

YUKON TERRITORY WATER BOARD

QZ94-004

SECTION 21(2) OF THE YUKON WATERS ACT

BYG NATURAL RESOURCES

HELD BEFORE:

PAUL HUNTER	-	CHAIR
BRUCE L. WILLIS, Q.C.	-	LEGAL COUNSEL
RICHARD TRIMBLE	-	GEOTECHNICAL CONSULTANT

BOARD STAFF:

JUDI DOERING	-	MANAGER, WATER BOARD SECRETARIAT
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TRANSCRIBER:

DOUG AYERS	-	J.G. MOORE & ASSOCIATES
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APPEARANCES:

- BYG NATURAL RESOURCES
 - JIM SMITH, VICE-PRESIDENT
 - TOM HIGGS,
 - PETER LIGHTHALL,
 - HOWARD PLEWES

- EPS/DFO
 - VIC ENNS
 - GEORGE MACKENZIE-GRIEVE
 - BENOIT GODIN

- DIAND (WATER RESOURCES)
 - DAN CORNETT
 - BUD MCALPINE

- ENVIRONMENT DIRECTORATE
 - MARG CROMBIE
 - KIRSTIE SIMPSON
 - KEVIN MCDONNELL

1

2 (Pre-Hearing Conference commenced at 9:00 a.m.)

3 CHAIRMAN: This meeting is called to
4 order. These proceedings are being transcribed and some of
5 the participants are attending by telephone; please wait to
6 be recognized before you speak, and remember to give your
7 name before beginning any of your remarks.

8 We'll deal with the introductions first, and then we'll
9 talk about procedure. Our transcriber today is Doug Ayers,
10 of J.G. Moore & Associates. My name is Paul Hunter; I'm the
11 Chairperson of the Yukon Territory Water Board. With me is
12 Bruce Willis, legal counsel; Richard Trimble, geotechnical
13 consultant; Judi Doering, Manager, Water Board Secretariat.
14 BYG Resources are participating by telephone. Mr. Smith,
15 would you introduce yourself and your delegation at this
16 time.

17 MR. SMITH: Jim Smith, Vice-President
18 Operations for BYG; Tom Higgs, consultant to BYG; And Peter
19 Lighthall, geotechnical consultant to BYG; and Howard
20 Plewes, geotechnical consultant to BYG. The last two are
21 with Klohn Crippen.

22 CHAIRMAN: Thank you, sir. Fisheries and
23 Oceans Canada/Environment Protection have submitted a joint
24 intervention; I'll ask Vic Enns to introduce their party
25 now.

26 MR. ENNS: This is Vic Enns, and with me
27 today is George MacKenzie-Grieve. And there is no one here

1 from DFO; no one was available. Oh, sorry, Benoit Godin is
2 on the phone from Sudbury, as well.

3 CHAIRMAN: Indian and Northern Affairs
4 Canada are participating in person and by telephone. I'll
5 ask Marg Crombie to introduce their party and just indicate
6 which people are in the room and which are on the phone.

7 MS. CROMBIE: Marg Crombie, Director of
8 Environment; Kirstie Simpson, Manager Environmental
9 Assessment, is here; and Bud McAlpine, from Water Resources,
10 is here; on the telephone is Kevin McDonnell and Dan
11 Cornett.

12 CHAIRMAN: Thank you. The Yukon
13 Territory Water Board has before it Application Number
14 QZ94-004, which is an application from BYG Natural Resources
15 Incorporated for a Type A water use license for a quartz
16 mining undertaking in the Mount Nansen area. A public
17 hearing into this application is scheduled to take place on
18 June 6, 1995.

19 The board has received a joint intervention from
20 Fisheries and Oceans Canada and Environmental Protection, in
21 which they state that they do have submissions to make to
22 the Board but they will not make these submissions in the
23 absence of an EARP screening. The Board has received an
24 intervention from DIAND, in which DIAND advises that they
25 are not prepared to participate in a public hearing, and
26 requested a pre-hearing conference to discuss postponement
27 of the hearing. No other interventions were received.

1 Since this pre-hearing conference has been called in
2 response to DIAND's request, I'll now ask DIAND why they
3 want the postponement of the June 6th hearing.

4 MS. CROMBIE: I guess, as indicated in our
5 letter, and agreeance with what DOE and DFO's submission
6 basically stated, we have not completed the EARP screening.
7 We have inadequate information, at this point in time, for
8 us to be able to make a decision, or to make a 12(c)
9 decision that the project can proceed with mitigation; and,
10 therefore, we are not at a point in time that we can
11 participate in a hearing.

12 CHAIRMAN: Maybe we can get more
13 specific, and ask for specific information that DIAND is
14 looking for.

15 MS. CROMBIE: Kevin, do you wish to respond
16 to the specifics of the main areas that we feel we still
17 need further information?

18 MR. CORNETT: This is Dan Cornett, with
19 Water Resources. I believe there is two main issues that
20 are before the RERC, that we are still trying to address
21 with the company. The first really pertains to the physical
22 stability of the tailings dam impoundment proposed by BYG.
23 We've had a geotechnical consultant provide DIAND with
24 advice on the design and, at this point, we do not believe
25 there is sufficient information and a sufficient design
26 before us in which to finalize the EARP review. We've asked
27 for additional information for that.

1 The other area pertains to chemical stability of those
2 tailings; in particular, the arsenic. I guess you should
3 say the two sort of go hand in hand; you have to have the
4 physical stability before we can have the chemical stability
5 as well.

6 These really are the two main issues that RERC is now
7 trying to finalize with the company.

8 CHAIRMAN: That's it, Dan?

9 MR. CORNETT: Yeah, I think that's in a
10 nutshell, I'm not trying to go into the details of every nut
11 and bolt at this point in time.

12 CHAIRMAN: Can I get a response from BYG?

13 MR. SMITH: Yeah, Jim Smith speaking. I'd
14 like to ask Mr. Lighthall to address the tailings dam
15 stability.

16 MR. LIGHTHALL: Yeah, we're rather surprised
17 that there is a concern over the tailings dam, because we
18 believe we've done a large amount of work, over the past 10
19 years, to look at a number of sites in this valley, and we
20 laid out in our letter of May 25th how the evolution of the
21 tailings dam site selection came about. We picked the site,
22 along with BYG, which is the best site, topographically, to
23 handle not only the 300,000 tonnes of tailings they have on
24 their proven reserves, but also gives them a good
25 opportunity to make this a longer term operation.

