June 30, 2017

Chuck Hubert - Senior Environmental Assessment Officer
Mackenzie Valley Environmental Impact Review Board
200 Scotia Centre P.O. Box 938
Yellowknife, NT
X1A 2N7

Dear Mr. Hubert:

Re: Report of Environmental Assessment and Reasons for Decision – Measure 4-4: Dike Stability and Safety Dike Review Panel Meeting #2

Dominion Diamond Ekati Corporation (DDEC) is pleased to provide the following submission regarding the Jay Project (the Project) as per the *Report of Environmental Assessment and Reasons for Decision* (REA) Measure 4-4: Dike Stability and Safety. This measure states the following:

> *To reduce the risk of dike failure and its associated significant impacts, Dominion will establish an independent dike review panel to evaluate and, if necessary, improve the design, construction, operation and maintenance of the dike. The panel will provide recommendations to the developer and the Wek'èezhìi Land and Water Board to ensure that impacts to the safety of people and the environment are minimized. The panel will, at a minimum:*
>
> - *review and accepts the dike design prior to the commencement of dike construction*
> - *review the dike operation*
>
> *Dominion will engage with the Wek'éezhii Land and Water Board, Government of the Northwest Territories and the Independent Environmental Monitoring Agency on the panel composition and tasks. Dominion will submit the review panel's final terms of reference to the Wek'éezhii Land and Water Board.*

On February 7-8, 2017 DDEC held Meeting No. 2 of the Jay Dike Review Panel (Panel) meeting in Vancouver. The objectives were to confirm the mandate of the Panel, previously referred to as the Board, and review the progress of the investigations and studies relating to the design and construction planning of the Jay Dike and North Dike, since Meeting No. 1 held in December 2015.

DOMINION DIAMOND EKATI CORPORATION
1102, 4920-52nd Street, Yellowknife, Canada X1A 3T1 T 1.867.669.6100 F 1.867.669.9293 www.ddcorp.ca

DOMINION DIAMOND

Summary of Key Discussions

- Update of project since last meeting.
- Review of conditions in draft water licence.
- Review of progress on items identified in previous meeting. The Panel is satisfied that the matters have been resolved or are included in action items to be dealt with in due course.
- Technical presentation on the following subjects: turbidity barriers; geotechnical site investigations, embankment construction, centreline trench excavation, placement of filter materials, densification, cut-off wall, jet grouting, grouting, instrumentation, material characterization and stability analyses, seepage analyses, and surveys.

Included in the report in Attachment D is the Panel feedback to responses to the Report of Meeting No. 1. The Panel provided a number of recommendations of which DDEC is currently working on, in advance of the start of the Jay Dike and Jay North Dike construction. The recommendations are found in the attached report.

If you have any questions or concerns regarding this submission, please contact me at 867-669-6116 or claudine.lee@ddcorp.ca

Sincerely,

Claudine Lee

Claudine Lee, M.Sc., P.Geol.
Head of Environment

Attachments:
Report on Meeting No. 2 Jay Dike Review Panel February 7-8, 2017

DOMINION DIAMOND EKATI CORPORATION
1102, 4920-52nd Street, Yellowknife, Canada X1A 3T1 T 1.867.669.6100 F 1.867.669.9293 www.ddcorp.ca

Robert Dodds
Oakville Resources
Oakville
Ontario

Anthony Rattue,
Rattue Consultant Inc.
Knowlton,
Québec

Cecil Urlich,
AECOM
Seattle
Washington

March 7th, 2017

Mr. Elliot Holland
Vice President, Projects
Dominion Diamond Ekati Corporation
#1102 – 492052nd Street
Yellowknife, NT Canada X1A 3T1

Email: elliot.holland@ekati.ddcorp.ca

Dear Mr. Holland,

Report on Meeting No. 2
Jay Dike Review Panel
February 7-8, 2017

1.0 INTRODUCTION

Dominion Diamond Ekati Corporation (Dominion) held Meeting No. 2 of the Jay Dike Review Panel (Panel) in the Vancouver offices of Golder Associates (Golder) on February 7th and 8th, 2017. The Panel is comprised of three members: Dr. R. B. Dodds (Chair), Mr. D. A. Rattue, and Mr C. M. Urlich. All three members were in attendance.

