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May 14, 2004

Mr. Philippe di Pizzo, Executive Director
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0

Dear Mr. di Pizzo:

Re: **Response to Information Requests - Nanisivik Mine 2004 Reclamation and Closure Plan**.

Thank-you for sending us the summary of Information Requests attached to your memo dated May 10, 2004. We believe that your requests accurately reflect the formulation of issues we assembled as a group at the Technical Meeting in Yellowknife. We would also add that we found both the Technical Meeting and the Pre-hearing sessions in Yellowknife to be constructive and helpful in advancing the review process towards approval of the Nanisivik Reclamation Plan.

Please accept the following information in fulfillment of CanZinco's requirements. We have included the original wording of the Information Request in ***bold italics*** below and followed each request with our response.

1. ***Commitment to undertake inspection under the concentrate storage shed and the industrial complex, including confirmatory soil sampling, contingency and background on ice lens below complex***

   Inspection, Confirmatory Sampling and Contingency

   We will undertake an inspection of the concrete floor of the concentrate storage shed with BGC and Gartner Lee in early June when we are on-site preparing for the Public Hearing. This will provide an indication of the competency of the concrete and the need for further investigations. The shed is currently being "swept" clean, which will enhance the investigation. Based on the results of this inspection, the need for further work will be assessed and reported to the Nunavut Water Board ("NWB").

   We will undertake visual inspection of the concrete slab underlying the industrial complex once the building infrastructure and internal equipment have been removed. The inspection will be for the purpose of identifying and documenting specific locations where cracks or other means may have allowed contaminants to pass to the underlying soils.

   If any locations of suspected or likely contamination are identified at either location, then the underlying soil in the immediate vicinity will be sampled by drilling a small diameter hole

through the concrete and extracting soil. Appropriate sampling protocols for preventing inadvertent contamination will be followed. Soil samples may be separated according to observed soil horizons or by depth intervals following the same procedures and rationale applied for the Phase 2 and 3 Environmental Site Assessments. Soil samples will be analysed for a complete suite of metals and for a suite of hydrocarbon compounds if observations and the on-site PID meter suggest that hydrocarbon contamination may be present.

If the analytical results indicate that the soil samples are "contaminated" (i.e. exceed the site specific remediation objectives), then contingency alternatives will be considered. These alternatives will include additional sampling to delineate impacted areas, additional sampling to verify marginal results, leave in-place (i.e., the currently proposed plan) with integration of a focussed monitoring program through the installation of thermistors or monitoring wells, and alteration of the proposed reclamation plan to include excavation of the contaminated soil.

If detailed investigations are required, then these will be reported to the NWB as quickly as practical after the investigation. If contaminated soils are present, then the report to the NWB will include a description of and justification for the selected contingency approach.

Background Information on Ice Lens below Industrial Complex

An underground ice lens was thawed during the first few years of operation of the concentrator, presumably from the heat generated in the building. A cavity formed under the east side of the complex resulting in some slight settlement of the building foundation. Due to the fact that the grinding mills were located in the settlement area, any movement whatsoever jeopardized the bearing alignment of this rotating equipment (having a loaded weight in excess of 100 tonnes). Remediation consisted of excavating an access way on the east side of the building to allow employees with pumping equipment to enter into the cavity that had formed. The cavity was pumped out and reinforced with concrete pillars to ensure that the complex was safely supported. Survey monitoring of the complex was regularly undertaken through the mine life to check for any slight movement. While the mine was operating, the heat generated from the complex may have prevented freezing in the void spaces, however there were no stability issues. Since mine closure in September 2002, it is likely that permafrost has begun to aggrade back into the void/materials below the building. As time goes on, and certainly after placement of the proposed 2.2 m thermal barrier cover, permafrost is expected to aggrade completely through the subsurface materials such that the area will remain physically stable. This area is scheduled to be assessed annually as part of the geotechnical inspection for physical stability following reclamation.

2. Mine stability issues

a) Requesting a validation of NRCan analysis using current mine conditions with the provision of a professional opinion on the future risks associated with mine stability issues

b) Commitment to provide detailed design closure plans for the mine portals stamped by a professional and undertake monitoring of Portal area (overview details of monitoring proposed)

NRCan Analysis

CanZinco will work with Marc Bétournay, the INAC/GN technical reviewer and, possibly, others to revisit the NRCan analysis of the physical stability of the crown pillar in the context of the final condition of the mine. This will, in essence, serve to update the analysis, which is currently based on information gathered prior to the completion of underground mining. We would like to reiterate, for clarity, that this is not an attempt to conduct a numerical probability analysis as it was agreed at the Technical Meeting that such an approach is not justified or necessary in this case.

We feel that adequate time should be taken in preparing this "update" so that the resulting report provides the information and professional opinion required and this is not possible prior to the June Public Hearing. Therefore, we propose to submit this report to the NWB by the end of September 2004. We note that it was agreed at the Technical Meeting that this report should not delay the approval process for the Closure Plan or the commencement of reclamation work.