26 It's a site which is favourably located with respect to
27 the mill; it's downhill. It is a site which we've

1 characterized with some well-sampled drill holes last year.
2 We have a good understanding of the foundation. We have a
3 good understanding of the potential maximum settlements of
4 the foundation. We've proposed a design which really
5 handles all of the, I think what we might say, worst case
6 behaviour of the foundation, in that we believe that there
7 is a good chance that this foundation won't thaw rapidly or
8 significantly, however, we've proposed a design which would
9 accommodate thawing. We've put in measures to slow the rate
10 of thawing. We've put in a liner on the upstream side of
11 the dam to minimize the rate of seepage through the dam.
12 It's a very flexible structure, being built of granular
13 materials. It's only of moderate height; it's, at the
14 maximum section, less than 20 metres in height.

15 We don't see this as a difficult tailings dam. We have
16 a good understanding of it. We have some design details to
17 complete, but that's not going to change the design of this
18 dam very much. So we really feel, with the amount of work
19 that has been done, it adequately characterizes the site.

20 Certainly, we're willing to talk about any specific
21 aspects of it, we're prepared to get any other information
22 as the design proceeds, but at this point we believe there
23 is enough information to allow the Water Board to make a
24 confident assessment that it is a good structure.

25 Does anybody else want to add to that?

26 MR. HIGGS: I would just like to reiterate
27 a bit of the history involved in the dam selection process.

1 We conducted a site visit in August of last year to provide
2 members of the RERC with the opportunity to view the
3 location of the dam site. That was well attended by RERC
4 members.

5 We completed a report in October of last year, which
6 provided the RERC with the preliminary design information,
7 and we were told, at that time, that the best approach to
8 getting an acceptable design dam was to work in concert with
9 the geotechnical consultant from the RERC, which we
10 attempted to do in early December, after we had filed our
11 IEE report. We did not get a response from RERC until early
12 February, at which time a number of issues were brought
13 forward. We finally arranged a conference between RERC
14 members and their consultants and Klohn Crippen, at which
15 point we felt we had reached a resolution of the outstanding
16 issues, that the technical issues had been sorted out.

17 We compiled that into a second report that was issued
18 as part of the IEE addendum. That was put forward in early
19 April. Then we got a response back the first part of May,
20 that basically came back with the same issues that had been
21 dealt with in the early correspondence in February, as if we
22 really had not reached any agreement.

23 In our water license application, we made a full
24 commitment to complete the detail design information and
25 submit it for review prior to construction. That commitment
26 is still there. We feel that there is every opportunity for
27 RERC to enter into discussions on detail design, and we feel

1 that there really isn't an additional need for delay of the
2 design function, at this point, on the dam. We're confident
3 that the design is a sound one. There seems to be a
4 difference of opinion on the level of detail required.

5 MR. LIGHTHALL: Just to reiterate what Tom was
6 saying, I don't think we've had very great concern over the
7 design, or particular concern over the design. The only
8 concern we are hearing is over the level of information, as
9 Mr. Higgs said, and I don't think that -- I'm confident
10 that that's not going to change the design, or it's not
11 going to change our minds that it's an adequate design. So
12 we really recommend to the Water Board that you proceed with
13 hearing us. We'd love to have a chance to present the
14 design to you, and believe that you'll be satisfied.

15 CHAIRMAN: Thank you. Maybe I could get
16 a response from DIAND.

17 MS. CROMBIE: We've indicated, several
18 times, that DIAND and RERC does not feel confident that --
19 or does not feel it's got adequate data, at this point in
20 time, to be able to say that they confidently feel that the
21 potential impacts of this site can be mitigated, because of
22 the location, because of the characteristics of the site,
23 itself. If this was in an area with no permafrost, or even
24 with heavy permafrost, it might be a different matter. But
25 it's because of the discontinuous permafrost characteristics
26 of this particular site --

27 MR. LIGHTHALL: Excuse me, I have to object.

1 CHAIRMAN: Because we can only talk one
2 at a time here, Peter, let her finish and then you can
3 respond, please.

4 MS. CROMBIE: We have basically requested
5 for a pre-hearing conference to discuss the postponement of
6 the hearing. We have not come either ready or prepared to
7 argue the technical merits of the project. We do not have
8 our geotechnical consultant here. This is not -- in our
9 mind, is not the Water Board hearing.

10 We cannot participate and, basically, won't be
11 participating in a hearing if there is a decision to
12 continue with it. Until we have a screening, we, as Federal
13 Government, cannot participate. And basically, from the
14 perspective of it being a Water Board hearing and a hearing
15 for the water license, DIAND could correct me on this but --
16 or Bud, but it is basically, from our perspective as
17 regulators, we feel it is necessary to have this information
18 submitted as part of the water license application so that
19 it can become a component of the water license, so it can be
20 enforced as a component of the water license.

21 There really isn't an argument as to what is being
22 proposed to be done, and that there will be a final design
23 committed. It seems to me the discussion is around the
24 timing of it, and what is required to be in place for the
25 water license and in the water license, itself.

26 CHAIRMAN: Go ahead, Peter.

27 MR. LIGHTHALL: Yeah, okay, I really just

1 wanted to object to just one statement, that this is in
2 discontinuous permafrost. This is in the continuous
3 permafrost zone, and we believe that it's a deep permafrost.
4 The only argument is over, if you put something on it, how
5 fast will it thaw; how cold is it. But I don't even
6 consider that a significant issue; we can deal with the
7 thaw. So I don't think it's discontinuous. It's continuous
8 permafrost, it's in the continuous permafrost zone. So
9 that's really just a technical objection.

10 MR. SMITH: Our problem, now, is, we're
11 worked around to the point that we can't start our
12 construction program in the summer. Basically, it will cost
13 us a full year if we have to wait until this process
14 continues on. So that's what drives us right now, to put it
15 before the Water Board hearing and get our case out and
16 judged.