The objectives were to confirm the mandate of the Panel, previously referred to as the Board, and review the progress of the investigations and studies relating to the design and construction planning of the Jay Dike and North Dike, since Meeting No. 1 held in December 2015.

The activities covered those outlined in the agenda which is included as Attachment A. The list of attendees at Meeting No. 2 is given in Attachment B.

Digital copies of several documents, listed in Attachment C, were transmitted to the members of the Panel in advance of Meeting No. 2. Digital copies of some additional documents were provided to the Panel during the meeting. Paper copies of the various PowerPoint presentations by Dominion and Golder were provided in a three-ring binder during the meeting.

At the conclusion of Meeting No. 2, the Panel convened and developed a PowerPoint presentation of its findings. This presentation was shown to the Dominion and Golder attendees, and constructive discussions followed. This presentation and the subsequent discussions served as a basis for this Panel report.

In the report which follows, the Panel's recommendations are underlined.

2.0 PROJECT UPDATE

The progress made in the studies, planning and permitting in the period since Meeting No. 1 was outlined. Preparatory works such as the crusher pad and installation are well advanced. Planning is underway for Jay Dike construction.

A request-for-proposal (RFP) has been issued by Dominion for the Jay Dike construction with the objective of selecting a prime contractor later this year. An additional objective is to have the selected prime contractor participate in the final design.

The permitting process has continued to advance, with a draft water license proposed by the Wek'èezhìi Land and Water Board, relevant sections of which were shared with the Panel.

3.0 JAY DIKE REVIEW PANEL MANDATE

As part of the licensing process, the Wek'èezhìi Land and Water Board has requested precisions on the Name, Composition, Mandate and Functioning of the Panel. The name change from "Board" to "Panel" is to distinguish it from the Land and Water Board and other regulatory Boards.

The proposed changes to the terms of reference of the Panel were discussed to enable Dominion to respond to the Water Board. The Panel members are satisfied with the version of the terms of reference to be submitted.

4.0 MATTERS ARISING FROM THE PREVIOUS MEETING

A summary of the recommendations made by the Panel at Meeting No.1 and the responses were presented. The Panel had previously received information in this regard so this served as an update. The items are contained in the table in Attachment D. The Panel is satisfied that the matters have been resolved or are included in action items to be dealt with in due course.

5.0 TECHNICAL PRESENTATIONS AND PANEL COMMENTS

5.1 Recap

The technical presentations began with a recap of the Jay Dike configuration, typical cross-sections, and overall construction schedule.

5.2 Turbidity barriers

Since Meeting No. 1, Golder has carried out numerical simulations of the water current speed and direction set up in Lac du Sauvage, for a variety of wind conditions. Modelling results have been used to predict current speed for upset (storm) wind conditions, which in turn were used as an input to the specified turbidity barrier design.

The Panel was informed that the barrier design, though not yet finalized, will include the appropriate robust flotation attachments, anchors, and furling and un-furling systems to adjust barrier depth, to account for the anticipated current velocities.

The barrier will be complemented by the outer rockfill groins to be placed during the winter but only after the first summer open water construction season.

5.3 Geotechnical Site Investigations

There have been three geotechnical site investigation campaigns, namely in 2014, 2015 and 2016. The 2016 campaign was completed to fill data gaps along the dike footprint, and at one location north of North Dike. Golder described that the full planned program could not be completed due to a late start and the requirement to demobilize drill rigs before the winter road closed at the end of March. However, the planned drilling locations that were considered the most important for design purposes were drilled.

The 2016 results add to the data used for the dike design report and to information previously transmitted to the Panel in Meeting No. 1. These results were used for finalization of the Issued For Tender (IFT) technical specifications and drawings. All the investigation work was carried out in winter and from the ice surface for the in-lake locations.