Closure of Portals

Detailed engineering designs for closure of the portals into the underground mine will be provided to the NWB, for their approval. To be clear, this will include the lower adit, 00, 01, 09, 17N and 39N portals to the underground mine, as well as the K-Baseline portal.

These designs may utilize some information that is developed for the update of the NRCan analysis of mine stability and, therefore, will be prepared subsequent to completion of that report. We propose to submit the detailed designs, sealed by a professional engineer, for closure of the portals by the end of November 2004. Since closure of these mine openings is not scheduled until late in the reclamation activities, this timeframe should allow sufficient time for approval of the designs prior to the scheduled implementation in 2005.

3. PCB

a) Inspection/confirmatory sampling at PCB storage facility

b) Additional PCB testing of building material to be disposed of prior to disposal through burning or underground placement

c) Identification of contingency/alternate disposal plan if additional PCB found on site

PCB Storage Facility

The PCB storage container is scheduled to be removed from the mine site in 2004 for off-site disposal of its contents. At that time, the concrete floor underlying the storage site liner will be sampled and analysed for PCB content.

Building Materials

In response to the issue of the possible historical use of PCB-amended paints or the possible historical application of PCB-containing oils as a wood preservative on buildings, representative samples of these materials will be analysed for PCB content. Samples will be collected of the painted cladding that is found on original industrial buildings, paint flakes from exterior surfaces of original wooden buildings and complete wood slats from exterior surfaces of original wooden

buildings. Two samples of each of the three materials will be collected, according to appropriate protocols, and analysed for PCB content.

This sampling will take place by early June and a brief report will be submitted to the NWB immediately upon receipt of the analytical results. None of these materials will be disposed by burning or placement underground unless the laboratory results indicate that these materials are not contaminated.

Contingency Plan

If the analytical results for any of the sampling described above show that the materials sampled are contaminated, then one of the following contingency actions will be taken:

1. Additional sampling to confirm marginal results or to more specifically delineate material types; or
2. Identification of the materials as "contaminated" and evaluation of disposal options.

Management of any PCB-contaminated material will follow all applicable regulatory and on-site procedures.

4. Landfill

a) Background/Overview information discussed regarding the continued presence of the dike at the toe of the landfill

b) Ensure that future water sampling at the landfill includes BTEX analyses

Toe Dike

The current proposal for reclamation of the landfill shows that the reclaimed and covered endslopes will be up to 3H:1V slope angle and that they will, at this maximum allowable slope angle, preserve a water flowpath on the upstream side of the existing seepage collection dike. This water flowpath leads seepage and runoff water to a "notch" where water sample NML-26 is collected. There is typically a small pooling of water immediately upstream of the notch.

Based on discussions at the Technical Meeting, the design of the endslopes is proposed to be modified slightly to have the top of the 2.2 m thick thermal barrier cover meet with the top of the seepage collector berm. This will provide for endslopes that are flatter than the maximum allowable 3H:1V slope angle and will avoid the possible accumulation of water or snow on the upstream side of the dike, which could prevent complete freezing into permafrost.

Regrading of the existing landfill surface will be controlled in the field to as near as possible, but not less than, 2.2 m true thickness below the crest of the dike for the endslopes where a 3H:1V slope would encroach on the upstream face of the dike. In areas where regrading of the existing landfill surface leaves a thickness of greater than 2.2 m, then this will be filled with excess shale during construction of the lower layer if the cover such that the final surface of the thermal barrier cover will meet the crest of the dike. This excess volume of shale is a negligible volume as regards the borrow area development plans and will not necessitate any changes to those plans.

Following reclamation of the landfill in this manner, water sampling location NML-26 will be re-established at a suitable location where surface runoff from the landfill can be readily sampled.

BTEX Analyses

The hydrocarbon compounds of primary concern at the landfill facility, and at the mine site in general, are those directly related to diesel fuel since diesel was the fuel used nearly exclusively on the mine site. Gasoline, as can be detected by BTEX analysis, was used only in minor quantities. Nonetheless, we agree that BTEX analyses can also provide valuable monitoring information at the landfill and will undertake to include analysis for BTEX compounds in the water monitoring program.

The Landfill Closure Plan (Water Licence Report G17) states that analysis of water samples will include a "full suite of metals and petroleum hydrocarbon parameters" (page 29). We propose that the hydrocarbon parameters for analysis during the Reclamation Period be specifically defined as BTEX and F1 to F4 compounds. These analyses will provide specific indications of the presence of various hydrocarbon compounds in the seepage water. At the end of the Reclamation Period, the needs for inclusion of all of these parameters will be re-assessed to ensure that analyses are appropriate to the needs of the site.

5. Confirmatory soil sampling for nitrate and nitrites at ANFO plant after remedial work is completed

Hydrocarbon contaminated soil has been identified at the ANFO storage plant that will be excavated and disposed in the underground mine for reclamation. Once this soil has been removed to the satisfaction of the field screening tests, the final confirmatory sampling of exposed soils will include analysis for total nitrogen, nitrite and nitrate. The results will be assessed at that time. Since there are no regulatory standards for these parameters, the assessment will be made on a professional judgement basis and a brief report will be provided to the NWB at that time.