17 CHAIRMAN: Do you specifically know what
18 information DIAND is requesting of you?

19 MR. SMITH: I know that, specifically,
20 DIAND wants some more data on ice temperatures, which we
21 will be producing prior to the scheduled June 6th date,
22 because we're going to have a site visit there to read our
23 thermistors. And they wanted some more geotechnical data,
24 but we don't feel that this -- But essentially, it was just
25 more data, is what I understand. But specifically ground
26 temperatures.

27 MR. WILLIS: The company is aware that the

1 Board cannot complete any hearing until EARP is complied
2 with? So that, if the company -- if the Board decided to go
3 ahead with the hearing, it would have to be adjourned, and
4 then await the compilation and completion of the EARP
5 Screening and Decision Report. You're aware of that?

6 MR. HIGGS: We are fully aware of the
7 requirement to comply with the EARP screening, but we felt
8 that, at this point, we were not making progress on
9 completing that work, and we saw no other avenue of trying
10 to get our case put forward and have some independent
11 review. We basically had disagreement between specialists
12 that, apparently, could not be resolved.

13 MR. WILLIS: Okay, Tom, I've got another
14 question for you, and it's a hypothetical. Assume that, for
15 whatever reason, you can go ahead and file your as-built
16 drawings as a license requirement. If there is an issue on
17 that, that opens the door to environmental concerns even at
18 that stage, there is no certainty because there may be a
19 request for an amendment hearing. So that I'm just
20 questioning whether or not you're trying to push this thing
21 ahead, and creating more problems for you than it's worth.
22 Because the Board cannot complete its hearing until such
23 time as EARP has been finalized and complied with.

24 So yes, the Board could go ahead and many of these
25 issues could be -- certainly there are many things that
26 could be dealt with, but there seems to be a question as to
27 ground temperature that's coming up, which presumably -- I'm

1 not an expert, but presumably there is an uncertainty there
2 that's bothering the Federal Government.

3 I guess my question is, what are the specific tests
4 and/or obtaining of information that is required, and what
5 is the time line for that? Is that clear on the table right
6 now?

7 MR. SMITH: Well, first of all, we don't
8 even believe that the ground temperatures are a fatal flaw
9 issue, anyway; we've designed the dam to accommodate thaw.
10 However, we have thermistors in place; we haven't been able
11 to get readings until now, which will give us some
12 temperatures. Now, for what it's worth, that data will be
13 available at the hearing.

14 But I'm not saying that it matters, particularly, to
15 us, as far as the design. So it's really an issue that has
16 been brought up by the geotechnical consultant to the
17 screening committee, which is not really, you know, to the
18 designers, of that great a concern. You know, it doesn't
19 seem worth holding up BYG for a year to wait on some ground
20 temperature data.

21 MR. HIGGS: I'd just like to break in.
22 Basically EARP Screening Guidelines Order has to answer the
23 question of whether the potential impacts can be mitigated
24 with known technology. We believe that this is a
25 conventional design, that can be built with known acceptable
26 technology. We don't see catastrophic failure, we don't see
27 a fatal flaw in any of these aspects.

1 MR. MCALPINE: You are in receipt of
2 Geo-Engineering's May 5th report, are you?

3 UNIDENTIFIED: Pardon me, Bud?

4 MR. MCALPINE: You're in receipt of Milos'
5 May 5th report?

6 MR. SMITH: Yes.

7 MR. MCALPINE: Did you not see anything other
8 than ground temperatures being asked for there?

9 MR. LIGHTHALL: Yes, we agree, but it's
10 essentially all in the nature of additional geotechnical
11 data. We don't see anything there that -- we obviously need
12 detailed geotechnical data so we can finalize designs of
13 diversions so they have proper filters and proper rip-rap.
14 But none of those are, we consider, issues that can't be
15 dealt with in detail design. We always feel, in a
16 feasibility study, we want to insure we have a good,
17 workable concept that eliminates fatal flaws and gets a
18 good handle on our costs, and that's what we've done.

19 The things that are being asked for in the May 5th
20 letter are, you know, just data, just more data. So it's
21 not anything that we feel is going to significantly change
22 our conclusions on this site. And it isn't an effective
23 process to do detail design for every feasibility study.

24 That's why we have trouble dealing with the long delay
25 in, first of all, responding to it, and then creating
26 another one year's -- possibly one year's delay because we
27 have to do detail design for a conceptual approval. So,

1 yes, I agree that there are a lot of other things that Mr.
2 Stepanek asked for, to answer your question.

3 MR. MCALPINE: I think basically what I think
4 had been told you before was that detail design was required
5 for the license, but we wanted a strong preliminary design
6 for the environmental assessment, and with the supporting
7 data to support that design. We are in receipt of your
8 report to BYG, which we understand is the commitment of the
9 company. They've submitted it to -- my copy says to the
10 Water Board on May 26th?

11 UNIDENTIFIED: Yeah.

12 MR. MCALPINE: So that's a commitment by the
13 company, is it?

14 MR. SMITH: Yes, it is.

15 MR. MCALPINE: Attached to that, on page 6
16 through 10, I believe you have laid out a program to do more
17 detailed investigations and data collection; is that
18 correct?

19 MR. SMITH: That's correct, yeah.

20 MR. MCALPINE: We see that as a good step
21 forward.

22 MR. SMITH: Good. And that's the
23 commitment that BYG wants to carry that work out, so that
24 they can get a final design done so that they can start
25 building it this summer, based on moving forward with the
26 approval of the concept which has been submitted.

27 MS. SIMPSON: I guess the problem is,

1 although you are, at this point, satisfied that there is
2 sufficient data to support the design, and you're happy that
3 the geotechnical program that you're going to be carrying
4 out over the next month or six weeks is going to support the
5 conceptual design that you've proposed, I'm not convinced
6 that other technical members of the RERC, not the
7 geotechnical consultant working for DIAND, feel that there
8 is sufficient data, at this point, to support that design.
9 And I guess the problem here is, although we're not
10 questioning your design, we are questioning whether or not
11 you've provided us with enough information.

12 And I guess the second concern is that the amount of
13 information that you've proposed on your May 25th letter,
14 the Klohn Crippen letter, would appear to be the information
15 that's required for licensing purposes. And if that
16 information were before us now, or before the Board in the
17 form of an application, we could probably be satisfied. But
18 I'm not sure how we accommodate collecting the information
19 after the public forum, after this public process is over.

