals and should be removed, and the mine has agreed to clean that up. So those were our big concerns that the Human Health and Ecological Risk Assessment, as it has developed over time, has helped us to resolve and develop actions that the mine has agreed to.

We heard when we were here in 2002 that the community had concerns about the marine environment, and while that's not our area to regulate, we want to help the community understand that their concerns have a way of being addressed in this plan.

We were pleased to see that the metal mining

- 1 effluent regulations are a force in effecting this
- 2 plan, and they will have environmental effects
- 3 monitoring happening through at least July of 2006.
- 4 That was confirmed to us just recently. And this
- 5 will make the federal regulators aware if there are
- 6 issues that should be addressed in their area that

are affecting the sea. So that testing will allow those concerns that the community had to be addressed by the federal regulators, if the testing results are of concern. So that area we felt was moving in a good direction.

Mine stability is a concern, and as well, the portals, because we don't want people or animals on the surface of the land endangered because it is a problem under the ground with stability. Also, it would be dangerous if, for example, children were able to enter the mine after it is supposed to be closed.

The mine has just recently agreed to report on their history with stability in the mine and how those issues have been treated, if there were any problems during the administering of the mine. And this is a bit of a compromise response, but it seems to be the best available data that are on file. And we think this is a response that Nanisivik has met just recently in the 14 years.

We also want you to know that stability and portals are an issue, that GN has authority over it as well. It is an area where DIAND is going to be interested because the area is involving them, and the mine safety officials from the GN will also be concerned, so there is two regulators both interested in some similar areas.

Mr. Van Goor (phonetic) is the mine inspector for Nanisivik, and although he is not here today, he has attended the technical meetings on several occasions to make sure that his concerns were being addressed. And he also has his own dialogue in the mine, separate from our own. So he has made his concerns known through the technical hearings, and he also follows up with the -- although there will be no more public hearings, for example, Mr. Van Goor works with the mine on an ongoing basis to make sure those issues are met.

Rhoda, the last two points that were made.

RHODA KATSAK: Arctic Bay residents, community concerns are concerns about the ten houses that were relocated. The tenants, whether they are in an safe environment in the houses, and Levi Barnabus has also expressed a concern.

25 And the Government of Nunavut did a study 26 with Nunavut Housing Corporation. And, as you 0204 1 know, in 1996, the buildings were renovated, the 2 interior and exterior, also furniture and the 3 furnace, and they were -- were built so that the 4 buildings complies to the code. And there was also 5 a concern that previous employees and their 6 families, whether there is no health -- health 7 concerns regarding the mining activity, that if 8 they are just temporary. Like not being there 9 permanently, on occasion, how it would affect the 10 health, whether it is a child or adult. 11 And the people that lived at Nanisivik and 12 that -- those that were employed for consecutive years, let's say three years or more, and whether 13 if anyone obtained equipment or something from the 14 15 mine site, whether it was not properly cleaned, so 16 these could be concerns for the -- if you stay on 17 the location for a number of years, you constantly 18 are in contact with the contaminants, then you 19 could be a health risk. 20 SUSAN HARDY: There is really two points 21 that I would like to cover, Mr. Chair, about this 22 slide. 23 First, we were pleased to see some final 24 measures being undertaken by the mine in the May 25 14th letter, and they have confirmed many of those 26 here today. The ones of importance to the GN 0205 1 especially are the testing of -- for dangerous 2 substances that they agreed to do, especially around concrete pads, and follow-up with that that 3 4 needs to be done. Providing of the portal closure 5 details was important to us, and the review of the 6 mine industry with regards to stability. 7 Also, the fact that the monitoring will 8 include some new hydrocarbon materials at the 9 landfill site, benzine, toluene, it was referred to 10 earlier as BTEX. This was a matter of concern to us, and they are undertaking this resolve. 11 12 And the current confirmation last fall that

the hot spots would be removed and placed in

underlying areas of concentrated metal proves that

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this was being dealt with. That was a matter of importance to us as well. And it goes to answering our question, how would we be sure the plans are done? Those last undertakings were our last sets of concerns that needed to be resolved.

Really, the Water Board has the key to lock in our confidence that this plan will work, that's through the monitoring and through the ability to respond to monitoring results over time. Follow-up is important.

And a bit like with medicine, you need to have a way of responding to unexpected

complication. And the contingency plan at the mine that's referred to is the way they propose to do this.

Also, the fact that the plan recognizes that the Water Board will give the approval that terminates monitoring is very significant to us. The monitoring would end only after an acceptable performance result is demonstrated. And that's a feature of their plan that doesn't match exactly with the stating that they think that will be seven years. Both ideas are in the plan. And the second idea is the more preferable one to us, that it will be the Board who says that seven years is right, based on the monitoring results you received. So those are the things that help us to be sure.

Our written submission addressed two other information requests, and we wanted to also give that information in person here. First of all, I would like to address the studies we have done about future use and efforts that the GN has put in to find out whether this site could be used for future use.

I guess I want to introduce this by saying that Nanisivik was meant to be a learning project in the 1970s when it was first thought about. And for us, in the alternative-use area, the last three

- 1 years have been a bit of a hard lesson. The fact
- 2 is there was a lot of work and hope from the
- 3 Government of Nunavut that an alternative future
- 4 use would be found and that Nanisivik would be a

usable site that could help us meet goals that the government and people share. It is disappointing that it hasn't turned out that way, and I would like to try to explain why, if I can, by first saying it is based on a totality. A number of different results from work that the GN was doing, you can't say it is this thing, it is that thing, that's why they are not doing it. It is all the things together have resulted in this decision.

Some of the GN work that the Board has heard about before and that we have been working on to investigate future use includes the soil sampling report that you have on file. As you know, as indicated levels of metals that the GN should be concerned about in inviting people to come to this site.

The mine's undertaking to clean those was encouraging. In addition, though, the alternative-use study was prepared, which was a study that DIAND and GN again entered into, worked out the terms of references and working together, having it done together. That study mostly

eliminated options. The results were not positive. The most positive outcome was that there might be a possibility of using the facilities for a training facility that might be studied later.

Housing officials at the GN also made an assessment of the housing, and that report indicated that today, as opposed to in the 1990s, to move a single house would cost over \$900,000, over that. And, of course, our housing experts are indicating to us that to build these houses is less costly. So this result ended the idea of moving the GN housing.

We also provided the Boards with results from this investigation that found that inside the house, there were lead and other metals, mostly lead though, that advised us that special cleaning would be required before those buildings and their contents should be used. For the buildings, they said that it would need to be washed thoroughly inside and out by people wearing protective clothing, and it would take four people a day for each house.

23 At about the same time, the public health 24 officials undertook assessments about whether the 25 metal levels would be a risk to people, and that's 26 where we get our comments today about the dangers 0209 1 to children, that there would be a risk of 2 exposure. 3 Even with all this information that I have 4 mentioned so far, right down to the toxicology 5 result, GN has not stopped. The GN, at this point, 6 is still working towards an alternate use, because 7 the mine is telling us that there are things that 8 they are prepared to do to help us make the public 9 health issues less of a concern. 10 This year, two further assessments were made. 11 The Public Works and Services Department, as they 12 were at the time, evaluated the buildings from the 13 perspective of their remaining life span. How much 14 time since 25 years has past do we have left with 15 these buildings? And also from the perspective of 16 what renovation would have to be made to bring them 17 up to the building code and safety codes and 18 regulations that apply now, because many of the 19 buildings were built according to code a long time 20 ago. 21 That result indicated that there were some 22 buildings that had exceeded their life span, and it 23 was time to demolish them now. It also indicated 24 that for the buildings that had some life span 25 left, the GN would require as much as \$50 million over four years to do the renovation just to the 26 0210 1 buildings. There is no program for it, just to 2 make the buildings useful. And that also does not 3 include the cost of the special cleaning that we 4 found out would be required. 5 People interested in the apprenticeship and 6 education and training requirements within Nunavut, 7 within the Government of Nunavut, were also doing 8 work to explore the training centre idea as well, 9 at the same time. The first alternative-use study 10 said this is worth getting into, and they were 11 looking into that. 12 The alternative option that was considered

13 was the use of the buildings as a trades training 14 centre, because they are suitable for that type of 15 education. It is not going to be a metal school 16 there. And the outcome of their study, 17 unfortunately as well, was that this option is not 18 sustainable at this site, particularly when all the 19 other studies, that I had mentioned, all were taken 20 into consideration. 21 So you can see, it is not contamination, it 22 is not cost, it is the whole result. And I have left out some things that were considered as well, 23 24 just because we have limited time here. 25 The overall decision that the GN has made is 26 that the establishment of the training program, 0211 this was our very last option we had left to 1 2 consider, is not sustainable. Its costs are 3 disproportionate to what could be achieved, and it 4 is particularly in light of the necessary upgrades 5 to the buildings and equipment, as this result was 6 found. 7 From a perspective that's focussed on the 8 benefit to Arctic Bay and their development of 9 resources as a community, and from a perspective 10 that wants to deal with quality education programs, 11 these funds would have been going too much into buildings in Nanisivik when individual's 12 13 development and the community development of Arctic 14 Bay are bigger needs and should be the government's 15 view focus. And that has been a problem for a while now, hasn't it? 16 17 Our core focus has been on community 18 development goals, and the community in question 19 here is Arctic Bay. 20 The money spent at Nanisivik, we found from 21 our socio-economic study, and I have a copy of that 22 with me, as well, if anybody wants to look at it. 23 This was done and submitted in 2002 as well. It 24 has not provided an expected level of long-term 25 benefit in Arctic Bay, and this is the hard way. 26 The alternative-use decision that GN is

- 1 making is a difficult one, but a strong voice that
- 2 that direction should change and that the benefit

should be more focussed on long-term benefits to Arctic Bay.

The decision doesn't mean that Arctic Bay people should not have access to safe, usable materials from the site. We are hoping that the mine will be willing to work with us so that GN materials that are safe and usable, that can be washed with a flat surface, that these would be available to the community and included in an organized way.

Things that are more difficult to wash, like a carpet, it is our view that certainly from our specific buildings, this would be a dangerous thing to give to a family. And it doesn't mean that the GN is finished with the outcomes of Nanisivik.

The socio-economic study is a document that's being used, as you Board members may know, in other projects with INAC. And when the Inuit Impact Benefit Agreements were being developed, this study was being used to make sure that mistakes are not repeated. It gives us our hard lessons here today, so things are more sustainable in this particular area where we are having a problem with that.

The next slide.

RHODA KATSAK: I am Rhoda Katsak.

The GN wants to keep certain things, and they want to keep the infrastructure. They have to be reclaimed, the main roads to Arctic Bay, the airport and to the dock. Also, okay, reclaiming would be the water systems, utilidor, sewage treatment building, town centre, three-bay garage, and GN houses would be reclaimed -- would be returned to natural state.

SUSAN HARDY: Thank you, Mr. Chair.

The mine, in addition to the public highway that's referred to here that the GN would like to keep, and it is also including in its plans the idea that GN would accept responsibility for maintaining some recreational roads. And I think that would be included in discussions over the next day or two.

Next slide. I would like to close by speaking for a moment about the socio-economic study a little bit more and some of the activities

21 and plans for the Government of Nunavut in that 22 area. 23 It is important for the community of Arctic 24 Bay to know that they are being listened to in 25 terms of the input they gave to the researchers 26 that made this report. It is being used in other 0214 1 project plan, certainly on the Government of 2 Nunavut's part. 3 First of all, we don't ever want to suggest 4 that Nanisivik had no positive impacts in Arctic 5 Bay. Throughout Nunavut, mining has the potential to bring economic and community development, and 6 7 that has happened in Arctic Bay to some extent. 8 In the case of Nanisivik, there are benefits 9 documented in the records of the community and also 10 in the report based on interviews. Some of those 11 would be that the mine was contributing as much as 12 13 percent of the income in the form of wages that 13 was earned by community members during its operation. Another benefit would be that the 14 15 income was available in the community to be used on things like houses, food, equipment for hunting, 16 17 things at that time. Another benefit is that for a 18 time, the mine improved transportation and 19 recreational opportunities that members of this 20 community had. 21 The mine and its predecessors deserve 22 acknowledgment also for taking on an environment 23 and challenges that had not been tried very often 24 before, and they have succeeded with their business 25 goals, and they have succeeded with some of the 26 community development and benefit goals. 0215 1 But we know looking at some of the old 2 documents, that some of these goals, 60 percent of 3 the mine workers being Inuit, were not achieved. 4 It was not as much benefit as the people hoped to 5 find for in the 1970s and '80s. And there was some 6 negative impacts that the community was not

And that reraises the question, how can the parties that were involved from the beginning, and

prepared or put up or to deal with, and we heard

about some of those yesterday.

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that's the government and the private parties, recognize the areas in which they succeeded and the areas in which they, perhaps, did not succeed and take on that share of the responsibility? And that include us, the GN. We inherit the legacy that our predecessor or government left us.

Some of the work that we have been doing so far is working on community business development in Arctic Bay, community capacity building through initiatives and support. There was a mentor visit made last year by a person who did a study in support of community members and what could be done to allow the community to develop the ability to be effective, to achieve its goals when it wanted to send a message, to make sure it sent the message right away to a finder or to a government official,

this kind of development in the community. There was development work done to plan a business week initiative, which we hope will go forward soon.

Also, there has been a great deal of support given to the Arctic Bay Development Corporation and to Nunavut Consulting. One of the initiatives to development local capacity was supporting the local management and market of the Midnight Sun Marathon, the community did that last year instead of having the mine doing it. And that requires some skills to let the world at large know what is happening here. And that was connected to an initiative by you in the community to use persons in that, that marathon and other charitable events to build you a new basketball court. So the community is coming together and has some goals that the groups are having, and we are trying to support this coming forward.

There was short-term pre-trades training given to persons in the community. The first two sessions were delivered this spring, and we hope that that will continue so that there are people available for higher levels of employment, as well as the basic employment in the reclamation project.

There was emphasis, as well, on community wellness. The socio-economic report was

particularly concerned around some healing needs arising from the experiences of the last 20 years, particularly in regards to substance abuse, self-esteem and anger management in the community, and that is being addressed.

And there are plans for the future as well. As Rhoda indicated, the long-term plan is to have -- we are required to bring together and have a first review by the decision-makers and the Government of Nunavut by the 31st of July. So the members of the socio-economic committee that have provided input to date will have their views taken forward at that time.

Those members of the socio-economic committee are advising us that Arctic Bay wants to see longer-term initiatives and supports and to build lasting resiliency in their community, and to move forward together.

Some of the members of the team that are here are looking to move that forward, both in the next two months, because we have been given a time frame, and over the longer term after that.

We were also pleased to see the provisions in Chapter 8 of the closure reclamation plan. The mine does have an intention, I think it was stated here today, to involve and employ members of the

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community of Arctic Bay, and where GN provides support to that, we want to do that.

I want to -- just before I pass this over to
Rhoda for closing, I wanted to just correct
something. I said Mr. Murphy was an engineer, and
he is a geologist.