The 2016 campaign resulted in two significant new geotechnical findings:

- Locally deeper bedrock profiles that take the maximum anticipated depth from the lake level to 32 m from 22 m, which is 10 m deeper than previous investigations indicated.
- Presence of accumulations of boulders at depth in the competent soil layer was noted. Competent soil, by and large, denotes till. Only highly disturbed matrix was recovered from the boulder horizons perhaps due to the drilling method.

Normally, the Sonic drilling technique permits complete recovery in most materials but the energy dissipated to pass through the boulders may create sufficient heat and disturbance to change the texture and fabric of the soil matrix.

The 2016 geotechnical findings will impact the depth of drilling and the area to be treated by jet grouting and curtain grouting. Moreover, the greater presence of boulders may require adjustments to the jet grouting program such as double rows in local areas.

The 2016 campaign did allow the recovery of samples of lakebed sediments, glacio-lacustrine sediments (not located within the dike footprint), and competent soil on which to conduct laboratory tests to enhance the database on material identification characteristics, strength parameters, and permeability. The results are further discussed in the sections below.

5.4 Embankment Construction

The Jay Dike design concept does not call for any foundation preparation prior to construction, so embankment fill placement will be the first activity after the installation of the turbidity barriers. A single wide embankment platform will be constructed over much of the length, although a double platform construction is proposed in the deeper areas.

As the Jay Dike is part of ongoing mine activities at Ekati, rockfill is reported by Dominion and Golder to be in adequate supply. The dike concept is appropriate, it facilitates equipment travel and also provides a robust structure.

The lengths for which the double platform concept will be used will be finalized with the contribution from the prime contractor. Early contractor involvement is envisaged by Dominion and Golder in the planning process and this is encouraged by the Panel as a means to ensure an optimal constructible design and thereby to minimize delays and to improve safety during the short construction seasons.

In order to facilitate the planning of the embankment advance, the Panel recommends the preparation of drawings to illustrate, by contours, the thickness of lakebed sediment as determined from all the site investigation sources (e.g. using geophysics data with control points). If this information becomes available prior to the first year of open water rockfill placement, it may help in terms of planning for minimizing the accumulation of loose sediments within the fill and in highlighting areas for additional care during placement for reasons of worker and equipment safety.

5.5 Centreline Trench Excavation

Following embankment placement, the centreline trench will be excavated through the rockfill and the overburden (single platform) or through overburden (double platform), to reach bedrock or acceptable competent soil to form the foundation of the central zones. The project team is fully aware that this constitutes one of the most important stages in the work with intensive quality control being a requisite.

There is a concern that finer material from the in-situ lakebed deposits may squeeze into the trench, and suspended particles may re-sediment on the base of the trench from the time the trench is excavated to the time of filter material placement. The panel recommends that the designers review means of faster, or real time, quality control and quality assurance measures, in combination with input from the selected contractor, in order to reduce this time and the potential for re-sediment interference.

The cross-sections, as illustrated on the drawings, call for an asymmetrical section with a greater width of filter material in contact with the foundation on the downstream side as compared to the upstream side. This is highly desirable to facilitate safe dissipation of seepage pressures during operation.

5.6 Placement of Filter Materials

Though requiring care, the techniques for filter placement were developed at previous projects. Quality Control includes ensuring an adequate but not excessive distance between the trench excavation operations and the leading toe of the fill slope.

5.7 Densification

The specifications allow the use of fine filter material containing up to 12% by weight of particles passing the 0.08 mm sieve size. Though not yet confirmed, some difficulties with densification on another site have been attributed to similarly high fines content.

However, the project team mentioned that preliminary crushing trials have indicated that the filter material may be on the coarser side of the envelope thus lowering the fines content and diminishing this potential problem. The current fine filter material specification allows for a maximum d_{10} of 0.5 mm. The coarse side of the envelope exhibits an odd looking curve but any adjustment thereof should not result in an as-placed d_{10} size greater than 2 mm from a slurry

retention perspective. The Panel recommends that it be involved in reviewing the gradation of materials after the crushing trials.