20 MR. LIGHTHALL: I guess that's the difficult
21 question that's before us. Did you want to talk about that,
22 Jim?

23 MR. CORNETT: This is Dan Cornett here. I'd
24 just like to pose that question before the Water Board, as,
25 what are they actually expecting to license here for
26 tailings dam facilities? It's very apparent, and the
27 company acknowledges, we think that the program that they're

1 going out to do, for the site investigation, is the correct
2 one; that they are in the process of trying to finalize a
3 design for the tailings dam. We, as government, would
4 submit to the Board that those final designs should be
5 before the Board, so that the Board can license that
6 facility. And what is before the Board now is not a final
7 design; it's, in essence, a concept. And I think that, as
8 government, we're not in the business, or even the Board
9 should be in the business, of licensing licensing concepts.
10 You need to have a design which we understand and we can be
11 assured will be built according to that. At present that
12 information is not before the Board.

13 MR. SMITH: I guess, in our experience,
14 myself as a mining developer, Peter Lighthall and Tom Higgs,
15 that our experience has been that what we put forward is the
16 standard, common, approach to tailings dam design
17 engineering and permitting. Tailings dams are approved at
18 this level hundreds of times. This is not something new.

19 In one moment, you're saying you want -- It becomes a
20 discussion on degree of engineering; at what point is it
21 final? Well, final engineering is during construction and
22 you're making the final adjustments. So it's a question --
23 you say "final design"; well, that doesn't happen. So it's
24 a degree. Degree of design, is what we're talking about
25 here. And I guess everybody here has a different idea of
26 what is required.

27 MS. SIMPSON: I guess you're right, there's

1 some semantics involved here. But I'm looking at page 6 of
2 the May 25th Klohn Crippen letter to you, Mr. Smith. And in
3 talking about the program of final design of tailings
4 impoundment, that "Additional site investigations and
5 engineering design work will be carried out to confirm the
6 foundation conditions determined in the preliminary
7 investigations...." So that tells me, right now, that we
8 have not confirmed the foundation conditions. "... to
9 analyze the thermal behaviour of the permafrost ... in
10 greater detail.", tells me you haven't got sufficient
11 thermal analysis at this point. "The results of the thermal
12 analyses will be used to predict excess pore pressures in
13 thawing foundation soils and to estimate the resulting
14 settlements and deformations of the tailings dam." So,
15 again, that tells me that there is not sufficient data, yet,
16 to even get on with that level of design detail.

17 I don't think we're looking for the final drawings at
18 this point; we're looking for the same kind of site
19 investigation data that you're looking for.

20 Now, this jurisdiction is different from other
21 jurisdictions. At this point, in another jurisdiction,
22 there might be an additional permit that might be required.
23 I think you've spoken to us a little bit about Ontario and
24 B.C. processes that you've gone through before. And in this
25 case, the public Water Board hearing is it. We can't
26 consider information that comes in after that hearing,
27 unless it is an adjournment and we re-continue the hearing.

1 The Board has no ability to consider any of that
2 information once that hearing process is over. So it has to
3 be in before the hearing. Or there has to be either an
4 amendment to that license, in which case I, frankly, don't
5 know what the point would be, because you'd have to come
6 back in for an additional hearing, and there would be the
7 risks associated with going back into another hearing. I
8 don't really know what the timing benefit would be, to you,
9 to do that.

10 MR. HIGGS: If I may add something,
11 certainly the company recognizes the fact that, if they
12 submit a design, a preliminary design for a dam, and it gets
13 put into the water license and then built, it is the
14 company's risk that parties that have intervened on that
15 application have the right to call for a hearing, an
16 amendment hearing on that license. The company accepts that
17 risk in this situation, because there isn't a strict
18 licensing process for dams. There isn't a group of
19 geotechnical people in government that do dam designs -- dam
20 design review, I should say, which there is in Ontario and
21 B.C., in which we have inspectors involved with the dam
22 construction.

23 We understand that; that that's our assumed risk.

24 MR. MCALPINE: I think, Tom, that's the
25 process you're going through right now.

26 MR. HIGGS: Prior to approval in principle
27 of the project --

1 MR. MCALPINE: Well, the first stage is to
2 clear the environmental assessment. When they're satisfied
3 that a strong preliminary design, with supporting data, is
4 available, then that's the first step. The second step is
5 to complete the design, go through the Water Board process,
6 have that design put in your license, and then carry out
7 that design, with minor amendments as detailed by your QAQC
8 program.

9 MR. HIGGS: Peter was involved in another
10 project in B.C., we recently went through on a dam design,
11 and we were able to move from preliminary design to
12 construction in a matter of months. That's why, if we look
13 at that process in parallel, we're a bit stymied why it
14 takes such a long period of time to get approval on
15 geotechnical designs.

16 MR. LIGHTHALL: Yeah, that project that Tom's
17 referring to, we were able to get project approval in
18 principle granted. We worked with the government regulators
19 to get the design approved, really, in a very short period
20 of time after construction. And it was a good cooperation,
21 actually, by the Ministry of Mines, that helped us get that
22 through. And I guess that's where we'd like the opportunity
23 to work with your experts in the same way, but recognizing,
24 you know -- I don't believe that the Water Board or DIAND
25 are taking -- would be taking a large risk, giving approval
26 on principle, on what we have on the table right now. The
27 detail design process only strengthens the final design, it

1 isn't a risk.

2 MR. CORNETT: I'd like to just point out,
3 maybe for Peter's benefit, that the Water Board licensing is
4 the final approval and sign-off for the dam, your design.
5 And we, as regulators, DIAND, have no ability to go in and
6 say your final design is not acceptable, after the fact. It
7 has to be -- it's signed off and approved in a license, as a
8 term and condition. That's the only real approval that we
9 have in the territory for tailings dams design.

10 MR. LIGHTHALL: Right, I understand that.

11 MR. SMITH: But we're going to get there,
12 aren't we?

13 MR. CORNETT: You're going in the right
14 direction, I'll tell you that, I mean that's what we're
15 asking for. It's a timing problem; how do we deal with
16 trying to make sure there's adequate information to finalize
17 the screening, to finalize a design and put that before the
18 Board, so that the Board can properly license it and you can
19 go out and construct it according to design? We're not
20 there yet. And this is a timing problem that we're trying
21 to deal with here; that's the request for postponement.