7 RHODA KATSAK: Our submission for our presentation, we believe that Arctic Bay residents

9 have concerns and knowledge on having a mine and

will have benefitted in that. In the future, when

there is a mine in Nunavut, that when the mine started, there were different regulations. And the

community is a good example of how it would be a

working relationship, and that when there is a mine

close to the community, that -- so they were used,

16 for example, to create new regulations, and it

created agreements so that the benefits to the

18 residents is considered through agreements. Also,

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         that there is -- if possible or if allowed, then
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         there needs to be an economic agreement.
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             And people are now more involved in the
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         development of a community and any impacts on the
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         community, they participate. And the benefits
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         include that Arctic Bay has provided knowledge for
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         the future or to the other areas, other regions.
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             Thank you for allowing us to speak and for
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        your support, and if there is any questions...
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        CHAIRMAN:
                               Thank you. I am getting
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        the signal from the interpreter to take a break.
        Thank you.
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         BILL TILLEMAN:
                                 Thank you, Mr. Chairman.
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            As we go to break, then we would suggest that
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         we could get Exhibit 4 would be the PowerPoint
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         presentation, electronic copy; Number 5 would be
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         the hard copy of the presentation; Number 6 would
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         be the socio-economic study in case it has some
         water-related impacts and land-related impacts and
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         so on. Thank you.
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         EXHIBIT NO. 4:
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              GN PRESENTATION, ELECTRONIC VERSION
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         EXHIBIT NO. 5:
              GN PRESENTATION, HARD COPY VERSION
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         EXHIBIT NO. 6:
   18
              GN 2002 SOCIO-ECONOMIC STUDY
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         CHAIRMAN:
                               Thank you. We will have a
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         question period after the break here. We will give
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         the interpreter a break here for a minute.
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                       (RECESSED AT 11:16 A.M.)
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                       (RECONVENED AT 11:34 A.M.)
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         CHAIRMAN:
                               Thank you, interveners.
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         Susan and GN members, thank you for your
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         presentation there.
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            If we could make one suggestion though, we
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        know that there is a lot of issues and concerns
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         that you raised that were outside the mandate
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        responsibilities and beyond the authority of the
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         Water Board, but we suggest that you meet with the
         community on those issues, the issues that are
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         beyond our mandate and responsibility.
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         SUSAN HARDY:
                                 Yes, Mr. Chair. If there
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- 9 are questions that we can address that don't affect
- water, we can try to respond to these very briefly
- 11 and...
- 12 CHAIRMAN: Okay. Thank you.
- Okay. Are there any comments or questions
- 14 from the applicant in regards to the GN?
- 15 BILL HEATH: Thank you, Mr. Chairman.
- 16 Bill Heath.
- 17 It may be somewhat of a departure from your
- procedure, but we are wondering if maybe the other
- parties might be afforded the opportunity to ask
- their questions of the GN, and we would like to go
- 21 last, if that's possible.
- 22 CHAIRMAN: Most certainly.
- Okay. Are there any questions or comments
- from NTI to be addressed to GN?
- 25 GEORGE HAKONGAK: No comments or questions,
- Mr. Chairman.

- 1 CHAIRMAN: Thank you.
- 2 Any questions or comments from DIAND to the
- 3 GN presentation?
- 4 DIAND QUESTIONS GN:
- 5 Q MR. McLEAN: Yes. We have a few
- 6 questions, Mr. Chair.
- 7 Thank you, Mr. Chair. It is Carl McLean,
- 8 Indian and Northern Affairs Canada, INAC.
- 9 I just have a few questions for the
- 10 Government of Nunavut. First question, can the GN
- provide a list and description of the reclamation
- roads for which it keeps?
- 13 A SUSAN HARDY: Thank you, Mr. Chair.
- 14 The two roads that the GN wishes to keep are
- both registered highways under the Public Highways
- 16 Act. It is the single stretch of road that runs
- 17 from Arctic Bay to the airport junction and to the
- dock and then the Nanisivik airport; those are the
- 19 roads that we wish to keep.
- 20 Q So there is no other roads then? Because we
- 21 understood from your presentation that there were
- some recreation roads you wished to keep.
- 23 A That was in the Mines Plan. We understood that
- 24 they were keeping an access to Kuhulu Lake, and we
- would like to know more about that ourselves. We
- 26 plan to discuss that with them and see what can be

Any questions or comments from Environment

18 Canada with respect to GN? 19 COLETTE MELOCHE: There is no questions at 20 this time, Mr. Chairperson. 21 CHAIRMAN: Thank you. Okay. DFO? 22. DERRECK MOGGY: We have no questions at 23 this time, Mr. Chairman. 24 CHAIRMAN: Thank you. Any questions 25 from the general public? 26 GENERAL PUBLIC QUESTIONS THE APPLICANT: 0224 1 MOSES OYUKULUK: I'm Moses Oyukuluk. 2 My question -- my questions, I think, would 3 be directed when they are having a meeting, their 4 road to Kuhulu Lake -- I thought about asking a 5 question on it, I think it is the right time to 6 ask. The road to Kuhulu Lake, if it is going to be 7 open, it would be used only summer and fall, that 8 it would have to be maintained either through 9 erosion, through water, and, you know, there is a 10 risk of vehicle accidents if it isn't maintained. 11 So the road to Kuhulu Lake would have to be 12 maintained. 13 And to the -- my comments yesterday, we were 14 told that buildings were wanted -- people of Arctic 15 Bay wanted buildings in Nanisivik for hunting 16 cabins. And I think 900,000 per unit is a very high estimate. Can you tell us exactly the actual 17 18 amount it cost for one house to be relocated? Any 19 chance that you government is making it impossible 20 to get buildings? 21 I think there should be a general public 22 meeting from the government so that the people are 23 informed and people can ask questions to them. 24 That's it. 25 SUSAN HARDY: Shall I reply, Mr. Chair? 26 CHAIRMAN: I'm sorry? 0225 1 SUSAN HARDY: Thank you, Mr. Chair. 2 In terms of the road, we had noticed the 3 maintenance implications, and we need to discuss 4 with the mine the timing of it, how that is going 5 to work, because they have been maintaining it up

until now. So we are aware of this concern, we

want to address that with the mine.

- 8 In terms of the buildings, the reason I used
- 9 the \$900,000 figure was because it surprised me as
- 10 well. Of course, if you move more than one
- building, there is a bit of a savings. But all of
- 12 the options that were considered for the GN to move
- a house, if the GN was paying for this service of
- moving houses for the community of Arctic Bay, all
- of them were much higher than the cost of building
- a new house.
- 17 If you only move one house, that's the most
- 18 expensive option, yes. And people are noticing
- that, and it is a very surprisingly high amount,
- \$900,000. And the actual amount, if my memory
- 21 serves me right, is \$938,000 for one house. But,
- again, a bit less for 10 houses or 15, but always
- 23 much higher than building a house.
- 24 CHAIRMAN: Thank you.
- 25 Q PIUYUQ TATATUAPIK: My question is Rankin
- Inlet, there was a mine there one time, and we

- 1 heard that there was a mine. So have you heard of
- 2 anyone getting health -- health due to the mine
- 3 activity in Rankin Inlet? Has anyone ever suffered
- 4 any illness from the mine activity?
- 5 A SUSAN HARDY: I'm afraid we don't know
- 6 the answer to that question. Mr. Van Goor, we
- 7 would have to ask him. We could investigate with
- 8 him and answer back later if that would be all
- 9 right.
- 10 CHAIRMAN: Thank you.
- 11 Q PIUYUQ TATATUAPIK: The second question for
- that reason, I don't think Nanisivik buildings are
- 13 contaminated, that we had workers there who were
- 14 cleaning the house regularly, and they put it --
- new, and they put on new things. So I don't think
- 16 contamination is a concern for Nanisivik buildings.
- 17 And I would support getting the houses here and in
- 18 Arctic Bay. Housing, local housing authority
- buildings, they have -- what about the...
- Since we are on a slope and the barrels are
- used as a foundation in some of the buildings, does
- 22 that mean they are okay? Are they contaminated,
- 23 the barrels that are contaminated in the community?
- 24 So the question is, are they hazardous to human
- 25 health, those barrels, if they are eroded enough?

26 A SUSAN HARDY: That's, first of all, a

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1	question about Arctic Bay, and it is a question we				
2	would need more information about.				
3	There are environmental and human health				
4	experts. We would like to talk to this lady about				
5	where the barrels came from and maybe what was in				
6	them, and they can answer the question later, if				
7	that's okay, just because we need more information				
8	to do more work and find that out.				
9	CHAIRMAN: Okay. Thank you.				
10	Q TOMMY KILABUK: Thank you, Chairman.				
11	I am working for Government of Nunavut, so my				
12	questions I used to work public works, or I used				
13	to work in Nanisivik for ten years maintaining. My				
14	question yesterday and I have seen Nanisivik				
15	activity and the contamination that is mentioned.				
16	I work for the government. I used to ask the				
17	wildlife officer why they don't study the				
18	wind-blown tailings, and government wildlife				
19	officer said it is not my responsibility.				
20	So it is no longer an active mine, so and				
21	we keep hearing these concerns about the				
22	contamination. And during the mine, when the mine				
23	was operating, government should have done studies.				
24	But in some ways I don't really trust the				
25	government.				
26	My question to Susan, since there was being				
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1	studies, the Inuit who had children in Nanisivik,				
2	have is there any evidence of that child, when				
3	they are born, whether they have any liver or				
4	internal illnesses?				
5	SUSAN HARDY: Thank you, Mr. Chair.				
6	There were two points there that I want to				
7	address separately. One is in terms of the				
8	affected wind-blown tailings, this team that you				
9	have been working with for the last two years, we				
10	did think it was our responsibility. And we had				
11	BCG Engineering do extra work, in addition to what				
12	the mine was doing, to make sure we understood what				
13	kind of effects they may have had for that site.				
14	So I can see where a wildlife officer might				
15	not take that action. But for us, it is our				

16 mandate and our responsibility, and we did take it 17 here that made us concerned. 18 In terms of data about specific children, we 19 don't have that for this site. What we have is an 20 understanding in the metal community of what lead 21 does to people generally, first of all, and also an 22 understanding that Inuit have a particular 23 susceptibility to metals absorption in addition to 24 the average person. So this is a considerably high 25 risk for children. We don't have any complaints from any 26 0229 children, and that could be because they weren't 1 2 exposed enough to be affected, or it could be 3 because they didn't understand that there was that danger to be working with. 4 5 Q Thank you, Chairman. More than 20 years the mine have operated, and if there is any concerns, health 7 concerns, then I think with all those studies, 8 there could have been an indication of how the 9 contaminations could have effect on the human 10 health. So if there was no studies done -- so I 11 don't know what the effects are. 12 So also, too, there was ten houses that were 13 moved from Nanisivik and are located to Arctic Bay. 14 And sometimes I get asked to fix up houses, and we -- I worked on the five buildings, interior and 15 16 taking it out and renovating the whole building, 17 and we work on them before they were washed. So 18 the five houses, funding for the five houses for 19 renovation, maybe the estimate that you got, amount 20 is some for renting vehicles? You said \$900,000, 21 that requires probably the rental of the moving 22 equipment, mainly that if -- that's my question. 23 **BRUCE TROTTER:** Thank you, Mr. Chair. 24 Bruce Trotter. I would like to answer your 25 questions as individually here. The first one that 26 Tommy asked was about, what does lead do to people? 1 There are two things, there can be what is called 2 an acute exposure to lead, which is something that

- 3 miners would suffer when they are actually in the
- 4 mining process, in this case. And the other one,
- 5 the one that is most serious is the long-term

- 6 exposure effects that children would suffer,
- 7 because they are the most vulnerable to the lead.
- 8 And these relate -- these effects relate to
- 9 developmental processes of the young body,
- mentally, mental particularly. And these are hard
- 11 to assess. And that's -- that is the thing that we
- 12 are concerned about with the -- with people living
- in these houses.
- 14 There were -- there were never any
- 15 complaints, and I think this has been established
- already, by people living in the houses, any
- 17 problems that they or their children were suffering
- 18 from that could be related to lead.
- A number of times miners were tested, but at
- 20 no time, to my knowledge, were other residents of
- 21 the community tested for lead. So that's -- does
- 22 that answer your question?
- 23 Q Thank you, Chairman. Yes, you partly answered, but
- 24 when I -- workers at the mine, they went home
- without washing, and they ate with their hands
- 26 without washing, so, you know, if they -- although

- 1 you said if they are eating without washing -- so
- 2 it is hard to get an answer whether that would be
- 3 dangerous if I eat something after working without
- 4 washing, and I eat with my hands, would that be a
- 5 health risk? Like, the building were -- the
- 6 buildings are usually -- have ventilation, and the
- 7 insulation were not removed, and the -- if they
- 8 were not -- if it is a real concern, then they
- 9 should have removed the insulation.
- So I have sons that can work to dismantle, so I still want some buildings to be given to us.
- 12 CHAIRMAN: I would like to ask GN,
- there are issues that are coming up here that are
- outside our mandate, for example, housing and
- health. And I just am wondering if GN would
- organize a meeting in the community today so that
- we can carry on with our public hearing that relate
- 18 to water-related matters.
- Obviously there are some concerns that are
- 20 outside our mandate, so I'm just suggesting and
- 21 asking if GN would organize a meeting with the
- 22 community so they can express their concerns about
- other matters other than water-related matters.

Thank you. 24 25 SUSAN HARDY: Thank you, Mr. Chair. Certainly if there is time at the end of the day to 26 0232 1 do that. There is also a meeting planned for the second week of July already, and that would give 3 us, as well, some time to respond to the questions 4 that were here and provide more answers. 5 CHAIRMAN: I think you fully understand what I am requesting, thank you for 6 7 understanding. 8 Q TOOTALIK EJANGIAQ: Thank you. Buildings is a 9 concern. 10 I usually listen to the CBC radio, and we 11 would -- we heard that there will be no house 12 relocated in Arctic Bay, and so we are trying to do something that's already been decided by 13 14 government. So we listen to the media, and I heard 15 on the CBC that any buildings from Nanisivik will not be relocated to Arctic Bay. Who is responsible 16 17 to make that decision? 18 A SUSAN HARDY: Thank you, Mr. Chair. 19 That is a decision the Government of Nunavut 20 has made. I want to clarify for the lady here that 21 the Board can't assist with that. The Government 22 of Nunavut has to make a decision. 23 CHAIRMAN: Thank you. The interpreter 24 couldn't hear you. 25 SUSAN HARDY: Okay, sorry. I was explaining that the Government of Nunavut has made 26 0233 1 the decision not to move houses; we explained a bit 2 earlier today why that decision was made. It is 3 the Government of Nunavut's decision and study that 4 resulted in that. 5 The Board doesn't have an input into that 6 decision, and they can't change it. 7 Q TOOTALIK EJANGIAQ: Thank you. Since we were 8 not aware of that decision, if we knew of the 9 decision made by the GN, we would not have 10 requested the building. And I think the GN should have consulted the people before they make that 11

kind of decision that affects the community. And I

think they were only concerned about the

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14 15 16 17 18 19 20 21 22 23 24 25 26	contamination. And if that was the only reason and the cost of relocating, then they were they did not consider the people of Arctic Bay, what they want. So I am very upset over that. And if the buildings are just demolished and because we had been told that this will be considered, because we live close to Nanisivik. And if individuals are allowed to dismantle buildings and move themselves, then we will use those building materials, and we will use them, we can fix them ourselves. We don't need money to do that. So there is no money involved in doing volunteer work, dismantling and moving, so I think			
0234	, , ,			
1	this should be considered seriously by GN of			
2	allocating or at least giving the building			
3	materials to Arctic Bay residents.			
4	And we are not concerned about the			
5	contamination of the buildings, that I want GN to			
6	seriously consider Arctic Bay people's request.			
7	And it is obvious that they are not they didn't			
8	consider the people's request. So I think as I			
9	mentioned yesterday, my next option is to go			
10	through the legal system.			
11	CHAIRMAN: I asked the GN if they			
12	could organize a public meeting, and because we are			
13	discussing things that are not related to the Water			
14	Board and GN, I asked them if they could set up			
15 16	a public meeting to address public concerns either health or contamination issues, so we have to move			
17	on with the Water Board matters. And these			
18				
19	buildings, as an example, or health issues, education, we aren't that's not the Water Board			
20	mandate, and that's we are here listening, we			
21	are hearing, and we already asked the GN if they			
22	could organize the public meeting, and they agreed,			
23	they would organize a public meeting.			
24	So after the Water Board hearing, the GN will			
25	meet with the public, the hamlet to listen to the			
26	people's concerns. Does that help?			
0235				
1	SUSAN HARDY: Mr. Chair, there is a small			
2	response that does relate to the Mine's Plan.			
3	CHAIRMAN: Okay. Thank you.			