5.8 Cut-off Wall

The first stage of the cut-off wall is the Cement-Soil-Bentonite (CSB) wall constructed by a slurry trench method. The identification of suitable base soil for this material has not yet been completed and the Panel awaits information in due course as to the planned sources and expected composition.

5.9 Jet grouting

In selected deeper areas, where the CSB wall will be terminated on competent soil, jet grouting will be adopted to continue the treatment down to rock. Although the technique will not form a cylindrical zone of treatment in bedrock, grout will penetrate, under gravity, into the more pervious fractured rock. The specification has been written to allow the contractor to have flexibility in the method used.

Again, early contractor involvement will enhance the selection of the optimal method (single, double or triple fluid) according to conditions and experience, before the mobilization of equipment. The optimal treatment in zones of boulders will be part of this evaluation process.

Jet grouting will normally be carried out in the spring, fall and winter seasons, and is currently envisioned in the spring shoulder seasons of Year 2 and Year 3, and in the fall and winter of Year 3. Any increase in scope (e.g., boulders and deeper rock areas) would be accommodated by carrying out additional jet grouting work in the fall shoulder season of Year 2 or through deferral until following shoulder season.

The potential for summer jet-grouting will be part of the contractor early involvement discussions. It is anticipated that the summer months of July and August will typically be reserved for earthworks only, according to the currently planned work sequence.

It is noted that the area where the deeper rock was identified in the 2016 geotechnical drilling campaign will be included in the first construction season.

5.10 Grouting

Since Meeting No. 1, Golder has carried out a compilation of the rock discontinuities observed in the vertical boreholes of the dike site investigations and from the logs of the inclined holes performed for resource evaluation. The results, as shown on hemispherical pole plots, validate the choice of vertical holes for the curtain grouting.

The advantages of vertical holes for the execution of the work are undeniable. The Panel concurs with this approach but recommends that some inclined verification holes be drilled early in the construction program to confirm the efficiency of the grouting work.

Perforated casing interface grouting at the bedrock surface is planned for all areas although its use in zones previously treated by jet grout will re-evaluated during the work by the results of the primary curtain grout holes.

In the area where numerous boulders have been identified, Multiple Port Sleeve Pipe (MPSP) grouting has been included as a contingency should jet grouting prove to be problematic.

5.11 Instrumentation

The scope of the instrumentation to be installed in Jay Dike is essentially unchanged from that presented at Meeting No. 1. Details of instrument locations will obviously be confirmed during construction according to the conditions that will be observed.

The current version of the specifications relating to instrumentation does not stipulate that the installation shall be carried out by experienced personnel. The Panel recommends the addition of this clause to include experienced personnel and, that a minimum number of years of installation experience in similar conditions be specified.

5.12 Material Characterization and Stability Analyses

Much effort has gone into using the in-situ tests and laboratory tests to define the appropriate material parameters for the stability analyses. Various correlations are available to determine consolidation and strength parameters from such tests as Cone Penetration Tests (CPT) and Vane Shear Testing in the lakebed sediments and glacio-lacustrine deposits. Undisturbed Shelby tube samples have been submitted to laboratory identification tests and to 1-Dimensional Consolidation and Direct Simple Shear tests. Triaxial tests were carried out in previous campaigns.

Of significance to the dike stability, particularly during construction and initial dewatering, are the characteristics of the "consolidated sediments". Loose lakebed sediments will likely be displaced by the advancing embankment fill and, unless large quantities are trapped within the fill, will have only a minor influence.

The stiffer consolidated sediments are comprised of mainly silt sized particles with a trace of clay minerals. This implies low permeability and lower shear strength than the underlying more competent soil. Consolidation tests and correlations indicate that the material is over-consolidated i.e. has characteristics associated with a historic stress regime greater than the current in-situ stress. The conclusion is that the behaviour during shearing is likely to be dilative.