22 CHAIRMAN: I think Marg Crombie wants to
23 speak.

24 MS. CROMBIE: Just following up, actually,
25 Dan addressed it from a different angle, the process here,
26 we don't have, either, the ability to give approvals in
27 principle. As Dan said, the license is the water license,

1 and we need to be able to enforce through the water license,
2 and from what is incorporated into the water license.

3 The comment that was made earlier, Jim, I'm not sure if
4 it was your comment, I mean, we are more than willing, would
5 be very happy, to work in concert with your consultants and
6 our consultants and, if feasible, the Board's consultants,
7 to work this through and do it in as timely a fashion as
8 possible. The question is, is there -- Our problem is, the
9 information is needed, be it for the EARP review or be it
10 for the regulatory review. From the perspective of this
11 discussion, I would tend to concentrate on the regulatory
12 needs. Once we have that information in place -- That's
13 where the time crunch is; it's getting that information that
14 is necessary to be included into the water license
15 application. If that period of time can be foreshortened --
16 Now, we're talking about -- I think we had looked
17 internally, and we're talking about a four week period, that
18 if we had that information....

19 We will be completing our review and our report of the
20 additional information, on all the other areas that we have
21 received information on, and there will be the two main
22 areas, and they are the main areas, that will be, at this
23 point, outstanding. So when the information comes in, those
24 will be the two areas that we will just have to finish up.

25 But it does come down to the amount of time it requires
26 for the company to provide that information in, so that it
27 can then be reviewed both by the government and by the

1 Board's consultant.

2 MR. WILLIS: I've got this question. The
3 Board cannot complete the EARP screening -- sorry, cannot
4 complete its deliberations until EARP is complied with.
5 There are other issues that can be dealt with. Why would
6 the Federal Government, knowing the Board's stated position
7 -- Effluent standards, security, any number of issues,
8 perhaps, could be dealt with, and the further debate on this
9 issue could be narrowed. Why would you not at least
10 participate to assist the process to go along? Because I
11 read nothing in any of the cases to suggest that an
12 authority such as the Water Board can't continue to do its
13 job so long as it cannot complete the licensing decision
14 until EARP is complied with. Is your position that, if --
15 I have no idea what the Board is going to decide after these
16 submissions today, but if the Board did go ahead, making it
17 abundantly clear, in going ahead, that it will not finish
18 its licensing decision until EARP is complied with, is your
19 position still not to show up at the hearing as intervenors;
20 or do you want to consider that and get back? Maybe I'm
21 putting you on the spot in that question.

22 MR. CORNETT: Bruce, maybe it's worthwhile
23 reading the 12(d) determination in the EARP Guidelines
24 Order, and what that says, in that it assists you in how
25 DIAND is looking at this.

26 MS. SIMPSON: The potential adverse
27 environmental effects that may be caused by the proposer are

1 But having said that, I'm not suggesting that all
2 issues can be dealt with. All I'm asking is this: if the
3 Board decided to embark on phase one of the hearing, would
4 you be participating, if that was the decision of the Board,
5 to at least go ahead and start the hearing? Because it
6 can't be completed until EARP is completed.

7 MS. SIMPSON: I was just going to say that,
8 unfortunately, so many of the issues are tied to this
9 particular issue; the arsenic issues, the security
10 issues.... I mean, I'm trying to think, in my mind, what we
11 could possibly discuss in a hearing, in absence of the
12 geotechnical work review having been completed.

13 MR. ENNS: That's the point that I was
14 going to make; that however unlikely it may be, if the
15 further geotechnical work resulted in a relocation of the
16 dam, for example, or was fundamentally redesigned, then a
17 lot of the information that we might be provided with would
18 be misinformation before the Board. Because if you take the
19 daily --

20 CHAIRMAN: Excuse me, just hang on a
21 minute. Too much noise coming over the telephone, I'm
22 sorry, gentlemen, but our transcriber is getting a little
23 confused, so... Vic, if you could just back up a little bit.

24 MR. ENNS: I was just saying that, in the
25 unlikely event that there was a major redesign or relocation
26 of the tailings dam, and we went ahead, even now assuming
27 that tailings dam, conceptually, is going to be as proposed,

1 that would knock out a lot of the intervention, if you
2 removed that from the consideration.

3 MR. LIGHTHALL: Could you repeat that point,
4 please; we missed that.

5 MR. ENNS: Can you hear me okay now?

6 MR. LIGHTHALL: Yes.

7 MR. ENNS: The point is that, however
8 unlikely it may be, if the final geotechnical work resulted
9 in a major redesign of the tailings structure, including
10 possibly a relocation, then the information that we would
11 have put before the Board, if we tried to address anything
12 on the basis of the concept that's before the Board now,
13 would in fact be misinformation. And if you take the
14 tailings facility out of the whole equation, I mean, that is
15 really the focus of much of what we bring before the Board.

16 I mean, we should be commenting on a project, not on a
17 component of a project. The more you split it up, the more
18 likely it is that you're going to end up with misinformation
19 before the Board, instead of good advice.

20 CHAIRMAN: Comment, BYG?

21 MR. SMITH: I gather he's suggesting that
22 possibly, with further engineering, we might end up
23 relocating the dam; is that the thrust of your point?

24 MR. ENNS: Yes.

25 MR. SMITH: Well, I guess that's the
26 issue, and Klohn Crippen, the consultants here, believe that
27 they have chosen the right data and all they need is

1 supporting data, now, for the detail design. And I guess we
2 would be at risk, certainly; if we got to that point, the
3 company would be mostly at risk there.

4 MS. CROMBIE: Government is also at risk, as
5 both the body required to undertake the environmental
6 assessments and the body that is required to enforce the
7 license. I believe that -- I mean, yes, the company is at
8 risk from one angle, and Government is at risk from another
9 angle. And from our perspective, Government is -- we are
10 here to insure that the project will work and that it will
11 be environmentally sound, and that it actually can be built
12 as is proposed to be built. And it's that level of
13 discomfort that we still have.

14 I mean, I come back to my -- I mean, all of the
15 suggestions, of looking at part of it and doing a conceptual
16 or approval in principle, it all comes back to, you're going
17 to have to come back and reopen -- or, adjourn the hearing
18 and come back and have another hearing. Or you're going to
19 have to come back and have an amendment. And in all cases,
20 then, you're back at the same point, without that license
21 and that design that is going to be regulated and built, you
22 can't build the dam.