4 They did indicate that they SUSAN HARDY: 5 would like to make furniture and parts of buildings 6 available to the community in an organized way, and 7 we would like to work with them to make sure that 8 that can happen. 9 As I mentioned in my presentation, there are 10 things that we would be concerned about people taking from the site, carpets, upholstery, things 11 12 that are likely to be harder to clean to a safe 13 level. But as for furnishings and building materials, even appliances that can be cleaned 14 15 before they are taken from the site, these are 16 things that we would like to find a plan that's 17 organized and safe for making available to the community in a way that the mine agrees and that we 18 19 can participate in with our assets as well. 20 CHAIRMAN: Okay. Thank you. Were we 21 clear on the request for GN to meet with local 22 people? I said it once, and a second time in 23 Inuktitut. 24 Okay. Ramli, you had a question with regard 25 to GN's presentation? 26 ACRES INTERNATIONAL QUESTIONS GN: 0236 1 RAMLI HALIM: Thank you, Mr. Chairman. 2 Just a very brief question, and I am Ramli Halim 3 with Acres International. 4 If I'm not mistaken, on the southeast of the 5 townsite there is a structure that is used for 6 storage of potable water, and I just want to 7 clarify actually who has responsibility for 8 reclaiming that area? And the other thing is, the 9 second question is that the waterline from the East 10 Twin Lake to that water storage? 11 Thank you, Mr. Chair. SUSAN HARDY: 12 The water infrastructure that we are aware of 13 is near East Twin Lake, just outside the town. 14 There is a tower with materials. Those are our 15 responsibility to reclaim, yes. 16 I confused people in my written presentation, 17 I think. The lake, of course, is federal, the water is federal. The materials we used to bring 18 19 it down from there are ours, including the 20 waterline. Does that answer your question? 21 RAMLI HALIM: Yes. There is no further

22 question. 23 CHAIRMAN: Thank you. 24 Water Board staff, do you have any questions 25 or comments? 26 WATER BOARD STAFF QUESTIONS GN: 0237 O PATRICK DUXBURY: 1 I just want to clarify the 2 role that the GN sees itself in playing with 3 regards to consultation post-closure, basically in 4 reviewing and sharing with Nunavut the results of 5 the monitoring studies? I know the Water Board 6 will review these internally. It is not my 7 understanding, once this hearing is closed, that a 8 lot of our findings shift away from this. We don't 9 have funding to basically liaise with the 10 community, so I am wondering what the GN can do to basically ensure that the community is informed of 11 12 these issues and the provisions. Thanks. 13 A EARL BADDALOO: Thanks, Mr. Chair. It is 14 Earl Baddaloo. Thank you, Mr. Chair. 15 The short answer is, yes, it will be shared. 16 Depending on the information that we receive at the 17 time and the kind of information that we receive, a 18 lot of times it comes through and it comes to us. 19 In those cases, it will be discussed with the Board 20 and certainly the information will be shared. 21 All this information is available, and it 22 could be also shared through the MLA. Any 23 information comes like that, what comes after is 24 public information. 25 Q To follow up on that question, also there has been -- it was requested from the intervention from the 26 0238 hamlet of Arctic Bay of possibility or partially, I 1 2 guess, the monitoring or reporting which resides in 3 the community supported by the GN possibly, the 4 Water Board or other agencies that they can. Can 5 you clarify the GN's commitments or its role to 6 help along that, to ensure that someone locally might be involved? 7 8 A SUSAN HARDY: Patrick, you are asking a 9 very good question that we are struggling with, 10 actually. We had budgeted for a position for a 11 community liaison-type person in connection with

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12
         alternate use earlier this year. Since that is not
   13
         possible now, we have to work towards our deadline
   14
         of July 31st to find another way of raising that
   15
         person with the activities that will happen in town
   16
         in the new scenario. And so it is not together
   17
         yet, so we understand the importance of that.
   18
             There is also a lot of activity that we would
   19
         like to have someone here just kind of
   20
         knowledgeable. And we recognize that that's a
   21
         need. Where is it going to fit in the next
         iteration of our planning? I'm not sure.
   22
   23 Q I have no more comments on that issue.
   24
         CHAIRMAN:
                                Okay. So I take it we
   25
         don't have any more questions from the Water Board
   26
         staff?
0239
         BILL TILLEMAN:
    1
                                  Yes, sir.
    2
                                Okav. I would recommend
         CHAIRMAN:
    3
         right now that we break for lunch and come back at
    4
         quarter to one.
    5
             Any further comments?
    6
         BILL HEATH:
                                Mr. Chairman, if you
    7
         recall, we asked to go last. And if you want to
    8
         get us in quickly before we break for lunch, we are
    9
         prepared to do that.
   10
             We recognize that some of the things that we
    11
         had wanted to talk about are outside of the domain
   12
         of the Water Board, so we would leave those alone.
   13
         But there are just very few comments we would like
   14
         to make.
   15
         APPLICANT QUESTIONS GN:
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         BOB CARREAU:
                                   Here is a question, I have
   17
         a question for the GN. I have a bit of a preface.
   18
             But first off, I would just like to say my
   19
         comments, my preface is not intended for the people
   20
         sitting at that table, and I have all respect for
   21
         the people at that table.
   22
             I think we have a bit of an advantage,
   23
         perhaps, in an organization the size of CanZinco is
   24
         that we offer up our own interests or the interests
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are reflective of the company, and that is not

of the company. So oftentimes my own opinions, my own perspectives or Bill's opinions or perspectives

always the case with the government. You may have different opinions, but you have to speak, you have to walk the line.

So it is just -- and I will get to my questions. It is curious for us to see how the GN believes that they are working in a cooperative spirit for us to transfer some infrastructure, the quote was, "To work with CanZinco to transfer materials and infrastructure." Lately the input has only been in the form of obstacles.

The GN efforts have resulted in stifling our efforts to contribute to the people of Arctic Bay and provide additional benefits in the form of materials, furniture, housing, large infrastructure.

We have heard today, for the first time, that we wouldn't be able to give couches or mattresses or some furniture that, in fact, the people here were using last night. Intuitively, common sense, these aren't 25-year-old mattresses and 25-year-old couches, these are things that you change out all the time.

Caution is important in these things, we have to be cautious, but it has got to be based on scientific evidence. And there is something called

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- 1 the precautionary principle that we invoke in
- 2 environmental studies, but that's in the absence of
- 3 information, in the absence of evidence. We have
- 4 enough evidence. And if we don't have specific
- 5 evidence of what the dust in the couch is, you
- 6 collect that. So to simply continue to say no and
- 7 avoid any possible liability and political fallout
- 8 is the easy way out, that's what the GN is doing.
- 9 And more importantly, it is stifling our interests
- in trying to provide some benefit to the people of
- in trying to provide some benefit to the people of Arctic Bay.
- So we certainly want to participate in any meetings that the GN has with the people of Arctic
- 14 Bay. And we would like to ask directly, for the
- record, can you provide specific guidance on which
- materials, which furniture, what infrastructure we
- can transfer, we can sell, we can donate to the
- 18 people of Arctic Bay?
- 19 SUSAN HARDY: Thank you, Mr. Chair.

20	Some of these answers may go into the		
21	territory that you want to have in a separate		
22	hearing, but I feel that it would be useful to		
23	respond to this.		
24	We anticipated questions of this kind. And		
25	it is important to be aware that GN's decision is a		
26	decision about what the GN can and can't do, and		
	,		
0242			
1	what we won't do. The mine is not limited in who		
2	it can buy and sell to from by us.		
3	So we, the GN, don't want to transfer any		
4	materials to the community that would be dangerous		
5	to the community, and we will be very strict about		
6	that in what we do.		
7	We would encourage the mine to take seriously		
8	the danger that a child could face being confronted		
9	with contaminated upholstery in their home. This		
10	is a concern to us, but we don't regulate it for		
11	the mine to donate to anyone else from their		
12	community. As a result, if the material were not		
13	cleaned and it were used in something that we		
14	regulate like an inn or a tourist facility, they		
15	would have difficulty with us.		
16	CHAIRMAN: Okay. Let's break for		
17	lunch. It is 12:15, come back at 12:45, half an		
18	hour from now. That sounds fair?		
19	(RECESSED AT 12:20 P.M.)		
20	(RECONVENED AT 1:16 P.M.)		
21	CHAIRMAN: Good afternoon. We can		
22	reconvene with the hearing.		
23	The next interveners will be DIAND. I will		
24	ask Susan to swear them in. Thank you.		
25	SUSAN HARDY: Thank you, Mr. Chair. I am		
26	a commissioner of oaths for the Territory of		
0243			
1	Nunavut. And I am just going to ask you to state		
2	your name and spell your last name for the record.		
3	CARL McLEAN: The name is Carl McLean.		
4	Last name, M-c-L-E-A-N.		
5	(CARL McLEAN SWORN)		
6	SUSAN HARDY: Can I ask that you state		
7	your name and spell your last name for the record.		
8	STEPHANIE HAWKINS: Stephanie Hawkins,		
9	H-A-W-K-I-N-S.		

10	(STEPHANIE HAWKINS SWORN)			
11	CHAIRMAN: Thank you, Susan.			
12	PRESENTATION BY INAC:			
13	CARL McLEAN: Thank you, Mr. Chair.			
14	My name is Carl McLean. I'm the manager of			
15	land administration with Indian and Northern			
16	Affairs Canada in Iqaluit for the Nunavut regional			
17	office. To my right here is Stephanie Hawkins, she			
18	is with our water resources division in our			
19	regional office. And to the far right of us here			
20	is Norm Cavanagh, he is with Justice Canada and our			
21	legal counsel on this project.			
22	Also part of our team is Constantine			
23	Bodykevich, he is our water resources officer. And			
24	he is handing out copies of our presentation here.			
25	Also Anusha Aruliah with Justice Canada. She is at			
26	the back of the room here. And my colleague has			
0244				
1	brought this up, and he kind of reminded me about			
2	it, so I won't forget today, Brent Murphy is our			
3	technical advisor from BGC Engineering Consultants.			
4	and he is also going to operate our presentation.			
5	We are very happy to be participating in this			
6	hearing today. The process of reviewing the			
7	reclamation and closure plan has involved			
8	participation of a lot of different parties on a			
9	number of issues. And this involvement will ensure			
10	that the Nanisivik mine site closure and reclaim is			
11	stable once the work is completed.			
12	On a personal note for myself, this is the			
13	first time in about ten years I have been back to			
14	Arctic Bay. And we have certainly been blessed			
15	with the weather, and the scenery is beautiful,			
16	like always.			
17	So we will go on with our presentation then.			
18	Basically we will start with the introduction. We			
19	will just briefly touch on what our regulatory			
20	obligations are dealing with the outstanding issues			
21	and recommendations by water license requirements,			
22	and we will have a conclusion.			
23	I will point out, though, that the points we			
24	are going to give today is just a summary of our			
25	more detailed written intervention, which we			
26	submitted to the Water Roard on May 28th And I			

encourage everybody to read the detailed report for the full information.

Indian and Northern Affairs Canada, with the assistance of EDA Engineering Consultants, they took a technical review of the Nanisivik mine reclamation and closure plan submitted by CanZinco in accordance with Part G of their water license.

The following comments comprise the summary of INAC's outstanding concerns with the reclamation closure plan and takes into consideration all correspondence received by the Nunavut Water Board proponent's subsequent recommendations of the reclamation and closure plan.

Next slide please, Brent. I just have to fix my screen here because I went too far, just bear with me.

INAC's RCP, reclamation and closure plan, review is based on the Human Health and Ecological Risk Assessment approved in November 2003, the Nanisivik mine 2004 reclamation closure plan and all properly -- documentation received by the Water Board from March to June 2004.

INAC believes that the proponent has provided a sound framework through which recommendation and closure activities can be implemented. However, a few outstanding items remain.

We will move on to -- we will review this now by sections. The first section we are going to deal with is the final closure and reclamation plan, G-3.

The proponent has committed to providing a spring/summer 2004 implementation plan at the Arctic Bay public hearings, and they actually have presented that yesterday. Pending the submission of the approval of the implementation plan, INAC recommends that the proponent provide future proposed implementation plans for NWB review and approval. And we actually made that policy also in our questioning to the proponent.

This could possibly be included as the proponent's report of the quarterly reports requirement issued by NIRB.