The laboratory Direct Simple Shear tests were conducted in an undrained condition, where the specimens were allowed to consolidate under the applied vertical embankment load prior to shearing. It is recommended that selected future additional tests be conducted with consolidation only to the equivalent confining stress of their in-situ state at the time of sampling, followed by rapid application of the vertical load equivalent to the embankment weight, and shearing under undrained conditions. Pending technical feasibility related to the limitations of the laboratory testing equipment, this would be more representative of the field conditions during construction.

The Panel agrees that the recommended tests are more representative of the in-situ material during and immediately following construction in a given area but less so for dewatering when dissipation of construction induced pressures will have taken place. The results of currently available tests, consolidated to the range of stresses that include the weight of the embankment would be expected to be representative for the dewatering phase.

Attention has been given to the presence of glacio-lacustrine deposits situated to the north of the dike axis. These materials have similar characteristics to the consolidated sediments but are located beneath layers of competent soils (till). Only one of these glacio-lacustrine deposits

has been encountered during the field investigation campaigns, and this is not located within the dike footprint. Nevertheless, for due diligence, the scenario has been included in the sensitivity analyses as the existence of such deposits cannot be entirely ruled out at this time.

Otherwise, the analyses carried out since Meeting No 1 have incorporated the previous recommendations of the Panel. In general, the results of the 2-D analyses have indicated adequate Factors of Safety during construction and initial dewatering. Some cases of analyses to simulate loading with construction equipment in the vicinity of the top of slope have less than required Factors of Safety in 2-D analyses but are satisfactory in 3-D, as was anticipated.

As in all numerical analyses in geotechnical environments, the absolute values predicted are indicative but subject to the uncertainties of the model and the material parameters. Golder described that sensitivity analyses have been carried out. The complete set of results should then be used to aid in engineering judgement applied to the observed field conditions (lakebed topography and materials, etc.), and the methods and rates of advance of dike construction.

5.13 Seepage analyses

Seepage analyses have been carried out for various cross-sections using parameters derived from testing or from the literature. These analyses enabled an evaluation to be made of seepage quantities, local hydraulic gradients, and anticipated pore pressures during initial dewatering and during operations. The results are a function of the geometry (stratigraphy), absolute and relative permeabilities (one material compared to another), and to the isotropy or anisotropy of each. Sensitivity analyses have been carried out to cover most anticipated variabilities. Seepage modelling is not required for the construction phase.

Laboratory testing has been used to establish critical hydraulic gradients on samples of materials from the site. The testing indicated that the site materials have a critical gradient of around 2. This was to show that using 1 is a conservative choice. Nevertheless, factors of safety have now been applied (2.0 for short term and 3.0 for operations to an assumed critical gradient of 1.0). The Panel agrees with these selections.

With a view to determining sensitivity to this aspect, the Panel recommends that consideration be given to using infinite elements on the vertical end boundaries of the model.

Observations of samples of consolidated sediments do not reveal laminations, i.e. anisotropy, but this may also be considered in a sensitivity analysis.

An anisotropy ratio (k_h/k_v) of 2 has been selected for the bedrock to take account of horizontal discontinuities. However, the hemispherical plots of discontinuities, made for the grout hole orientation study, indicate that the predominant joint sets are inclined and the ratio may be closer to unity.

The most critical section during dewatering will be that at Stn. 0+200, the highest section of the dike, where the sediment and competent soil layers thin out towards the toe. This will be one of the last areas to be drained and uplift pressures could influence behaviour. Piezometers are planned for the area, but only within 15 m of centreline. It is recommended that an array of three piezometers be installed in a borehole near the outer edge of the platform.

A contingency plan could include the provision of equipment and materials to install relief wells in the same area (similar to other artesian relief wells used for other comparable projects) if required on the basis of monitoring results collected during dewatering.

5.14 Surveys

The Panel was favourably impressed by examples of the use of GIS by Dominion in its operations and feels that adaptation and integration of GIS and 3-D graphical applications to construction control and quality control for the design and construction of the Jay Dike design could enhance safety and efficiency. The Panel noted that other agencies have successfully adapted these technologies to civil construction.