23 And I'm not at all sure what you're gaining by trying
24 to get what appears to be, in my mind, I could be wrong, is
25 an approval in principle, of the concept, to be followed up
26 by approval, at a later date, of the actual design. And our
27 process is, you get approved of the design. Correct me if

1 I'm wrong, Tom, but --

2 MR. LIGHTHALL: Could I make a comment? I
3 guess I am a little -- well, I see there seems to be the
4 assumption that what we've put forward as design is not the
5 design. In other words, that this is just some concept that
6 we're going to change later. That's not really the point.
7 The point is, this is the tailings dam we've put forward as
8 our design. But every structure is detailed; when you go to
9 build it, you do construction drawings, and detail them.

10 It seems to me that we're trending toward a case where
11 you have to have construction drawings for approval, and
12 that's really -- to me, it's a very tremendous deviation
13 from practice. And so I guess your comments, that we're
14 putting forward for approval in principle and then coming
15 back, asking for a later approval, that really isn't it.
16 We're asking for approval of our design.

17 The assumption is made, because Mr. Stepanek would like
18 to see more detail for final design, that that's all part of
19 the approval process. I really don't think it is. I think,
20 with all due respect, that this is not a major -- I know
21 it's important environmentally, but it is not a huge
22 project. It's a small dam, it's a small mine, and we have a
23 very safe design, and we're asking for approval of our
24 design. Not for approval of a concept.

25 So I'm sorry that we're in this impasse, but, to me, it
26 is not a major issue, and it's costing BYG and their
27 investors a lot of concern over their ability to get the

1 mine into operation, over something I don't think is -- I
2 don't think is -- I'm not belittling it, but we've put
3 forward a design, and asking for approval of it. And it has
4 taken BYG a long time, to this stage, to get to this point.
5 And so I'm a little bit bewildered that we can't get
6 approval of what is a sound preliminary design, even
7 detailing.

8 But I understand that maybe it's happened with other
9 projects in the Yukon, is that essentially you need
10 construction drawings, but it's very difficult for the
11 proponent.

12 MR. WILLIS: Well, no, the Act is clear,
13 it's preliminary design, in the regulations, and that is the
14 decision that you're looking at the environmental effects
15 of. There is no suggestion in the Yukon Waters Act or its
16 regulations that it's got to be construction drawings; it's
17 preliminary design, under Section 6 of the regulations.

18 However, listening carefully, there seems to be some
19 question of the assumptions of the preliminary design, with
20 respect to the temperature and the question of permafrost
21 and melting. That seems to be the issue, is whether or not
22 your preliminary designs -- Because there is no suggestion
23 here, under the Yukon Waters Act, it's other than
24 preliminary design. It seems to be the assumptions on this
25 preliminary design, that's the question.

26 MR. LIGHTHALL: Well, I put forward that this
27 is an adequate preliminary design. This is the design

1 that's going to be detailed and put forward for
2 construction. So I don't -- We've done a lot of analysis
3 on this design, we've analyzed for very worst case pore
4 pressures, in the case of foundation thawing, we've looked
5 at maximum possible settlements... we just don't feel that
6 there is anything outstanding, here, that justifies a delay
7 in the project.

8 It's a good design, there's ample precedent. We'd love
9 to show you next week, at a Water Board hearing, some
10 precedent where similar designs have worked, and I think
11 we'll make the Water Board feel very confident that this is
12 something they can move forward with.

13 So I feel really bad for BYG, that we get an impasse,
14 waiting for detail design. Because we always have a detail
15 design stage before we go to construction. But we can't
16 afford to do this for approvals in every case.

17 I would very much like to recommend that we be given
18 the chance to put this to you in a hearing.

19 MR. HIGGS: If I might interject, some
20 people don't appreciate that, with geotechnical design, some
21 of the best design information is accumulated as part of the
22 construction activity. The subsurface conditions are
23 defined as best they can be through drilling, but as the
24 work proceeds, additional information is gathered. It's
25 quite different from the designing of a building or a piece
26 of machinery, where everything is known; they can start and
27 go to detail design. On geotechnical issues, you have to

1 have some flexibility, and you have to have the ability to
2 collect required information and modify designs as they
3 proceed.

4 MR. MCDONNELL: I had a question for Peter.
5 How long would it take to collect and assess the additional
6 information that is laid out in your program?

7 MR. LIGHTHALL: Well, we hope to get started
8 next week, and we think it's two to three weeks on site, and
9 then another two to three weeks to finalize the design. So
10 it's probably four to six weeks. Four would be optimistic,
11 but five or six weeks, I think.

12 And Kevin, I guess you can project, from there, if it's
13 another four weeks for the review to be completed, that's
14 nine to ten weeks, and that's a big chunk of the summer
15 gone.

16 MR. MCDONNELL: In that time frame, it
17 couldn't be constructed?

18 MR. HIGGS: Well, you know, it always
19 makes life difficult to start things in -- So we're saying
20 June, July, mid-August, really only leaves you about six
21 weeks of reliable weather. And don't forget that the water
22 license has to be signed by the minister before any work is
23 started, so that's always an unknown, what the time required
24 for that is.

25 Not only does the RERC screening have to be complete,
26 but the license has to be signed and approved, plus you have
27 to mobilize the contractor.

1 UNIDENTIFIED: If there is a delay, it
2 doesn't look good for construction this year.

3 MR. LIGHTHALL: I sure wish there was a way we
4 could find to -- a workable compromise that could protect
5 everybody in this issue. I'm afraid we're up against a kind
6 of a regulatory blockage that -- I guess I'm appealing to
7 the RERC, to see if there is any way we can get around it,
8 and call this a preliminary design which is approvable, and
9 then, with good faith, work very closely with your
10 geotechnical consultant to make sure he's happy with what
11 goes into place.

12 Because I certainly feel that the Water Board will look
13 at our design favourably when they see what we've proposed
14 and we've explained it to them, but I don't think that the
15 government is taking a big risk on this. It's not a
16 difficult structure. I would hope that there is some way we
17 can find a solution to the impasse.