INAC also recommends that new water license

18 applications be required for any undertakings not 19 identified under the current license. Such 20 undertakings would include a proposed reassignment 21 of facilities or infrastructure identified under 2.2. the current license. 23 INAC, in its written submission, also 24 provides a listing of the six land leases and the 25 four quarry permits held by the proponent. It 26 recommends that these leases and permits are kept 0247 1 up to date and requested that the roads on these 2 leases be recontoured and returned to its 3 post-mining conditions as possible. 4 G-4, engineering and design of surface 5 reclamation covers. The proponent concurrently 6 plants to leave the industrial complex and 7 concentrate storage concrete foundations in place 8 and cover it with shale for reclamation. 9 INAC has previously recommended that these 10 foundations and any associated contaminated soils be removed and stored in the underground mine 11 12 workings. The proponent has committed to 13 investigating the concrete foundation areas for 14 potential contamination. INAC recommends that 15 given the uncertain state of these sites, NWB 16 approval be conditional for final approval granted 17 on receipt and review of these reports. That's the 18 investigation reports. 19 G-8, which is the waste rock piles and open 20 pit closure plan. The proponent has committed to 21 providing additional geochemical characterization 22 of the west open pit and west open pit access road. 23 INAC recommends that the waste rock piles and open 24 pit closure plan receive conditional approval with 25 appendaging (phonetic) geochemical inspection 26 reports subject to a separate NWB review and 0248 1 approval process. 2 G-9, which is the closure and monitoring 3 plan. INAC supports the current identified 4 monitoring regime, which covers the reclamation 5 period and the first five years of the post-closure 6 period. The support -- this support is conditional on the proponent's identified commitment to modify

8 the program, including lengthening of the 9 monitoring period to address any and all concerns 10 and environmental impacts that may be identified. 11 INAC recommends, however, that the proponent 12 also provide the plan to ensure that the residents 13 of Arctic Bay be kept informed of the monitoring 14 results and the implications throughout the 15 monitoring period. 16 And the next report is Section 13, 2003, 17 Phase 3 environmental site assessment. INAC 18 recommends that the proponent may further their 19 commitment to the sampling for PCBs in the 20 immediate and surrounding PCB storage facility, 21 including the slab. INAC further recommends that 22 the results of the PCB and ANFO plant sampling and 23 any contingency plans developed be submitted to the 24 Nunavut Water Board for review and approval. 25 Section 14 of the plan is Human Health and 26 Ecological Risk Assessment, or HHERA. The 0249 1 Government of Nunavut and the Department of 2 Environment has expressed concern over the HHERA in 3 which received NWB approval in November 2003. As a 4 number of GN departments were involved in the 5 development of this HHERA, INAC recommends that the 6 Nunavut Water Board seek clarification on the GN's 7 position on the acceptability of the HHERA and the 8 soil quality and the remediational objectives, 9 which I refer to as SOROs, contained therein. If 10 the Nunavut Water Board determines that the HHERA and associated SQROs are open for further 11 12 discussion and/or modification, INAC recommends 13 that the review approval on the specific activities 14 and approved SQRO, such as clean up of contaminated 15 soils, cease until such time as these remediational 16 objectives are no longer subject to change. 17 G-16, which is the waste disposal plan. The 18 information provided by the proponent is 19 insufficient with regard to Nanisivik mine's 20 long-term stability and potential for future 21 surface subsidence. INAC requests that an updated 22 and certified report be prepared by a professional 23 engineer that reflects current mine conditions and 24 addresses the short and long-term stability issues 25 associated with the closure of the Nanisivik mine.

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1 this report were also inadequate. INAC requests

that the proponent provide a subsequent NWB review

3 and approval of detailed closure of the mine

4 portals, ventilation raises and all other mine 5

openings to the surface that are certified by

6 professional engineers. 7

The mine portal seal designs are also subject to approval of the mine inspector, Workers' Compensation Board.

G-17, landfill closure plan. INAC recommends that the proponent provide landfill contingency

12 plans and the framework under which these plans

13 would be employed. These could be submitted to the

Nunavut Water Board for review and approval at a

date prior to the completion of the reclamation 15

16 phase. INAC also recommends that the proponent not

17 be permitted to remove any monitoring parameters

18 without environmental approval of the Nunavut Water

19 Board.

20 Finally, to conclude, INAC has reviewed

21 CanZinco's Nanisivik mine 2004 reclamation and

22 closure plan, and is of the opinion that the

23 proponent has provided a sound framework through

24 which reclamation and closure activities at the

25 mine can be implemented. 26

INAC is confident that the reclamation and

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- 1 closure plan has been developed in accordance with
- 2 Nunavut Water Board processes, good engineering
- 3 practices and government policies for mine
- abandonment and reclamation. INAC is satisfied 4
- 5 that the reclamation measures proposed and land

6 leases from INAC are sound.

INAC, therefore, recommends that the 2004

8 Nanisivik mine final closure and reclamation plan 9

to include information and commitments provided by 10

the proponent through NWB mediated correspondence

11 be granted conditional approval, with the

12 identified outstanding items subject to additional

13 Nunavut Water Board review and approval.

14 And further, I would like to commend the mine 15 for coming a very long ways from two years in the

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16
         plans they developed for the reclamation and
   17
         closure. We feel they have done a very good job.
   18
              Thank you very much.
   19
         CHAIRMAN:
                               Thank you, Mr. McLean.
   20
             Any questions or comments from the applicant?
   21
                               No, we are fine. Thank
         BILL HEATH:
   22
         you, Mr. Chairman.
   23
         CHAIRMAN:
                               Thank you.
   24
             Any questions from the hamlet of Arctic Bay?
   25
         No? Okay. Any questions or comments from NTI?
         GEORGE HAKONGAK:
   26
                                      No questions, Mr. Chairman.
0252
                               Thank you. GN? Thank you.
    1
        CHAIRMAN:
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        Environment Canada?
    3
        ENVIRONMENT CANADA QUESTIONS INAC:
       O COLETTE MELOCHE:
                                     Environment Canada has two
    5
        quick questions for them.
    6
            Thank you, Mr. Chairperson. Colette Meloche
    7
         from Environment Canada.
    8
            The first question is in relation to the land
    9
         leases. In your written intervention, you had
   10
         stated that the Crown Land leases would be renewed
   11
         until December 31st of 2012, and Environment Canada
   12
         just is wondering why they would be renewed until
   13
         this date, rather than the end of the monitoring
   14
         period in 2010.
   15 A CARL McLEAN:
                                  That is a very good pick
         up. It is probably an oversight on our part. We
   16
   17
         will at least want the leases renewed to 2010.
   18
         which is the current proposed end to the monitoring
   19
         program. However, with the proviso that if the
   20
         condition is warranted an extension to that, it
   21
         will be applied to the lease dealing with that
   22
         extension. Thank you.
   23
       Q Colette Meloche with Environment Canada, Mr.
   24
         Chairperson. One further question, under Part G,
   25
         Section 4, engineering design resurface reclamation
   26
         covers, you had stated that in your written
0253
         intervention, a significant contamination was
    1
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- 2 detected within the loading concrete foundations.
- We would recommend that the foundations and 3
- 4 associated soils be reviewed. I was just wondering
- 5 if you could define for us what you consider

- 6 significant contamination to be.
- 7 STEPHANIE HAWKINS: If those materials were to
- 8 be found above the escrow rows, then that would be
- 9 sort of back to the Water Board review and
- discussion and review in the contingency process
- 11 from that point forward.
- 12 COLETTE MELOCHE: Thank you. No further
- 13 questions, Mr. Chairperson.
- 14 CHAIRMAN: Thank you.
- 15 Any questions or comments from DFO to be
- addressed to INAC?
- 17 DERRECK MOOGY: No questions, Mr.
- 18 Chairperson.
- 19 CHAIRMAN: Thank you.
- Any questions or comments to be addressed to
- 21 INAC from Acres?
- 22 RAMLI HALIM: No further questions.
- 23 CHAIRMAN: Thank you.
- Any questions or comments from the general
- public to be addressed to INAC?
- 26 GENERAL PUBLIC QUESTIONS INAC:

- 1 Q MOSES OYUKULUK: It is the final meeting,
- 2 and we are serious. My question, when MOT was
- 3 administering the airport, they used to have a
- 4 landfill near the airport. And in that area there
- 5 is old equipments and old landfill, and will those
- 6 be reclaimed, or will they be covered, or will they
- 7 be part of the reclamation and put inside the
- 8 underground work mines?
- 9 A CARL McLEAN: Thank you for that
- 10 question. It is Carl McLean, INAC.
- 11 I wonder if the gentleman could clarify
- whether this is the airport property or if it is --
- 13 I am actually trying to think of something which
- may help us determine the landowner.
- 15 Q The current location of the airport. I don't know
- the boundary of the airport, but when they were
- 17 using the -- when MOT was responsible for the
- airport, they had the landfill site there.
- 19 A Thanks for the clarification. The current airport
- 20 property and the immediate land in the vicinity was
- 21 transferred to the Government of the Northwest
- 22 Territories and, at some point, the Government of
- Nunavut through the Arctic Airports Transfer

- 24 Agreement. But without knowing the exact details
- of the landfill site, it would be tough to answer
- on the responsibility for the remediation. But,

- 1 you know, that's -- in our opinion, it is not
- 2 Indian and Northern Affair's responsibility, but
- 3 whose -- actually whose responsibility it is with
- 4 the question of reviewing the situation, location
- 5 and ownership and who is responsible.
- 6 CHAIRMAN: Thank you.
- 7 Q KOONOO OYUKULUK: My question -- I'm Koonoo
- 8 Oyukuluk. I am -- federal government, DIAND, that
- 9 you will be monitoring the contamination of Arctic
- Bay is our municipal government, and that if there
- is any seepage, I guess, from the contamination,
- that Arctic Bay be invited to observe or at least
- witness the -- because hamlet is our municipal
- 14 government, therefore, they should be involved if
- 15 there is any changes or any seepage from the --
- 16 from the tailings. I guess that they should be
- invited to see what's happening there.
- 18 A CARL McLEAN: Yes, I'm just trying to
- 19 find where in our intervention -- because I believe
- we dealt with that, but just give us moment, I will
- 21 try to find the exact wording.
- Yes, in our intervention under G-9, closure
- 23 monitoring plan, we recommended that the proponent
- also provide a plan to ensure that the residents of
- 25 Arctic Bay are kept informed on monitoring results
- and information through the monitoring period.

- 1 Thank you.
- 2 CHAIRMAN: Thank you.
- 3 LEAH KALLUK: My question, when the mine
- 4 was being prepared, Arctic Bay residents were asked
- 5 if they want to move the community to Nanisivik.
- 6 But we heard today that there is contamination in
- 7 the area, and I am glad that the -- our Elders that
- 8 were here at that time did not decide to move the
- 9 community to Nanisivik, and they knew it was too
- 10 far from the coast, as Inuit like to live along the
- 11 coast. And so I'm grateful that our Elders did not
- agree to move the community up to the Nanisivik
- site because the contamination that we hear, that

14 we could have been involved in the contamination. 15 But also since our kids were small, we were told that our kids would work at Nanisivik, so when 16 17 we started having grandchildren, the mine finally 18 closed down, and -- but to me, I have asked a 19 number of times the minerals that were found, I 20 think they ship it out, the concentrate, twice a 21 year, and we have never been told of what the 22 purpose of those concentrate is. Like, we don't know what they use that material for, the -- within 23 that they mine, because we heard, perhaps. The 24 25 Arctic Bay residents could be told where those 26 concentrates go and what they use them for, so that 0257 1 they can understand what those minerals or the 2 metals are used for. And, like, they used them for 3 different equipment or something, and just to show 4 how the minerals have impact on our day-to-day 5 lives and how it develops. So thank you. 6 Would you like a brief BILL HEATH: 7 explanation of zinc? 8 CHAIRMAN: Might as well. I think if 9 I understood her question properly that that's just 10 wondering about the zinc that was mined. 11 **BOB CARREAU**: Good question. Thank you 12 very much. 13 The concentrates -- concentrate means it is a 14 mixture of the metal that you are after and the 15 waste material. We didn't produce 100 percent zinc 16 and 100 lead. We produced a mixture, and our 17 mixture was about 50 percent zinc in our concentrate and about 50 to 60 percent lead in the 18 19 metal concentrate product, the rest of it being 20 waste material, iron, flower stone (phonetic), 21 things that aren't economically recoverable or 22 economically viable. But they report in the 23 concentrate. 24 So what you do with zinc, is you galvanize 25 metal, that means you are putting a treatment on 26 metal that makes it rust proof or rust resistant, so autobodys, appliances, roofing materials,

- 2 that's what you use zinc for, is the big consumers.
- 3 But zinc is also a fundamental micro-nutrient, so

4 we use zinc as well, it is a vitamin, a mineral, a 5 mineral that we need for to sustain life. So a 6 small portion of zinc is used in making mineral 7 supplements. 8 The lead is -- the biggest consumption for 9 lead is for batteries still, car batteries, so in 10 order to start your Skidoo or to start your car. 11 And it is also used -- it is used as a shielding 12 for nuclear devices, and those are the biggest two 13 uses. I hope that answers your question. Thank you. Okay. Any 14 CHAIRMAN: 15 questions from the Water Board staff? 16 BILL TILLEMAN: Thank you, Mr. Chairman. 17 We will go to Patrick first. 18 WATER BOARD STAFF QUESTIONS INAC: 19 PATRICK DUXBURY: Just a question. Pat 20 Duxbury here. 21 I just wanted to revert to a letter the was 22 submitted by Stephanie Hawkins on May 14th, and 23 this is where it kind of is in regards to concerns 24 that were brought up earlier by several people from 25 the community here about being involved in 26 monitoring and doing the reclamation and 0259 1 post-closure period. And the letter refers to the 2 fact that INAC would be willing to be involved in a 3 committee or some sort of organization and maybe some other commitments that we mentioned, or at 4 5 least INAC would clarify with. It would perhaps do 6 in order to support the community in understanding 7 that the closure process and also perhaps the 8 organization, territorial organizations such as the 9 GN and Nunavut Water Board, approval from these 10 organizations as well. 11 STEPHANIE HAWKINS: I believe the letter 12 you are referring to was a response on the 13 Strathcona Sound monitoring that exists, but our 14 understanding is not to the appropriate value or 15 issues of monitoring reclamation dealt with. It is more of an essential economic membership and 16 17 mandate and doesn't have the scope or the manpower 18 or the mandate to be dealing with in reclamation 19 and closure issues on a monitoring basis. 20 So what I was trying to reflect in that 21 letter is that really, reclamation and closure and 22 all of this is a Water Board process. And if we

- 23 suggested in our intervention that we believed that
- 24 the majority of the monitoring and reporting and
- 25 getting that information back to the community
- 26 really should follow the proponent. But if the

8

- 1 Water Board believed that something along the lines
- 2 of a multi-stakeholder committee were required and
- 3 wanted to take that initiative, then by all means
- 4 we need to be of the parties involved and are going
- 5 to be part of that group.
- 6 But it is not within our mandate as a
- 7 department to sort of take over the Water Board
 - process and say we are going to do that. We are
- 9 saying the Water Board feels some things are
- 10 necessary, yes, we are going to be involved. So it
- can't really be our initiative, but we would be
- more than willing to participate.
- 13 DIONNE FILIATRAULT: Thank you, Mr. Chair.
- 14 I had one question, verification in a
- 15 question that was posed by Moses regarding the old
- landfill site somewhere in the neighborhood of the
- 17 airports, and DIAND verified that it was not within
- their jurisdiction. That it would be helpful from
- 19 the Water Board's perspective to get a little bit
- 20 more information. And I am wondering if the GN
- 21 would provide some clarification on this and
- 22 whether or not they are aware of this particular
- 23 facility in relation to any potential water issues
- 24 that would be applied to this site. Can we get
- 25 clarified potential ownership and remediation?
- 26 CHAIRMAN: Thank you.