6. Twin Lakes quarries boundaries should be more clearly defined if expanded and no more than 50 m from water

Field work schedule for May/June 2004 will include staking of the Twin Lakes sand and gravel quarry boundary. Considerations will be given to ensuring that a 50 metre buffer is maintained between the quarry perimeter and West Twin, and that the orientation of the borrow area does not interfere with the East Twin feeder streams.

7. Provide implementation schedule

a) List of work proposed for spring/summer 2004 (active reclamation, monitoring)

b) Clarification of East Adit contingency options (remediation/equipment availability)

Spring/summer 2004 Work

The requested implementation schedule outlining the general tasks for 2004 is being developed and will be available for presentation at the Public Hearing.

East Adit Contingency Options

Sludges in the East Adit Treatment ponds will be removed in 2005 and disposed of in the underground mine. Following removal of the 39 North waste rock remnants and the reclamation of the East Open Pit, we expect to decommission the East Adit Treatment Plant (EATP) and associated infrastructure. The estimated demolition debris from this small installation is less then 25 cubic metres in scrap steel and pipe and will be hauled underground. If demolition of the EATP should occur after the mine adits are permanently sealed (i.e. water treatment is required for some time after site decommissioning), then the EATP demolition debris and any sludges generated after 2005 would be buried in the ~~it would be necessary to bury this waste in the~~ reclaimed catchment pond ~~footprint~~ under 2.2 metres of shale, where they would freeze into permafrost.

~~(It should be noted that existing sludges in the East Adit Treatment ponds will be removed in 2005 and disposed of in the underground mine.)~~

8. ***Schedule of submission of additional geo-chemical analysis (road assessment)***

The Rock Piles and Open Pits Closure Plan (Water Licence Report G.8) proposes that an additional geochemical investigation be performed at the West Open Pit ("WOP") and at the WOP access road. The purpose of investigating the WOP is to identify zones of potentially acid generating rock in the pit wall that require remediation by covering with the 2.2 m thick thermal barrier cover. The purpose of investigating the WOP access road is to gather additional information to determine whether remediation by covering and/or relocation is required. Report G.8 reports that the available information for the WOP access road does not provide certainty in this regard.

These two investigations will be conducted together during the summer of 2004. The walls of the WOP will be visually mapped and sampled for acid-base accounting testing. The WOP access road will be visually mapped and sampled for acid-base accounting testing from surface, test pits and/or drilling as specified in Section 4.5.1, page 33 of Report G.8.

A report, containing all of the information plus the proposed final reclamation measures, will be submitted to the NWB by the end of October 2004. This timeframe should be sufficient to allow the work to be completed during 2005, as scheduled.

9. ***List of potential amendments to be filed with Regulatory agencies (to the extent that they are currently known), needed for ongoing work (i.e., change boundaries pits)***

The primary authorizations that are held by CanZinco, outside of the Water Licence itself, are quarrying permits for each of the developed quarries, explosives manufacturing permit and a land lease in the dock area.

Any required amendments to the quarry permits will be obtained through the applicable agency (INAC, GN). The explosives manufacturing permit is necessary through the Reclamation Period since some minor blasting may be required for completion of the proposed reclamation work. This permit will be closed-out upon completion of the work that may require blasting. The land lease in the dock will be returned to the land owner once the necessary reclamation work has been carried out.

10. ***Summary table of volumes of waste/storage capacity (check/balance)***

A table is attached to this letter that lists waste/storage capacity checks and balances following from the discussions held at the Technical Meeting. This table can be considered an amendment to the waste/storage capacities listed in the Waste Disposal Plan (Water Licence Report G16).

11. Commitment to monitoring at Kuhulu lake

CanZinco commits to continue annual water quality monitoring at the inlet to and outlet from Kuhulu Lake through the two-year reclamation period and the five year post-closure period. We would also reiterate that the Kuhulu watershed is outside the mining impact area and that monitoring carried out throughout the operating period confirmed there were no negative impacts.

12. Commitment of Applicant to resubmit a final AR plan following hearing to address all comments in written submission (GN, EC, DIAND, Acres),technical meeting discussion and final hearing comments.

Upon conclusion of the review process, which is expected to culminate with the final hearing, we will incorporate the agreed modifications, revisions and corrections into an *addendum* which will be filed with the NWB and become part of the permanent record.

In keeping with our discussions at the Technical meeting and the Pre-hearing in Yellowknife, we anticipate that this supplemental information will address the Board's requests. As always should you have any questions or wish to discuss any of the foregoing, please contact me directly.

Yours sincerely,
Original signed by:

Robert Carreau
Corporate Manager, Environmental Affairs
Breakwater Resources Ltd.

Attachment: Table, Waste Disposal Summary, 3 pages