18 CHAIRMAN: Sorry, I didn't hear those
19 last comments.

20 MR. LIGHTHALL: I'm just saying, I don't think
21 there's too much more I can add to that. I'm just really
22 hopeful that we could find a way out of the impasse. And
23 we'd certainly be prepared to work very closely with your
24 consultants, but it seems to be a regulatory problem of how
25 we can do it and meet a reasonable timing.

26 MR. HIGGS: If there could be a mechanism
27 put in place to allow the dam to be constructed this summer,

1 then it would meet BYG's objectives. Now, I don't know how
2 that could be done on a regulatory basis, but that,
3 basically, is what we have to do.

4 MR. MCALPINE: In terms of working together,
5 I take your offer and we're quite willing to work with you,
6 Peter, in final design on this. However, I think we still
7 are stuck with, you said you've got a preliminary design but
8 our position is basically that there isn't the information
9 there to support the design at the moment. And I think the
10 program of final design, as you proposed in your May 25th
11 letter, clearly outlined that more information is necessary.

12 MR. HIGGS: For final design.

13 MR. MCALPINE: And for regulatory. We would
14 like to see that sort of information included in the design
15 that you submit to the Water Board, to insure that the
16 conditions that you find on site are accounted for in your
17 design, and that that design is included in your license.

18 MR. LIGHTHALL: Well, it's unfortunate.

19 MS. SIMPSON: I'm just sort of trying to
20 think through other scenarios where there might be short
21 term licenses requested or -- and specific requirements for
22 amendments to license in the fall or whatever, but I am
23 having trouble seeing how that gets you any further ahead.
24 I guess you could always do that and assume the risk that
25 you'd have to tear the whole thing down. And again, I can't
26 imagine you'd have to do that but -- I'm just sort of
27 thinking out loud. I mean, you're not the only company

1 that's been in this position before the RERC, and we've been
2 trying to think through whether or not there is any ability,
3 on our part, to look at short term things, or agreements or
4 -- yeah, agreements in principle, or approval in principle,
5 and we really just haven't come up with anything, based upon
6 what we are required to do legally under the EARP Guidelines
7 Order.

8 I guess that's maybe one thing that could be done,
9 would be a requirement for an amendment to license very
10 soon, but that would mean coming back into the hearing
11 process again, and I guess re-Gazetting and all that stuff.
12 I have no idea what kind of timing would be involved in
13 something like that, and how that might help you. Because,
14 just because of the location of your dam, you would be -- I
15 mean, you'd be diverting water and impounding water right
16 away, it wouldn't be a matter of just constructing it for
17 storage in the spring.

18 UNIDENTIFIED: That's correct.

19 MR. HIGGS: I just have a question for
20 Paul; whether you have any instructions to your geotechnical
21 consultant to provide any design review, at this point, that
22 may be helpful to resolve this impasse that we have.

23 CHAIRMAN: How do you mean, Tom?

24 MR. HIGGS: Well, I mean you have engaged
25 Richard Trimble to review the design and the amount of
26 detail provided, and what we would hope is that there may be
27 some -- potentially, with his review, there may be some way

1 out of this impasse that's created by the differences of
2 opinion on the required level of detail. I'm just asking
3 whether you have given him any instructions on providing
4 some of those answers. And if so, we'd certainly love to
5 hear from him.

6 MR. TRIMBLE: I have had a chance to review
7 all the information that has been handed to the Board, and
8 there is a lot of information there. And there is a lot of
9 work been done on this mine site up to this point in time.

10 My opinion is that the tailings dam location is
11 probably in as good a spot as it can be, and they've looked
12 at other options and things, so I don't think additional
13 work is going to change location of the dam.

14 Also, I don't think that additional work is going to
15 change the concept. It's basically going to be an earth
16 built dam over top of permafrost, but the permafrost is
17 going to melt, the crust of the dam is going to settle, and
18 there will be allowances made, in the design, for that
19 settlement; either increased freeboard or whatever. So it
20 should be included in the final design.

21 I also have noted that there is some of what I would
22 call basic information missing, but it's not going to affect
23 what is going to be built. It's still going to be an earth
24 built dam over top of permafrost. I guess, just to
25 reiterate what I said, there's going to be settlement,
26 there's going to be a little bit of seepage. I think the
27 information that's going to be gathered is not going to

1 change the concept, it will just make some improvements to
2 what has been submitted.

3 MR. HIGGS: Richard, in your opinion, do
4 you feel this dam can be built with standard technology, and
5 be a safe and secure dam, in terms of reducing or
6 eliminating environmental impact?

7 MR. ENNS: Is this becoming a public
8 hearing, at this point in time?

9 CHAIRMAN: Yes, better be careful there,
10 Tom.

11 MR. ENNS: I'm speaking on behalf of
12 DIAND at this point of time. I don't think it's
13 appropriate, you know, the federal agencies aren't here to
14 participate in this type of discussion at this time. What
15 we're talking about is a problem with the process, we're not
16 trying to resolve the technical difficulties at this
17 meeting.

18 MR. HIGGS: From our perspective, the
19 reason why you have called for postponement of the hearing,
20 in the first place, is the fact that you felt there is
21 insufficient detail provided, and that seems to be the issue
22 here, of why there is a postponement in the first place. If
23 there hadn't been, then we'd expect that you would have
24 completed your RERC screening report and there wouldn't have
25 been a delay in the hearing. So the geotechnical issue is
26 front and centre.

27 MS. SIMPSON: It is front and centre, but

1 the reason we asked for a postponement of the hearing was
2 because the EARP screening, the process, is not complete.
3 The reason might be the geotechnical, but the reason for
4 asking for the postponement is the screening is not
5 complete. And I agree with Vic, that we're certainly not in
6 any position to discuss the technical merits at this
7 meeting.

8 MR. MCALPINE: It was our intention not to
9 discuss the technical merits, and that's the position we're
10 continuing to stay with.

11 I think, one question I have for Richard, in terms of
12 what you've seen, do you feel there is enough information to
13 design the right hand abutment?

14 MR. WILLIS: You can't object to him -- he
15 never gave an answer to the other side, you can't do what
16 you objected to. He's here to assist the Board, and I just
17 think that -- You're prejudiced because you don't have your
18 technical consultant, and I hear that. Is there any further
19 submissions on the adjournment?