- 1 BILL TILLEMAN: Well, Mr. Chairman. While
- 2 the GN is seeking their documents, they should
- 3 understand the question to clarify is simply
- 4 another landfill is an issue with the Board. We
- 5 need to know if there is anything to know about it
- 6 all, so if DIAND doesn't know that, GN, so either
- 7 now or later in the closing, if they have any
- 8 further information, just let us know, of course.
- 9 Thank you, that's all.
- 10 CHAIRMAN: Thank you.
- 11 MUCKTAR AKUMALIK: First, these people sitting
- here, they sent me to Yellowknife, so I thank them,

- when Nanisivik was requesting a license. So we had a meeting in Yellowknife for one day, and I was
- making a small income from that.
- First, when the -- before the mine started,
- we were told that Arctic Bay residents were told
- that Nanisivik will have contamination. And before
- 19 the mine started, we were told that after the mine
- is closed, that they will leave behind
- 21 contamination, so that's a concern that if we were
- told that there is going to be contamination after
- the mine is closed.
- 24 INTERPRETER: Okay, I'm sorry, he said
- 25 people did not -- were not told that there would be
- 26 contamination in the mine, but now they are hearing

- 1 that there is contamination now at the mine site.
- 2 MUCKTAR AMUKALIK: So people's concerns are
- 3 not being listened to. And water quality is being
- 4 controlled in that the Water Board has the mandate
- 5 to protect the fresh water. And government, that
- 6 they did not tell us what the outcome would be of
- 7 having a mine. And they only told us the good side
- 8 of having a mine. We only heard the positive and
- 9 good parts. And Jim Marshall even joked about
- having a mine, because they did not mention any
- 11 concerns. And right now, like, we didn't prepare
- 12 for houses.
 - Like, we were never told of the negative side of having a mine, but today, after it is closed, we finally realize that there is a problem with having
- 16 a mine.

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15

- 17 And hamlet of Arctic Bay mayor and -- are
- dealing with their houses. And I have been with
- 19 the local housing authority all my time, so there
- were ten houses that were moved from Nanisivik to
- 21 Arctic Bay, and they were given to the local
- 22 housing authority. And some were sold to private
- homeowners, and they moved them using heavy
- 24 equipment. But we didn't know that they were
- contaminated, so afterwards today there is a big
- 26 concern over that now, so what will happen to

- 1 those? I don't know. Why the housing -- since
- 2 they sold them is they have -- like, a house right

now, right now are fully furnished, and, like, we don't know that there is any contamination in the houses.

And there is, you know, there is boards, planks that can be used to make sleds or kumutuk (phonetics) that is used as frames, I guess, that can be salvaged by people and make kumutuk or sleds out of them. There is long planks or beams, I guess, that can be salvaged, and the beams, I guess, of the buildings, the foundation frame is -- they would make very good kumutuk or sled.

So Inuit are also looking for those material to make sleds or kumutuk. Sometimes then Inuit, they find a short piece of wood, if they could find an extension, that's how desperate they were to make kumutuk or sled. So right now we have all the material available now, but we are not able to obtain them. So we, Arctic Bay residents, are always looking for materials to use and everything. And Nanisivik is right there that we can use, and we can -- people wants to bring materials on their own, but we didn't realize that there would be a contamination issue that would be stopping us. So when we...

There was a meeting in Yellowknife, not regarding Arctic Bay, and NTI and Iqaluit, they are not visible to us in that they are not helping us, that the Nanisivik company is the only one that's trying to help the community. Like, but they haven't said the negative side of having a mine.

So I don't know what we will do now because I'm not going to deceive or lie about what I heard. I was sworn in as an Elder committee, and we had the RCMP as a witness, so I have been a JP for more than ten years.

And I participate in the judicial proceedings. And recently the judge, I guess, wrote a letter to me asking if I could stay on as a JP.

But we are hearing about the negative sides of the mine, who is responsible for that? Who can -- because we are only listening to the negative sides now of the mine.

In the past, we were living without

- 21 materials. We were living -- my own life, my
- families were hungry, they were without food. And
- as Inuit, we built houses out of snow. And my
- 24 mother -- because they didn't have anything to make
- 25 water, they -- she put snow in the mouths and melt
- the snow, and she would let me drink water from,

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like, that way. And because we were -- I live that way, and while I am still living.

I got sick one time, and doctors -- an airplane came in, and doctor was there, he said I would die soon, and the doctor did not send me out. So I am still alive, even though they said I would be dead by then.

But right now we are listening to the negatives or the bad side that I don't think the Inuit are being considered. We are hunters. We hunt seals.

When I was hunting seal, I jumped across a road and landed badly and injured my hip, so -- also during the one incident where we had to go rescue, search and rescue two people, we wouldn't -- near the flowage, and because when we were going along the flowage, there were cracks along, and my snow machine was brand new. And because I was going fast, and I didn't realize there was a crack, and I -- okay, my snow mobile when to the crack and fell in the water. And because I didn't get any compensation for those, and all the --

We hear good news, they just talk with their mouth, they don't talk with their mind, they don't talk with their heart, they just talk with their

- 1 mouth. They just say good things. And NTI are
- 2 slowly starting to speak up and starting to feel
- 3 the people, but they are very slow in starting.
- 4 And I think when we -- or the Inuit, when they --
- 5 Nunavut territories fully develop -- we can work
- 6 together, both not Inuit and Inuit. But now mining
- 7 companies now, explorations, we are able to
- 8 communicate with them directly. But those
- 9 explorers in the future will be consulting us and
- so that they should be honest and tell us what the

bad effects would be and not just tell us the good side of it and inform the people. So these are my concerns.

And I am also involved as the JP. I'm not trying to use my position to mention my concerns, but I am saying these things on behalf of the people. Because we have seen materials or wood that we can salvage, that we can use, like, to make sleds.

And there were ten units or houses that were moved here, and there is appliances and furniture that were also distributed in the community, so if they are contaminated, then somehow the people are at risk now because they are saying the whole buildings and everything else is contaminated, that means those contaminated items were distributed to

the community.

They said we have to wash them and clean them before they are moved here. So, you know, it is -- it is possible to cut them in sections, wash them and clean them and put them aside and, you know, for people to salvage.

It has been more than two years, HTO did not mention, but it has been more than two years that there is no Norwhales here in the Arctic Bay area, north or south. There used to be a lot of Norwhales migrating to this area along the cliffs. There were a lot of Norwhales, but now there is none of those. It has been more than two years, no Norwhales, and not even an apology for that.

And because we hear Nanisivik is all contaminated, and so we didn't realize that there is bad contaminants, that they were showing up.

So we want assistance from the Nanisivik company, either through -- from federal government or other agencies, that we want assistance.

I also thank the Water Board for one day of work that I got paid in the meeting. So he told me one time that's enough, one day meeting there, although I wanted to continue with the meeting.

Thank you. That's it. 26 CHAIRMAN: G

CHAIRMAN: GN, they are listening and

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         other agencies are here listening, and NTI is here
    2
         too.
    3
         LEAH KALLUK:
                                  Last week or so in the
    4
         newspaper I read that Arctic Bay landfill or sewage
    5
         was leaking and draining to Strathcona Sound, and
    6
         it was not a true statement or newspaper article.
    7
         But, you know, it is not even possible for the
    8
         sewage to drain to Strathcona Sound, they have to
    9
         go over the mountain to do that.
   10
              So the sewage lagoon, it said that it is
         draining to Strathcona Sound, and some people,
   11
   12
         although they are stories, they sound reasonable,
   13
         but they are not always true.
   14
             And also there is -- the airport is located
   15
         where the creek is draining to our water lake, and
   16
         the jet flies over that, and I want the Water Board
         to consider the coast ocean that -- how much
   17
   18
         allowing the dock area -- especially around the
   19
         loading area, how much concentrate have gone into
   20
         the ocean?
   21
             And also the ice turned brown or black in the
   22
         springtime, and the salt water is different than
   23
         when we were used to, so I think Water Board -- and
   24
         Levi was the mayor in Grise Fiord one time, and
   25
         they were -- they were exploring for diamonds and
   26
         gold in the land area, and hamlet used to get
0269
         permits, I guess, letters from the applicants
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    2
         asking for a permit, and the hamlet -- so in the
    3
         future, during the -- their reclamation work, they
    4
         inform the Arctic Bay residents how much water that
    5
         is being used for this summer, let's say for this
    6
         summer, how much water will be used after that. We
    7
         don't want any more surprises, that at least tell
    8
         us how much water was used, if -- so that we know
    9
         if we are being informed, we could make better
   10
         decisions. So that's my comment.
   11
         CHAIRMAN:
                                Let's take 15 minutes to
   12
         take a break.
   13
                        (RECESSED AT 2:16 P.M.)
   14
                        (RECONVENED AT 2:31 P.M.)
   15
         CHAIRMAN:
                                 We will go off the record
   16
         here.
   17
                        (DISCUSSION OFF THE RECORD)
   18
         CHAIRMAN:
                                 I would like to reconvene.
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19
             Mr. Tilleman, I believe you have some things
   20
         to add?
   21
         BILL TILLEMAN:
                                   Thank you, Mr. Chairman.
   22
          There are four things. The first one is we have
   23
         two exhibits that I think we need to file, one
   24
         would be the e-file of DIAND's presentation today,
   25
         and the second would be the hard copy of the
   26
         DIAND's presentation. So the electronic version
0270
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         would be Exhibit 7, and the hard copy would be
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         Exhibit 8.
    3
         EXHIBIT NO. 7:
    4
              DIAND PRESENTATION, ELECTRONIC VERSION
    5
         EXHIBIT NO. 8:
    6
              DIAND PRESENTATION, HARD COPY VERSION.
    7
         BILL TILLEMAN:
                                  The second thing I want to
    8
         know is I would like to -- the staff would thank
    9
         Mucktar for his comments, the parties -- well, all
    10
         of the parties. You can see from Mucktar that he
    11
         was asked to go, and I asked the staff, and that
   12
         was eight years ago. So that was quite a while
   13
         ago. So I am glad that he is happy and that was a
   14
         nice thing to do, and that was eight years ago.
             The third thing is as we are almost through
   15
         the list, as you know, sir. And we have
   16
   17
         Environment Canada and DFO and whoever else you
   18
         want to call. But also we have Ramli Halim who is
   19
         with Acres, and I wanted to just ensure the parties
   20
         here knew that he is an intervener, like other
   21
         parties. He is not advisor to the Board, he is not
   22
         with the Board, he is not influencing the Board.
   23
         So if anyone wants to ask him questions, then he
   24
         should do that, and he may have something to say,
   25
         and I'm not sure -- we haven't heard from him yet,
   26
         so likely we should do that before we end.
0271
            And then finally some municipal issues came
    1
    2
         up that will be dealt with under the municipal
    3
         water license. And so for those who are worried
    4
         about that regarding the municipal matters in
    5
         Arctic Bay, what the Water Board Staff would do
         would be to offer to meet privately with those
    6
    7
         people outside of the scope of this hearing and try
    8
         to answer their questions or resolve their
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9
         concerns. So we will try to do that as soon as we
   10
         can, and those are -- those comments, Mr. Chairman,
   11
         and we can get back.
   12
         CHAIRMAN:
                                Thank you, Mr. Tilleman.
   13
             The next intervener is Environment Canada.
   14
         PRESENTATION BY ENVIRONMENT CANADA:
   15
         COLETTE MELOCHE:
                                     Thank you, Mr. Chairperson.
         I believe I need to be sworn in by Mr. Tilleman.
   16
   17
         BILL TILLEMAN:
                                  Please state your name for
   18
         the record and spell your last name.
   19
         COLETTE MELOCHE:
                                     Colette Meloche
   20
         M-E-L-O-C-H-E.
   21
                        (COLETTE MELOCHE SWORN)
   22
         COLETTE MELOCHE:
                                     Thank you, Mr. Chairperson.
   23
             My name is Colette Meloche. I am here on
   24
         behalf of Environment Canada. I am the
   25
         environmental assessment and contaminated site
   26
         specialist for Nunavut.
0272
    1
            Rather than reading our entire written
    2
         submission into the record, I will just focus on
    3
         the highlights and present those to the Board.
    4
            Our intervention focuses on the
    5
         implementation of a long-term water quality
    6
         monitoring program for the site and ensuring
    7
         appropriate disposal of federally regulated
    8
         materials.
    9
            Just so everyone is aware of the role that
   10
         Environment Canada plays in these hearings, the
    11
         operations out of the Nanisivik mine are subject to
         the following statutes which are administered by
   12
   13
         Environment Canada, those are Section 36.3 of the
   14
         Fisheries Act, the Canadian Environmental
   15
         Protection Act, the Migratory Birds Convention Act,
         the Canada Wildlife Act.
   16
   17
             Nanisivik mine is also currently captured by
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         the Metal Mining Effluent Regulations, under the
   19
         Fisheries Act.
   20
             And CanZinco has applied for recognized
   21
         closed mine status under this regulation, so,
   22
         therefore, it will be captured by the Metal Mining
   23
         Effluent Regulation until at least July 30th of
   24
         2006. And at that time, recognized closed mine
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         status will be granted if the mine has fulfilled
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         all of the necessary requirements. And once this
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status is obtained, the effluent from the site will be subject to the general provisions of the Fisheries Act.

Through the course of the review of the reclamation and closure plan, Environment Canada has had the opportunity to identify many of our concerns, either directly to the proponent or through technical sessions that have been arranged by the Board. And as a result of these interactions, it has been able to conclude that the majority of our concerns have been addressed.

We do have the following remaining outstanding issues that we would like to bring to the attention of the Board for consideration for your terms and conditions for the water license. In regards to monitoring, Environment Canada is pleased to hear yesterday that CanZinco is willing to treat the monitoring plan as a living document. We find that this is critical to ensuring the effectiveness of the monitoring plan. And we recognize that the Water Board notes in the license that the length of the closure portion of the monitoring plan may change, based on the results of ongoing monitoring.