6.0 NEXT MEETING

No date has been set for Meeting No. 3 of the Jay Dike Review Panel. The Panel awaits instruction from Dominion as to the most appropriate time according to the outcome of planning exercises and the results of further studies and interaction with the selected Contractor. It was agreed that telephone conference calls or Webex meetings may suffice for the next Panel meeting.

A site visit is not considered to be necessary before the first construction season.

7.0 ACKNOWLEDGMENTS

The Panel wishes to thank the personnel of Dominion and Golder for their hospitality and participation in the meeting, and for the excellent documentation and presentations made which contributed to the efficiency and effectiveness of the proceedings.

Signed:

Dr. Robert Dodds, P.Eng.

D. Anthony Rattue, P.Eng

Cecil Urlich, P.Eng.

ATTACHMENT A

AGENDA FOR PANEL MEETING NO. 2

February 7-8th, 2017

JAY DIKE REVIEW PANEL MEETING #2

Purpose

The purpose of the meeting is to review the most current Jay Dike and North Dike designs as presented in the Dike Design report (May 10, 2016), updated Issued for Tender Drawings and Specifications (January 2017), Drilling Implications Memorandum (May 2016), and 2016 Field Investigations Data Report (October 27, 2016) which Golder Associates has made available to Dominion Diamond and the Dike Review Panel. Golder will be presenting the design and supporting documents. The Review Panel will provide feedback on the basis of design and analyses, and would identify potential challenges, issues and opportunities for improvement. Feedback will be considered and incorporated into issued for construction drawings, and specifications, as needed.

Tuesday, February 7

Welcome: Ermanno Rambelli (Golder)	
8:30 to 8:45	Introductions, Office Orientation, Safety Share
Meeting Purpose and Project Overview: Elliot Holland / Brendan Barron (Dominion Diamond)	
8:45 to 9:15	• Meeting purpose • Mandate of the Dike Review Board (Panel) • Terms of Reference
9:15 to 10:00	• Jay Project status update • Environmental permitting update • Comments received from Stakeholders
10:00 to 10:15 Break	
Jay Dike Design: John Cunning, Vafa Rombough and Fiona Esford (Golder)	
10:15 to 12:00	• Actions from Meeting #1 (December 2015) • Outstanding actions from the Panel's requirements after Meeting #1
12:00 to 13:00 Lunch will be provided	
Jay Dike Design: John Cunning, Vafa Rombough and Fiona Esford (Golder)	
13:00 to 14:45	• Jay Dike Design Recap and changes since Meeting #1
14:45 to 15:00 Break	
Question Session	
15:00 to 16:30	• Jay Dike Design Recap and changes since Meeting #1 • Open session for questions and comments

JAY DIKE REVIEW PANEL MEETING #2

Wednesday, February 8

Question Session	
8:30 to 10:30	• Open session for review, questions and comments
10:30 to 10:45 Break	
10:45 to 12:00	• Open session for review, questions and comments
12:00 to 13:15 Lunch will be provided	
Panel Deliberation and Presentation	
13:15 to 16:00	• Panel Deliberation
16:00 to 17:00	• Panel to present their current findings and comments • Recommendations for next meeting

ATTACHMENT B

ATTENDANCE AT FEBRUARY 2017 JAY DIKE REVIEW PANEL MEETING

Held in the Golder Associates offices in Vancouver

Attendance		
Elliot Holland	Dominion	Vice-President, Projects
Chris Fedora	Dominion	Senior Engineer
Brendan Barron	Dominion	Senior Manager – Major Projects
John Cunning	Golder	Engineering Project Director
Ermanno Rambelli	Golder	Engineering Project Manager
Fiona Esford	Golder	Geotechnical Engineer
Chad Mundle	Golder	Geotechnical Engineer
Vafa Rombough	Golder	Geotechnical Engineer
Greg Naus	Golder	Geotechnical Engineer
Robert Dodds		Jay Dike Review Panel
Anthony Rattue		Jay Dike Review Panel
Cecil Urlich		Jay Dike Review Panel