20 CHAIRMAN: We seem to be going around in
21 circles here. Is there anything else anybody wants to say?

22 MR. HIGGS: The only other issue we
23 haven't dealt with is the arsenic issue, and I don't know
24 whether anybody wanted to deal with that or not. Certainly
25 we have looked at that. Is there any desire to deal with
26 the arsenic issue or not?

27 MR. ENNS: You mean right now?

1 latter part of the day. My feeling is that BYG still wants
2 to go ahead with the hearing, and participate in it, and
3 that DIAND wants a postponement of the hearing; we are in
4 the same boat as when we sat down an hour ago. So probably
5 at the latter part of the day, you'll know. Does that
6 answer your question?

7 MR. HIGGS: That's fine, thanks Paul.

8 CHAIRMAN: Anything else?

9 MR. HIGGS: No.

10 CHAIRMAN: Dan and Kevin, you still
11 there?

12 MR. MCDONNELL: Not from here.

13 MR. CORNETT: No more from here.

14 MR. WILLIS: Can I just ask one question:
15 If the decision is to adjourn, when could the hearing --

16 MS. SIMPSON: Adjourn or postpone?

17 MR. WILLIS: I don't see a difference
18 between postponement or adjournment, sorry; if there is, let
19 me know. But it's not going ahead as scheduled. -- when
20 could DIAND be ready for Water Board hearing?

21 MS. CROMBIE: It is dependent upon when the
22 information is provided by the company. We felt that we
23 needed four weeks after the information was submitted.

24 MR. WILLIS: We never did get on the Record
25 exactly what the information was, because your geotechnical
26 consultant -- Can I assume this: that if you don't feel
27 the information is adequate, then you're never going to

1 complete the EARP because of unknown -- under 12(c)? So
2 that would be the conclusion, that it could not go ahead?

3 MS. CROMBIE: Or you could do the 12(d),
4 which has basically the same result.

5 MR. WILLIS: But it will be about four
6 weeks after the filing with the governmental authorities?

7 MS. CROMBIE: We will be doing as much up
8 front as we can do, so it's out of the way. And anything we
9 can do to speed up the process, we will attempt, but --

10 CHAIRMAN: Just to confirm what Peter and
11 Tom had said -- Howard, did you not want to become a part
12 of this conversation at all?

13 MR. PLEWES: I am listening.

14 CHAIRMAN: It seemed to me that you said
15 it was going to take a five to six week period, by the time
16 you got in to do field studies and put them together; is
17 that correct?

18 UNIDENTIFIED: That's right, yeah.

19 MR. PLEWES: Yeah, I would agree with that;
20 about two or three weeks in the field. And certainly some
21 preliminary information will come from the field and, right
22 from day one or day two, we'll be assessing the data as it
23 comes in, so the design will be coincident, so we could
24 complete the final design as expediently as possible.

25 CHAIRMAN: And then is it possible that
26 some of that preliminary information, supplied over the
27 period of time, as you get it, to the RERC may help them

1 quicken up their steps, as far as finishing off the EARP
2 screening?

3 UNIDENTIFIED: Yes, I see no problem with
4 that. Every week we could submit an interim report on the
5 results of the site investigations and design conclusions
6 from it.

7 MR. PLEWES: Does that mean that the review
8 could be faster, if the information were provided sooner?

9 UNIDENTIFIED: Certainly it helps.

10 CHAIRMAN: I think one goes in hand with
11 the other. I think the government is sitting and says, the
12 faster you can get it to us, the faster we can get it out.
13 Is that right, Dan?

14 MR. CORNETT: Yes, I would agree with that.
15 I mean the screening is, for the most part -- I think Kevin
16 was saying we've got half of it built. The big issue is the
17 tailings dam, and that's what we're trying to make sure that
18 gets out. RERC is going to be reviewing that. You know,
19 even as the company's consultants go out and undertake their
20 investigations, we're going to be moving to get RERC -- you
21 know, seeking their concurrence on other aspects of the
22 screening, as well. So we're not -- we won't be standing
23 idly by, we'll be carrying forward with the project.

24 CHAIRMAN: So in other words, if we have
25 a -- as long as the field data is coming in and RERC is
26 doing what they have to do with it, we're not looking at a
27 four week period, plus a four week period; we could be maybe

1 envisioning everything done in a total of a four week
2 period. Am I reading that? There are no more intervenors
3 going to be intervening, by the way. We're just dealing
4 with the parties that are here.

5 MS. CROMBIE: RERC is dealing with more
6 parties, including the Band, and I don't think it can be
7 exactly in synch, but it would definitely have a good chance
8 of speeding up the process. I mean, we were already
9 starting to overlap our process because, once we get through
10 the, I'd almost say, side issues, the other issues, the core
11 group, even in RERC, will be a lot smaller, it will be a
12 technical sub-group, with feed into the Band in case they
13 have any outstanding concerns that they wish to impart to
14 us. So we were already starting to overlap the review and
15 the preparing of the screening report as much as we can.
16 And hopefully, as we prepare the screening report, it's not
17 going to have to do a reiterative process.

18 CHAIRMAN: Jim, do you have any further
19 comments or response to that?

20 MR. SMITH: I guess I stated earlier, we
21 desperately want to find some way to be able to construct
22 the dam this summer. And we're ready to accommodate every
23 effort to get that completed. So it's really a critical
24 issue for us, for a number of reasons. Being a junior
25 mining company, and financing the whole thing, everything is
26 one of perception, sometimes. There's a lot of reasons for
27 getting this thing built this year.

1 CHAIRMAN: I understand the financing
2 aspect of a junior company, but I also see the loggerheads
3 involved, without some sort of usual cooperation. I seem to
4 have heard, in the last few minutes, leeway to shorten a
5 nine week period into a four week period. And I just throw
6 that out at you, and maybe it's something you want to think
7 about throughout the day. We won't be making our decision
8 until later on today, anyways.

9 Anything else?

10 UNIDENTIFIED: No, not from here.

11 UNIDENTIFIED: Not from Vancouver.

12 CHAIRMAN: Okay, this pre-hearing
13 conference is adjourned. Thank you very much for
14 participating.

15 **THE PRE-HEARING CONFERENCE WAS ADJOURNED AT 10:30 A.M.**