In regards to monitoring at the landfill, now a written intervention which we have submitted to

- 1 the Board, we recommended that during the
- 2 reclamation period, the hydrocarbon parameters of
- 3 BTEX, B-T-E-X, and the effluent F4 compounds be
- 4 monitored on a weekly basis at three different
- 5 locations, the NML-26, NML-30 and NML-29, as in
- 6 their plan, CanZinco did not indicate frequency or
- 7 sampling locations for these parameters. However,
- 8 as CanZinco has indicated in their response to
- 9 Water Board staff questions, they are currently
- proposing to monitor every two weeks for these
- parameters at NML-26 monitoring station.
- Environment Canada is satisfied with this
- 13 monitoring frequency of every two weeks. We find
- that that would be sufficient for our concerns,
- 15 rather than every week as we originally proposed.
- 16 However, we do still recommend that the two other

17 locations that we identified, MNL-30 and MNL-29, 18 also be monitored. We feel it is necessary in 19 order to indicate if there is any movement of 20 hydrocarbons from the landfill, especially until 21 the permafrost has developed in the landfill 22 itself. 23 Also, as CanZinco is currently proposing to 24 monitor for other parameters at these stations on 25 an every two-week basis, we don't feel that 26 monitoring for these parameters as well would be 0275 1 overly onerous for the company. 2 In regards to monitoring at Kuhulu Lake, we 3 are very pleased to see that they have taken our 4 recommendations that we have put forth in our 5 written intervention and have agreed to annual 6 monitoring for total metals, total suspended 7 solids, pH and conductivity effluent. 8 In regards to federally regulated materials, 9 Environment Canada is currently aware that there are five active transformers at the Nanisivik mine 10 11 site. And in their presentation yesterday, CanZinco indicated that the active PCB transformers 12 13 have been purchased by Wolf Den Resources, will be 14 shipped to their site in 2006. 15 We do request confirmation that the transformer underground is removed prior to the 16 17 portals being sealed, as the sealing of the portals 18 hasn't been -- or at least it wasn't noticeable in 19 the schedule that had been put up during the 20 presentation. So if there are plans to seal the portals earlier than when the transformer is to be 21 22 shipped off-site, Environment Canada requests that 23 CanZinco begin discussions with us to ensure that 24 the underground transformer is properly stored in 25 the interim. 26 We also request confirmation as to whether the underground transformer is still in use, as it 2 has been the understanding of some Environment

- 3 Canada stock numbers that was dedicated to the
- 4 underground pressure. If it isn't in use, we
- 5 recommend that it will be removed from the
- 6 underground transformer and to make it accessible