ATTACHMENT C

DOCUMENTATION TRANSMITTED IN ADVANCE OF MEETING No. 2

- Golder 2017, Dominion Diamond Jay Project, 2016 Fragmentation Analysis for Lynx Pit;
- Golder 2017, Dominion Diamond Jay Project, Issued for Tender Drawings for Jay Dike and North Dike;
- Golder 2017, Dominion Diamond Jay Project, Issued for Tender Technical Specifications Jay Project: Roads, Dike and Diversion Channel;
- Golder 2016, Jay Dike and North Dike, Detailed Design Report;
- Golder 2016, Technical Memorandum, Winter 2016 geotechnical Investigation Preliminary Results and Potential Implications;
- Golder 2016, Technical Memorandum, Addressing of Jay Dike Geotechnical Review Board Meeting No.1 Report;
- Golder 2016, Jay Dike and North Dike, 2016 Geotechnical Field Investigation Factual Report;
- Golder 2016, 2016 Geotechnical Field Investigation, Appendix B Core Photos;
- Dominion Diamond, 2016, Jay Project, Water Licence and Permit Application, Intervention Responses.

DOCUMENTATION TRANSMITTED DURING MEETING No. 2

- Wek'eezhii Land and Water Board 2017, Revisions to Water License #W2012L2-00001
- Amec Foster Wheeler, 2016, Jay Project Feasibility Study, Third Party Technical Review,

ATTACHMENT D

JAY DIKE REVIEW PANEL FEEDBACK TO RESPONSES TO REPORT OF MEETING No. 1

Report section	JDRP Recommendation	Action taken	JDRP Feedback
4.4a Stability Analyses	Excess pore water pressure to be applied as a base case for all stability analyses	Included in Design Report	Panel considers item to have been dealt with satisfactorily
4.4b Stability Analyses	Consider that contractive shear behaviour of lake bed sediments may result in excess pore water pressure	Considered in Design Report, Lab testing and additional analyses carried out	Suggestion for additional testing included in Meeting No. 2 report.
4.5 Filter Compatibility and seepage Analyses	Rockfill gradation and inter-zone compatibility	Wipfrag grain size analyses carried out	Panel considers item to have been dealt with satisfactorily
Idem	Review hydraulic gradients obtained in seepage analyses and apply factor of safety of 3 at exit points	Included in Design Report	Panel considers item to have been dealt with satisfactorily
Idem	Re-visit seepage quantity estimates after completion of grouting	Future data from drilling and grouting to be incorporated	Panel satisfied with response. Subject to be re-visited in due course
4.6 Instrumentation	Add thermistor locations on upstream outer edge of platform	To be considered in final instrumentation layout according to field conditions	Panel satisfied with response. Subject to be re-visited in due course
4.7 Total Suspended Solids (TSS)	Determine water currents and appropriate compliance locations	Additional studies carried out and included in design report	Panel considers item to have been dealt with satisfactorily

Report section	JDRP Recommendation	Action taken	JDRP Feedback
4.8 Construction Schedule	Evaluate material balance to ensure adequate rockfill	Required quantities provided to DDEC. DDEC to evaluate and identify need for additional sources	Panel considers item to have been dealt with satisfactorily
4.9 Grouting	Validate vertical drill holes	Evaluation of orientation of discontinuities included in Design Report. Future drilling to be included	Panel considers item to have been dealt with satisfactorily
idem	Evaluate need for perforated casing grouting in areas treated by jet grouting	Grout takes in primary holes will be used to evaluate need	Panel satisfied with response. Subject to be re-visited in due course
4.10 North Dike	Consider alternative concepts	Included in design Report. May be re-visited with additional data	Panel satisfied with response. Subject to be re-visited in due course
4.12 Additional comment	Utilize Failure Modes and Effects Analysis to identify any risks associated with any departure from precedent in other projects	Jay Stage 3 Risk Assessment provided to the Panel	This item is ongoing. Further Risk Assessment to be carried out subsequent to Construction Planning exercise with Contractor.