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         in testing the soils. And to ensure this, we
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         further recommend that the Board instruct CanZinco
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         in their license to ensure that the access to the
   10
         underground transformer is not blocked during the
   11
         course of the reclamation work.
   12
             We also request that any information
   13
         regarding the presence of PCB light ballasts
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         on-site be provided, and that CanZinco confirm how
   15
         these materials will be disposed of.
             So, in summary, Environment Canada is very
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         pleased with the substantial progress that has been
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   18
         made with the reclamation project closure plan at
   19
         the Nanisivik mine site.
   20
             And we would like to thank the Water Board
   21
         for the opportunity to come before you and make
   22
         these recommendations. We hope that they are of
   23
         some use to you during the decision-making process.
   24
             Thank you.
   25
         CHAIRMAN:
                               Thank you.
   26
             Are there any questions from the applicant to
0277
    1
        Environment Canada?
        BILL HEATH:
    2
                               We are fine. Thank you,
    3
        Mr. Chairman.
    4
        CHAIRMAN:
                               Thank you.
    5
            Are there any questions from Arctic Bay to be
    6
         addressed to Environment Canada about their
    7
         presentation? Thank you.
    8
            Are there any questions from NTI to be
    9
         addressed to Environment Canada over their
   10
         presentations?
   11
         GEORGE HAKONGAK:
                                      No questions, Mr. Chairman.
   12
         CHAIRMAN:
                               Thank you.
             Any questions from INAC?
   13
   14
                                 No questions, Mr. Chairman.
         CARL McLEAN:
   15
         CHAIRMAN:
                               Thank you.
             Are there any questions from DFO?
   16
   17
         DERRECK MOGGY:
                                    No questions, Mr. Chairman.
   18
         CHAIRMAN:
                               Thank you. Any questions
   19
         from Acres International?
   20
         RAMLI HALIM:
                                 Mr. Chairman, there is no
   21
         questions.
   22
         CHAIRMAN:
                               Thank you.
   23
             Are there any questions from GN?
   24
         SUSAN HARDY:
                                 No. Thank you, Mr. Chair.
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25
                               Thank you. Are there any
         CHAIRMAN:
   26
         questions from the general public to be addressed
0278
    1
         to Environment Canada about their presentation?
    2
            Are there any questions from the Nunavut
    3
         Water Board to be addressed to Environment Canada?
    4
                                 Thank you, Mr. Chairman.
         BILL TILLEMAN:
    5
        No questions.
    6
            It is just that over the last break, the
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         issue of the landfill site, no one apparently knew
         where it was at. It has been somewhat identified.
    8
    9
         It is now located on the map. And I just recommend
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         that we file the map as an exhibit. I haven't seen
         it yet. It is just now being passed over here. So
   11
   12
         what I would propose is that we actually, during
         the next break, get this to all the parties, let
   13
   14
         them look at that map, and if there are any values
   15
         to it, I don't know right now because I haven't
   16
         seen it. But subject to hearing from the parties
   17
         on that, that would become Exhibit Number 9. So as
   18
         the staff, we have no questions. We have no
   19
         questions for Environment Canada. But we will get
         a copy of this exhibit.
   20
   21
         EXHIBIT NO. 9:
   22
              MAP IDENTIFYING ABANDONED AIRPORT LANDFILL
   23
         CHAIRMAN:
                               Thank you, Mr. Tilleman.
   24
         Thank you, Ms. Meloche.
   25
         CHAIRMAN:
                               Next I invite DFO to make
   26
         their presentation.
0279
    1
        DERRECK MOGGY:
                                    Do I need to be sworn?
    2
        BILL TILLEMAN:
                                 Please state your name for
    3
        the record and spell your last name.
    4
        DERRECK MOGGY:
                                    Derreck Moggy, M-O-G-G-Y.
    5
                       (DERRECK MOGGY SWORN)
    6
        PRESENTATION BY DFO:
    7
        DERRECK MOGGY:
                                    Thank you, Mr. Chairman and
    8
        Nunavut Water Board for allowing DFO an opportunity
    9
         to do our presentation.
   10
             In reviewing the closure plans CanZinco has
         presented, our issue was the impact of fish and
   11
         fish habitat, including dilatory substances,
   12
   13
         specifically sediment, that water quality issues on
   14
         the topic by Environment Canada and some other
```

agencies as well.

Additionally, I would like to provide an update in terms of the DFO lands that are owned in the docking area and by those out at the tank farm where the concentrates shed is, the storage areas.

This is just a note, I guess, before I start, with respect to the activities in the closure plan, just to summarize that there hasn't been any fish identified in those two -- in East Twin and West Twin Lakes, and because of several significant barriers along the creek, fish probably aren't able to access very far up, so as a result, our concern

would relate more to the activities in the creek that would generate sediment and be discharged to the Strathcona Sound or East Twin or the Twin Lakes downstream.

Therefore, the following parts are my recommendations to the Board: With respect to some of the restoration activities, specifically west rock pile, west open pit and west adit roadway, some of the activities in and around those areas are adjacent to the creek and have the potential to generate sediment. However, there can be measures that can be incorporated, plans to prevent the release of that sediment and get into the creek. They would be based on site-specific measures.

And with respect to some of the other ones, the west open pit is actually an area with waste rock that will be pulled out of there, although not all of it. And the water quality in that area, general physical stability will be monitored. I guess my only recommendation was that there be enough time provided in the year to get in there and make any adjustments if necessary. I suppose if you wait too long in the year and then have to wait until the next year.

The other aspect was that in the west open pit, if there was a contingency, in the unlikely

- 1 event that the remaining material would have to be
- 2 removed, then there was consideration for access
- 3 road down into the creek, and I am just
- 4 recommending that plans for that be sent around to

the agencies, specific DFO, to ensure that mitigation measures incorporated into the plan would produce the generation of sediment.

With respect to the road construction as well, just is a big note that there were roads that were necessary in the area, and in the future, for any use, that it should be removed as part of the plan, that that be done in such a manner as they can reduce the generation of sediment into the creek. And furthermore, that the area be restored so that the long-term stability of the banks would be considered back then.

And I understand that there may be some types of crossings that might be necessary for the community, and, again, I believe that they are published options that would design something that would allow the crossings, so that would be my recommendation to address that.

I did have a bit of a concern, I guess, with Twin Lakes sand and gravel. Initially, my -- I noted that the boundaries came across the creek, a feeder creek in East Twin Lake, and given that

comment that CanZinco has warranted some grounds, that was basically it, not having the quarry get into the creek to generate sediment further down stream. So basically boundaries of all the new quarries should try to avoid all water bodies, not just that one feeder.

With respect to the East and West Twin disposal area, there will be some work done to the outlet channel at East and West Twin to ensure the long-term stability. Again, doing the work in and around that section, the water has potential to generate sediment. And so there are measures to deal with that.

And I did comment on the control structure and the Dike. The stability needs to be demonstrated that beyond the monitoring period, we are concerned that they may fail and tailings and other sediment be generated back down there.

With respect to the monitoring plan, there is an environmental effect monitoring plan that Environment Canada had mentioned, and how we look at the water quality impacts with the water

23 species. If there is a creek down into Strathcona 24 Sound. The only other aspect that I wanted to add 25 was, again, the physical stability will be 26 monitored, and efficiencies will be addressed. It 0283 is recommended that the efficiencies be reported to 1 2 the Water Board as soon as possible, so that the 3 opportunity to fix the problem would be immediate. 4 So the other aspects I wanted to provide an 5 update on the dock area as well. DFO has a dock 6 area. And we are having some discussion with 7 CanZinco early next week to discuss the terms and 8 conditions based on the closure plan and some of 9 the new items that came up specifically about a 10 week or so ago. 11 Some of the -- there was consideration, at 12 one point, of the tank farm to potentially be used 13 by the third party. I understand that is probably 14 not going to happen, but the timing, depending when 15 that will end. We just have to clarify with these 16 points and one other point. 17 Oh, the other aspect was the long-term use of the dock and the marina. It is kind of based or 18 19 anticipated that would be industrial-type use area. 20 I don't know if that is going to continue on to be 21 the case or not, so that might -- may be 22 rediscussed again next week if that's an 23 appropriate level of cleanup in that area. 24 So, in summary, for the most part the closure 25 plan looks reasonable to DFO. However, there will be some discussions with respect to the land lease 26 0284 1 area in terms of what the appropriate level of 2 cleanup will be and if there is any additional work 3 that needs to be done and any other additional 4 monitoring that might occur. 5 And one other aspect that I just wanted to note that some of the shoreline along the dock 6 7 areas, the lands there should -- our 8 recommendation, again, would be that it is stable 9 for the long term. 10 Thank you, Mr. Chairman. 11 CHAIRMAN: Thank you. 12 Any questions or comments from the applicants

- 13 addressed to DFO?
- 14 BILL HEATH: We have no questions, Mr.
- 15 Chairman.
- 16 CHAIRMAN: Thank you.
- 17 Any questions or comments from Arctic Bay to
- 18 address to DFO?
- 19 ARCTIC BAY QUESTIONS DFO:
- 20 Q NIORE IQALUKJUAK: Yes. I am the mayor of
- 21 Arctic Bay.
- My question to DFO in the Arctic Bay area, in
- 23 the ocean, have they been studied if there is any
- 24 impacts from the mine operation, the oceans around
- 25 Arctic Bay area?
- 26 A DERRECK MOOGY: I'm not aware of any

- 1 studies we have done in the Arctic Bay area. I
- 2 think there is a brief report around Strathcona
- 3 Sound on that basis of previous work that was done,
- 4 but nothing in Arctic Bay.
- 5 Q Since there is no studies, can -- is it possible to
- 6 do a study in Arctic Bay area to make sure that the
- 7 marine environment is not impacted?
- 8 A I can't answer that right now. I can take it back
- 9 and consider that with appropriate people in my
- office as a possibility and see if there has been
- any in the past as well.
- 12 Q The dock area, when will you know what will happen
- to the dock facility?
- 14 A Next week we are having a discussion with CanZinco.
- 15 The people in our office will, after the lease
- aspect between CanZinco and DFO, we will sit down
- and discuss how that will play out and also try to
- determine what the likelihood is for the dock and
- marina facility, what's the long-term plan of the
- dock.
- 21 Q So if there is a decision of exactly what will
- happen, can you inform the people of Arctic Bay
- 23 your decision?
- 24 A Yes.
- 25 CHAIRMAN: Any questions to DFO?
- 26 Q KOONOO OYUKULUK: HTO representative.

- 1 DFO, I have never seen them doing discoveries
- 2 in Nanisivik area. And my question -- and I'm not

- 3 aware of any activities being done by DFO, so my
- 4 question is DFO -- DFO is responsible for marine
- 5 life. My question is related to Kuhulu Lake fish,
- 6 have you done any studies in Kuhulu Lake?
- 7 A DERRECK MOGGY: I am not aware of any
- 8 studies that was done specifically with Kuhulu
- 9 Lake. I can check and get back to you if there has
- been any done in the past, but I am not aware of
- any right now. I know that there has been some
- 12 information from other sources, but specifically as
- to what went on...
- 14 Q My question is related to that before the mine
- started, there used to be fish in that lake with --
- 16 you know, and we used to catch the fish in Kuhulu
- 17 Lake, and right now there is hardly any fish there,
- so that's why I want a study to be done, because
- 19 there is less fish. And we would like to go
- 20 fishing in that lake on the ice. Sometimes the
- women, they go very early in the morning to go
- fishing, so right now even the women that go early
- in the morning, they can't catch any fish, so I
- 24 think there is a change. So I suggest that DFO do
- a real study.
- 26 CHAIRMAN: Thank you. Any questions

- 1 or comments from NTI to be addressed to DFO?
- 2 GEORGE HAKONGAK: No questions, Mr. Chair.
- 3 CHAIRMAN: Any questions or comments
- 4 from GN to be addressed? Thank you.
- 5 Any questions or comments from INAC?
- 6 CARL McLEAN: No questions.
- 7 CHAIRMAN: Environment Canada?
- 8 COLETTE MELOCHE: No questions.
- 9 CHAIRMAN: Acres?
- 10 RAMLI HALIM: No questions, Mr. Chairman.
- 11 CHAIRMAN: Dionne?
- 12 WATER BOARD STAFF QUESTIONS DFO:
- 13 Q MS. FILIATRAULT: Thank you, Mr. Chairman.
- Just a point of clarification that you also
- 15 had a map showing your lease boundaries?
- 16 A DERRECK MOGGY: Yes, it is just basically
- the boundaries of the leases are DFO and CanZinco.
- 18 MS. FILIATRAULT: Thank you.
- 19 CHAIRMAN: Thank you.
- 20 BILL TILLEMAN: Mr. Chairman, I think that

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21
         would be meant that that would be marked as number
   22.
         10.
   23
         EXHIBIT NO. 10:
   24
              CANADIAN COAST GUARD NANISIVIK LEASE
   25
              L-9195300 MAP
   26
         CHAIRMAN:
                               Number 10, okay. Thank
0288
    1
         you. Thank you, so much.
    2
        DERRECK MOOGY:
                                    Thank you, Mr. Chairman.
    3
                               Next intervener is Ramli
        CHAIRMAN:
    4
         Halim from Acres International.
    5
         BILL TILLEMAN:
                                 Please state your name for
    6
         the record and spell your last name.
    7
                                Ramli Halim, H-A-L-I-M.
         RAMLI HALIM:
    8
                       (RAMLI HALIM SWORN)
    9
         RAMLI HALIM:
                                Mr. Chairman, members and
   10
         staff of the Nunavut Water Board, Mr. Iqalukjuak
   11
         and residents of Arctic Bay, thank you for an
   12
         opportunity to make my presentation here today.
   13
             My name is Ramli Halim. I work for Acres
   14
         International Limited. I am a mechanical engineer
   15
         and have been in practice for more than 20 years,
   16
         and I would -- Acres is an engineering consultant
   17
         company retained by the Board.
   18
             Before going into my main presentation, I
   19
         would like to provide an introduction about the
   20
         Nanisivik closure and reclamation plan, a final
   21
         copy of which was submitted earlier this year.
   22
             As we have heard from other presentations
   23
         today and yesterday, the plan contains the
   24
         components as shown in this slide.
   25
             The main report, referred to as Item G-3 of
   26
         the plan, brings together the eleven components of
0289
    1
         the plan.
    2
            I would like to bring a little background
    3
         history about the plan and how the process has
    4
         taken place in these past two and a half years.
    5
         The plan was originally presented by the Nanisivik
    6
         mine in February 2002, after a decision back in
    7
         August 2001 that they were going to close the mine
    8
         permanently in October of that year. The review
    9
         process for the plan was ongoing since the first
         submittal of the documents.
   10
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11 A pre-hearing was held in June 2002 and a 12 public hearing the following month. Technical 13 meetings were subsequently held to review and 14 provide directions, to fill the data gap, to refine 15 and finalize the plan. These meetings were held in Igaluit, in Calgary, Ottawa and just recently in 16 17 Yellowknife. 18 The Yellowknife technical meeting was held 19 last month after the Nanisivik submitted their 20 final closure and reclamation plan. 21 As a summary, the final closure and 22 reclamation plan was submitted two and a half years 23 since its first interim plan was presented in 2002. There have been four technical meetings since then. 24 25 Besides Nanisivik mine, the regulators and 26 other parties have been involved in reviewing 0290 process, which included the people from Arctic Bay, 1 2 Nunavut Water Board, DIAND, Government of Nunavut, 3 Environment Canada, DFO and NTI. 4 The plan has brought a pool of technical 5 consultants across Canada. I hope I have included 6 all of them here. There are also other experts, 7 such as Dr. Bo Eberling from the University of 8 Copenhagen and others who had been carrying on 9 studies and worked in the Nanisivik area. 10 The following shows what has been achieved in 11 the review process for the plan. Most of the field 12 activities were completed, including the Phase 2 13 and Phase 3 Environmental Site Assessment, additional geotechnical investigations for the 14 15 taliks, quarry sites, spillways, hydrogeological 16 study of the West Twin Dike area, geochemical 17 study, Human Health Ecological Risk Assessment and 18 many others. 19 They established the design criteria and 20 guidelines for the studies, which need to be 21 completed for the plan. 22 They completed the design work for the 23 various components of the plan. And, finally, the 24 final plan is generally ready for its

A general consensus after the technical

25

26

implementation.

meetings about the final plan is that the design work is completed, proposed activities have been presented; contingency plans were developed and placed. Long-term plan for the closure and reclamation are now more or less laid out, which include the critical instrumentation and monitoring to observe how well the plan will perform in the coming years.

The following slides contain some comments on remaining issues that need to be addressed. They should not, however, prevent the process from moving ahead into the implementation stage. In addition, Nanisivik mine has made commitments to resolve most of the issues in the following slides in their letter dated May 14th, 2004 and in their presentation yesterday.

There are other comments and many issues, the first one is about details on their plan to carry out closure and reclamation activities. It is important that there is a master plan to fit in all their activities together. A schedule is useful as it helps the mine to organize their work. It helps the regulators to plan their activities such as inspection approvals, help to understand the master plan for the commissioned work, provide a clear picture of all the reclamation activities and shows

work well or not.

time lines for all the activities.

In their presentation earlier yesterday, Nanisivik mine finally showed a master schedule for the closure and implementation plan. Subject to a final review, this will certainly answer all of our questions about the implementation details of the Nanisivik mine closure plan.

The second issue or comments is about the duration of how the plan will be executed. Yesterday we heard from Ms. Hardy from the Government of Nunavut about their plan. And in terms of the timing, the important part, I believe, is it has to be an open-ended process in terms of the timing of the plan, should be performance driven, which has the following mechanisms for check and balances to see whether the plan would

In addition, the contingency plans must be in

19 place to take any immediate action to correct any 20 problems that developed during the closure and 21 reclamation periods. 22 The third comments about the plan is a 23 clarification about the cover thickness required 24 for remediation work outside the areas of the 25 tailings, waste rock, open pit and the landfill 26 sites. This issue deals with handling of the 0293 1 reclamation work in the industrial areas, the dock 2 areas, the townsite, the land farm and other 3 various places. 4 Until their presentation yesterday, I have 5 not seen a specific statement to the cover 6 thickness, particularly if we will be dealing with 7 some excavation to clean up part of the area as per 8 confirmatory sampling requirements. 9 It would be a very good idea to have a site 10 map which shows all of the existing structures, 11 show areas which will likely need excavation based on Phase 2 and Phase 3 ESA, and show areas which 12 13 will need additional excavation for hot spot, if 14 required by a confirmatory test on the underlying 15 contaminated soil. 16 We will be basically more in the 17 implementation stage so the detail has to go fairly 18 clearly in terms of structure by structure, not 19 just the area. 20 The following two areas, the taliks and 21 underground mine/portal areas, should emphasize on 22 the importance of proper and adequate 23 instrumentation, monitoring and inspections. 24 Nanisivik mine has made a commitment to 25 obtain further information to ensure that the mine 26 portals, opening and underground mine will be 0294 stable. Warning signs, as well as visual 1 2 inspections, should be included in the plan for 3 these areas. 4 The long-term performance of the taliks under 5 the tailings should also be addressed for the West 6 Twin Dike area. 7 It is time now to move forward with closure

and reclamation work. Again and again, as shown in

the previous slides, instrumentation and monitoring are required to check the effectiveness of the remediation work. They also provide direction and indication whether we are going on the right track.

Nanisivik mine should consider seriously on the comments made by DIAND in their compliance reports. Efforts should be made to get adequate instrumentation in place and to get a proper monitoring program running on a timely and efficient manner.

The residents of Arctic Bay ask about their involvement of this part of the work, as there will be no more Nanisivik staff on-site after closure work is complete. Training to monitor the instruments cannot be done in a short time. It needs direction, experience and commitment to do the work.

And finally, the contingency plans need to be

considered during the monitoring process in case some actions need to be done. G-9 report on monitoring addresses most of these plans already.

Just some comment about the Human Health and Ecological Risk Assessment. As part of Acres' team to view the HHERA, Dr. Bryan Leece and Dr. Ulysses Klee, both of Dillon Consulting, carried out the peer review and were involved in the discussion process and technical meeting in Ottawa last year.

If there is any questions or queries specifically related to this issue or our review of the HHERA, I will gather these questions and hopefully Dr. Bryan Leece will be able to address them through a teleconference, if necessary.

The next slide contains issues that are related to the industrial dock, the townsite and mine access roads.

To clarify the closure and reclamation work in this area, again, maps showing areas affected by the remediation work, including details on the proposed work, will be helpful.

Just to follow Nanisivik letter dated May 14th and Nanisivik presentation yesterday, the reclamation work in the east adit treatment facility needed to be put into the greater picture of the plan, i.e., its implementation schedule.

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The contingency plan needs to be put in place, as this area may be reclaimed after the closure period is complete. Again, the water quality monitoring and their records may be able to tell us on time when this will happen.

The last issue is about Strathcona Sound. Jacques Whitford carried out some sampling in the dock area last year. Similar programs should be included in the future and within the proposed reclamation period.

We have to realize that the sediments that went into the Sound are likely now in deep waters, over 50 metres deep. I strongly believe that trying to further disturb the sediment may do more damaged or impose greater risk to the environment.

Finally, I believe that the plan has provided us with a good map to carry out the closure and implementation plan. In this public hearing, we hope that this presentation will provide assurance to the residents of Arctic Bay about the technical efforts that have been put in place for this plan. Now, if there is any question or comments?

23 CHAIRMAN: Thank you, Ramli.

24 Any questions from the applicant, please?

25 APPLICANT QUESTIONS ACRES INTERNATIONAL:

26 BILL HEATH: Thank you, Mr. Chairman.

0297

Just one point of clarification, and on the

2 risk of being picky, but this does form part of the

official record, so we thought we would just

4 clarify one slide that Bob had had. And that was

5 the announcement to advise people of the closure in

Nanisivik came in September of 2001, but the final closure didn't come until September 30th, 2002.

8 And other than that one point of clarification, we

9 are fine, Mr. Chairman.

10 RAMLI HALIM: Yeah, I guess if that's a

11 mistake of the timing.

12 CHAIRMAN: Pardon me?

13 RAMLI HALIM: That's a mistake on my

behalf, I made it of the timing, but that should be

15 corrected for later. Thank you.

16 CHAIRMAN: Are there any questions or

17 comments from Arctic Bay hamlet? Thank you.

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18
            NTI?
   19
         GEORGE HAKONGAK:
                                    No questions, Mr. Chairman.
   20
                              GN? GN? Any questions or
         CHAIRMAN:
   21
         comments?
   22.
         SUSAN HARDY:
                                No, thank you, Mr.
   23
        Chairman.
   24
        CHAIRMAN:
                              Thank you. INAC?
   25
                              No questions, my lord.
        MR. McLEAN:
                              Environment Canada?
   26
         CHAIRMAN:
0298
    1
        COLETTE MELOCHE:
                                  No questions.
    2
        CHAIRMAN:
                             DFO?
    3
        DERRECK MOOGY:
                                  I have no questions, Mr.
    4
        Chairman.
    5
        CHAIRMAN:
                             General public?
    6
           Okay. Ouestions or comments from the Water
    7
        Board staff?
    8
        DIONNE FILIATRAULT:
                                   No questions.
    9
        CHAIRMAN:
                             Thank you.
   10
            Okay. Thank you. We will break for 10
         minutes for the interpreter. Thank you.
   11
   12
                      (RECESSED AT 3:16 P.M.)
                      (RECONVENED AT 3:37 P.M.)
   13
                              Okay. Mr. Tilleman?
   14
         CHAIRMAN:
   15
                                Thank you, Mr. Chairman.
         BILL TILLEMAN:
   16
            And so what I would like to do is just
   17
         continue with these exhibits.
   18
            I can confirm that I spoke with the
   19
         interveners regarding the map which we propose as
         Exhibit Number 9. The approximate location of the
   20
   21
         abandoned airport landfill as identified by Moses.
   22
            And so 10, then, we have already done, the
   23
         DFO document which is the Coast Guard Nanisivik
   24
         Lease.
   25
            We propose that Exhibits 11 and 12 in that
   26
         order be first the electronic version of the Acres
0299
    1
        International presentation, that would be 11, and
    2
        number 12 will be the hard copy.
    3
           Thank you, sir.
    4
        EXHIBIT NO. 11:
    5
             ACRES INTERNATIONAL PRESENTATION,
    6
             ELECTRONIC VERSION
    7
        EXHIBIT NO. 12:
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8	ACRES INTERNATIONAL PRESENTATION, HARD
9	COPY VERSION
10	CHAIRMAN: Thank you.
11	Okay. We are at number 12, we are here to
12	talk about the water-related matters, and we heard
13	different issues. Buildings or health issues are
14	not related to Water Board, so any issues should be
15	directed to the appropriate departments, such as
16	the GN, and that we are here to listen to the
17	applicants. And that if we have not heard any
18	other concerns, because we already heard comments
19	and concerns, so anything related to water license?
20	And when you go to the microphone, state your
21	name.
22	Any other comments related to water license?
23	Okay. There was no response with regards to item
24	12, so I believe that we can skip item 13,
25	questioning of the other persons, associations,
26	agencies, as there was no response to items 12.
0300	
1	Okay. We will move on to Item 14: Closing
2	remarks of the interveners. If I can start with
3	Arctic Bay, closing remarks?
4	As for your information, would you prefer to
5	come last? With regards to closing remarks, would
6	you prefer to come in last?
7	NIORE IQALUKJUAK: Yes, okay.
8	CHAIRMAN: Thank you.
9	Okay. Any closing remarks from NTI?
10	CLOSING REMARKS BY NTI:
11	GEORGE HAKONGAK: Thank you, Mr. Chairman.
12	First of all, I would like thank the Nunavut
13	Water Board for allowing NTI to voice their
14	concerns. Also, the hamlet of Arctic Bay and the
15	school for the use of the gym. Thank you to
16	CanZinco for lodging, meals and transportation
17	during our stay. In closing, thank you to the
18	residents in voicing their concerns. And last but
19	not least, thank you to the caterers and to the
20	interpreter.
21	And before I close off here, Dionne had asked
22	me a couple of questions earlier on today, and I
23	would just like to answer those one at a time.
24	There was among various speakers after NTI, so
25	forgive me.

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0301

1 GN's responsibilities, from listening to the GN's 2 presentation, I am willing to let this issue go as 3 it is going to become responsive to the GN, and it 4 is going to be a huge expenditure and not part of 5 the interest in stepping in as well. I work for

6 The Department of Lands and Resources, so that is 7 out of my scope of responsibility.

And the second question was about specifics about sampling sites and monitoring sites. After reading the CanZinco submission, after rereading it, the water quality monitoring and intake facility, monitoring at the cover for seepage, I was reading page 76 that refers to increased frequency of sampling and monitoring in the event of erosion or seepage, so that's -- answers my question.

And also during the closure period, monitoring with discreet visits, one point is that there were training and technical assistance from Arctic Bay. And if CanZinco can train someone fully, then discreet visits would become bi-weekly or monthly visits to water quality monitoring, as well as the monitoring. Also, soil sampling around the tailings facility concentrates storage areas.

I think the most important areas to monitor are also the West Twin reservoir, I think it is

0302

1 station number 159-6, and also at the east adit

2 treatment facility, station number 159-12, I think

3 these are too important as they flow into several

4 areas, and to my understanding, eventually into

5 Strathcona Sound. And it would be especially in 6

the spring and summer that monitoring and samples

take place. And as we know, weather changes are

8 very unpredictable. When the season changes, 9

naturally it is different.

West Twin Lake Dike geothermal monitoring is specific after rereading the proposal.

12 That's all that I have. Thank you, Mr.

13 Chairman.

14 CHAIRMAN: Thank you very much,

15 George.

16	Okay. Any closing remarks from GN, Susan
17	Hardy?
18	CLOSING REMARKS OF THE GN:
19	SUSAN HARDY: Thank you, Mr. Chair.
20	The closure and reclamation plan, including
21	the recent commitments that you have heard
22	discussed earlier, represents, in our view, a sound
23	process for the reclamation.
24	We wanted to thank the Board and our
25	colleagues who have been participating in the
26	opportunity of the technical discussions and to a
0303	
1	point of consensus that have been reached on the
2	closing reclamation plan.
3	And we want to commend the mine for a sound
4	response that has taken them a lot of effort in
5	this final stage of operation.
6	We are wanting to be clear that we are
7	willing to support the issuance of a water license
8	for this reclamation to begin. The scheduling for
9	this summer is a schedule we are in agreement with.
10	And our total consent, in terms of the technical
11	reports, includes the Human Health and Ecological
12	Risk Assessment.
13	The question of the landfill at the airport
14	is not an important point for your license, but it
15	was we were asked to address it now.
16	DIAND did transfer a parcel of land to the
17	territorial government that is for where the
18	airport is located, so it is our job to look for
19	any indication of that landfill being on the land
20	that they transferred to us, and we will do that.
21	If there is a landfill on land that's been
22	transferred to the GN, we will do our job, which is
23	to respond to that quickly. That wouldn't be part
23	
24 25	of the mine reclamation proper, it is on different land.
25 26	With regard to the meetings that the
20	With regard to the investings that the
0304	
1	concerns the community has raised, you will see
2	that the Government of Nunavut came to this hearing
3	with a large team. Many of these people will be
4	reporting back to their senior officials in the
5	government when they return. And we will be

6 remaining behind after the hearing closes. When 7 you conclude the hearing, Mr. Chair, for another 8 period of time so if the community has questions or 9 comments they wanted to convey to us to take back, 10 we are happy to do that. So we will stay after the 11 hearing is formally closed by you to do that. The community should also be aware the MLA 12 13 made a strong statement in the House about his 14 concerns about Arctic Bay, and that the long-term 15 planning for the community should be very strongly focussed on here by our experts, so that's another 16 17 area that we will be following with the community. 18 I mentioned before that we have actually been 19 given a time limit for working out the details of 20 the long-term response to the needs of Arctic Bay. 21 And there is a plan to have a meeting July 10th to 22 get community input about that. 23 If the community meets us with questions this 24 afternoon, we will try to get them their answers 25 before the meeting happens in July. 26 So, again, thank you. We are glad to be able 0305 1 to be here to support the beginning of a 2 reclamation process that will be successful. And 3 if there is anything more we can contribute to help 4 you with the decision, please just let us know. 5 Thank you, GN. CHAIRMAN: 6 Closing remarks from INAC? 7 **CLOSING REMARKS OF INAC:** 8 STEPHANIE HAWKINS: Thank you, Mr. Chairman. 9 I'm Stephanie Hawkins from INAC. 10 In closing, INAC would like to reiterate the 11 fact that this process, the reclamation and closure 12 plan, the develop process has been interactive and 13 has been done on a cooperative basis with the 14 involvement of many parties. 15 We have come a long way from two years ago, 16 and we are very satisfied with the process to date. 17 And as such, we have only two remaining comments in 18 addition to those already presented. The first is 19 in regard to the recreational roads, we believe 20 that without the agreement of the Government of 21 Nunavut to take responsibility for maintenance and 22 repair, these roads should be reclaimed by the

23

reclamation and closure plan.

24	The second is that if any Government of
25	Nunavut facilities or infrastructure are to be
26	reclaimed, this work should either fall under the
0306	
1	existing water license, or if it does not or
2	cannot, that a new water license application should
3	be filed.
4	So, in closing, the proponent in the meeting
5	in Calgary in 2002, made a commitment to undertake
6	a number of technical studies. And they have met
7	and achieved all of these commitments made at that
8	meeting, and they are to be commended for their
9	efforts in this regard.
10	And so, finally, INAC would like to thank the
11	Water Board, the community of Arctic Bay, the
12	proponent and all of the parties that were involved
13	in bringing the process to this point. Thank you
14	very much.
15	CHAIRMAN: Thank you.
16	Closing remarks from Environment Canada?
17	CLOSING REMARKS OF ENVIRONMENT CANADA:
18	COLETTE MELOCHE: Thank you, Mr. Chairman.
19	Colette Meloche with Environment Canada.
20	In closing, Environment Canada would like to
21	recommend that CanZinco provide a written
22	commitment to all of the issues that have not been
23	resolved, including those that were resolved at the
24	technical meetings in Yellowknife, and the
25	responses to the various information requests that
26	have resulted from the technical meetings and at
0307	
1	this hearing.
2	Environment Canada requests that the
3	interveners take an opportunity to review this
4	submission for accuracy as well.
5	Environment Canada is also satisfied with
6	CanZinco's submitting an addendum to the various
7	reports, rather than a revised reclamation plan.
8	And we would also like to see the executive
9	summaries updated, as well as their translations.
10	And we, again, the same as INAC, would like
11	to commend CanZinco for all the work that has gone
12	into the reclamation and closure plan.
13	And I would like to thank the Water Board to

14 allow us to present our recommendations to you. 15 Thank you. CHAIRMAN: 16 Thank you. 17 Closing remarks from DFO? 18 CLOSING REMARKS FROM DFO: 19 **DERRECK MOOGY:** Thank you, Mr. Chairman. 20 Derreck Moggy, Fisheries and Oceans. 21 Mr. Chairman, Board, Arctic Bay, I just want 22 to thank you for providing DFO the opportunity to 23 provide comments on CanZinco. 24 We would like to reiterate the comments with 25 the protection to fish and fish habitat. 26 First off, with most of the construction 0308 1 activities around Nanisivik, site-specific 2 mediation measures that further prevent or limiting 3 the opportunity for fish habitat or dilatory 4 substances to be done, those would include waste 5 rock piles, restoration of the waste rock piles, 6 roadways, government channels, Twin Lakes and 7 gravel and road removals and restoration. 8 Further, any contingencies that are 9 contemplated to address these problems should also 10 be reviewed as well. Second of all, the monitoring 11 should strongly demonstrate controlled 12 infrastructure at the West Twin Lake and the 13 storage channel, East Twin and the Dike -- sorry, 14 and the Dike to ensure that future failure of these 15 structures beyond the seven-year period is not 16 likely to result in sediment and tailings for fish 17 habitat. 18 Any inefficiencies in the Dike or any of 19 these other structures identified should be 20 reported immediately and for the plan to address 21 these things as soon as possible. 22 And, lastly, with respect to the dock, DFO 23 and CanZinco have agreed to meeting next week for 24 additional clean up and/or monitoring will need to 25 be adjusted, how they will need to be adjusted in 26 the meeting last week and in the last few days, and 0309 it will also follow consideration of the terms and 2 conditions of fish habitat dwellings. 3 So once again, I think the plan basically is

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4
        very good from the standpoint of fish and fish
    5
         habitat. And I thank the Water Board members for
    6
         the opportunity to provide comments.
    7
        CHAIRMAN:
                               Thank you.
    8
            Closing remarks from Acres International?
    9
        Ramli Halim.
   10
         CLOSING REMARKS OF ACRES INTERNATIONAL:
                                 Thank you, Mr. Chairman.
   11
         RAMLI HALIM:
   12
         Ramli Halim with Acres International.
   13
             Nanisivik closure and reclamation plan have
         been reviewed, modified and finalized to its
   14
   15
         present document, which was submitted in February
   16
         and March 2004. It is a relatively large document,
   17
         over 1000 pages, containing the main report and its
   18
         11 components.
   19
             For a document of this size, there are bound
   20
         to be many corrections, additional information,
   21
         discussions and requested clarifications from the
   22
         regulators and other parties, as well as from the
   23
         residents of Arctic Bay. However, subjective
   24
         amendments which need to be made for the document.
   25
         this should not prevent the Nunavut Water Board for
   26
         its approval of the plan.
0310
            On behalf of Acres International, I would
    1
    2
        like to thank the Board for my participation, and
    3
         also from my colleagues from Dillon Consultings,
    4
        Dr. Leece and Dr. Klee in the review process.
    5
            Thank you.
        CHAIRMAN:
    6
                               Thank you, Ramli.
    7
            Okay. Closing remarks now from the
    8
         applicant. Oh, I'm sorry, closing remarks from the
    9
         Arctic Bay, Mr. Mayor.
   10
         CLOSING REMARKS FROM ARCTIC BAY:
         NIORE IOALUKJUAK:
                                     When the mine was closing,
   11
   12
         when it was announced the mine was closing, Levi
   13
         Barnabus was involved in acting as the liaison
   14
         officer, and he created a Hamlet Working Group, and
   15
         I want to thank them, along with the hamlet
   16
         council.
   17
             Although the issues were hard or tough, we
         also work with the HTO. And also the Water Board,
   18
   19
         thank you for allowing us, the people, to express,
   20
         and also to Patrick for informing the public and
   21
         for his effort to inform the people.
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22	And although it is sometimes it was tough
23	issues that people were mentioning but also
24	CanZinco for informing the people of their plans
25	for closure. And representative from NTI, GN, DFO,
26	INAC and Acres International, Environment Canada,
	,
0311	
1	that we heard their comments, that they are
2	supporting the Arctic Bay residents. And the
3	interpreter had to deal with tough words to
4	translate or interpret.
5	INTERPRETER: I got paid for it.
6	NIORE IQALUKJUAK: We understand that
7	residents of Arctic Bay are being represented by
8	these different departments or agencies, and we
9	will are willing to work with them regarding the
10	buildings infrastructure in Nanisivik.
11	And I want to thank the Water Board for
12	coming to Arctic Bay.
13	CHAIRMAN: Thank you, mayor.
14	Closing remarks. Closing remarks from the
15	applicant, please.
16	CLOSING REMARKS OF THE APPLICANT:
17	BILL HEATH: Thank you, Mr. Chairman.
18	Bill Heath from CanZinco.
19	I will do my best to be brief, but given the
20	amount of work we have put into this, we have a lot
21	of people to thank. It hasn't happened easily.
22	I guess the most logical starting point would
23	be to start by thanking the various interveners and
24	their technical consultants and technical experts.
25	Everybody who has appeared before you, Mr.
26	Chairman, has essentially said the same thing, and
	,
0312	
1	that is the plan that we presented to you and
2	submitted in the summer of 2002, while it was a
3	good starting point and it was a good conceptual
4	document, there was a lot of document lacking, and
5	we knew that when we presented it to you, but it
6	was that way by design. And it is only through the
7	cooperations and the spirit of includibility
8	amongst the interveners and the various expects
9	that we were able to refine it and work at it, to
10	get it to the point where it is today.
11	And that's not in any way to belittle the

efforts of Bob and Murray and Eric and Jim and the fellows from Jay Swicher who aren't here, because it is only through Bob's diligence, I think, that we have come to have the document that we have.

And it was his hard work and his efforts that was the driving force.

So to all the interveners, all the kind things you said about the document, they shouldn't come to CanZinco, they should go to Bob and his team

I guess there is one comment about -- I will try to stay on the water. One of the issues that has been raised here is the issue of -- between GN and the issue of materials and supplies and so on. And we understand that the GN is convening a

meeting, as Susan indicated here, sometime in the middle of July. We would very much like to participate in that.

I spoke briefly with the mayor during the last break, and obviously he is concerned about the impact that that might have on his residents. And we would like to do as much as we can to cooperate in that effort.

And I am sure that we are all reasonable people, and we will find a solution that we can abide by.

On the general topic of the mayor, I've not known this mayor very well. I certainly knew the predecessor mayors quite well. I have had a number of opportunities to speak with the mayors and with the hamlet councils.

I have enjoyed my time in Arctic Bay. I have always enjoyed and appreciated the openness and the candor with which elected officials in Arctic Bay felt the need from time to time to sort of keep up on the straight and narrow, and we certainly appreciated the input. And that very much goes very much for the community of Arctic Bay as well.

You know, we hope that over the course of the last 25 or 30 years we have been a good neighbour. And we hope that we have been more than just the

employer down the road.

We know that there have been times when the town or the hamlet of Arctic Bay has needed things, and we have done our best to accommodate. And certainly in listening to some of the presentations by some of the residents of Arctic Bay and some of the Elders, we have not always been a great neighbour. Certainly we have made some mistakes along the way, but our hope is that on balance, people think of Nanisivik as much, much, much, more good than bad. And that -- and if that's the case, then I think our legacy here will have been fulfilled.

So to the people of Arctic Bay and to the hamlet, elected officials, the mayor and council, we appreciate -- we extend our appreciations and our thanks for your support. And the Elders and the organizations, and Hunters and Trappers who again, from time to time, have felt the need to keep us honest, we appreciate your comments.

I should also take the opportunity to thank the staff of the Board. As much as the interveners have been instrumental in making sure that the document that we have in front of us today is a complete and accurate one, both technically and administratively, the staff of the Board has been

just incredible in their support and their help.

And most of all, we would like to thank the Board itself. We would like to thank the Board for the opportunity to come and present our report. And we recognize that it is probably sometimes a tedious process, but it is one that we need to go through. And we appreciate that the Board has convened this meeting in such a timely fashion.

And on a personal note, Mr. Chairman, we would like to thank you for steering us through some, what could have been rather choppy waters in the past few days, but you have by and large kept us out of trouble, so our thanks to you as well.

And with that said, the, I guess the last thing is to suggest that we believe that the report that we have rendered, that seems to have garnered the support for most, if not all, the interveners, would be in your hands, and we would very much appreciate it if you would give it its blessing.

20	Thank you.
21	CHAIRMAN: Thank you very much.
22	To conclude this hearing, I would like to say
23	that as a quasi-judicial tribunal, the Board will
24	make the decision based on the evidence presented
25	during this hearing and based on its own
26	understanding and appreciation of the issues raised
20	understanding and appreciation of the issues raised
0316	
1	during the hearing and in view of the lack of
2	circumstances.
3	In any case, the Board is not a party and
4	does not take sides. The Board will endeavour to
5	finalize its decision and issue its reasons for the
6	decision within 30 days. And all interested
7	parties will receive a copy of the Board's
8	decision.
9	The public hearing is now adjourned, and I
10	would like to thank everyone within CanZinco,
11	interveners and members of the public for taking
12	their time to come out before the Board yesterday
13	and today. Also the interpreter who has a very
14	difficult job to translate very complex issues to
	us, I understand.
15	<i>'</i>
16	Before we end this public hearing, I would
17	like to ask Charlie Inuaraq to say the closing
18	prayer.
19	CHARLIE INUARAQ: (CLOSING PRAYER)
20	CHAIRMAN: This hearing is now closed.
21	(HEARING CLOSED AT 4:10 P.M., JUNE 4, 2004.)
22	
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0317	
1	CERTIFICATE OF TRANSCRIPT
2 3	I, TARA LUTZ, hereby certify that the
	foregoing pages are a true and faithful transcript
4	of the proceedings taken down by me in shorthand
5	and transcribed from my shorthand notes to the best
6	of my skill and ability.
7	Dated at the City of Edmonton, Province of
8	Alberta, this 10th day of June, A.D. 2004.
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                  Ms. Tara Lutz,
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                  Court Reporter
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0318
      EXHIBITS ENTERED IN THE NUNAVUT WATER BOARD HEARING
   1
   2
   3
                        PAGE NUMBER:
   4
      EXHIBIT NO. 3:
   5
           MLA STATEMENT TO THE NUNAVUT WATER
   6
           BOARD...... 177:23
   7
   8
      EXHIBIT NO. 4:
   9
           GN PRESENTATION, ELECTRONIC
   10
           VERSION ...... 219:13
   11
       EXHIBIT NO. 5:
   12
           GN PRESENTATION, HARD COPY
   13
   14
           VERSION ...... 219:15
  15
   16
       EXHIBIT NO. 6:
   17
           GN 2002 SOCIO-ECONOMIC STUDY ..... 219:17
   18
   19
       EXHIBIT NO. 7:
  20
           DIAND PRESENTATION, ELECTRONIC
           VERSION ...... 270:3
  21
  22
  23
       EXHIBIT NO. 8:
  24
           DIAND PRESENTATION, HARD COPY
           VERSION ...... 270:5
  25
  26
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0319	
1	EXHIBIT NO. 9:
2	MAP IDENTIFYING ABANDONED AIRPORT
3	LANDFILL 278:21
4	
5	EXHIBIT NO. 10:
6	CANADIAN COAST GUARD NANISIVIK LEASE
7	L-9195300 MAP287:23
8	
9	EXHIBIT NO. 11:
10	ACRES INTERNATIONAL PRESENTATION,
11	ELECTRONIC VERSION 299:3
12	
13	EXHIBIT NO. 12:
14	ACRES INTERNATIONAL PRESENTATION,
15	HARD COPY VERSION299:6
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