



P.O. BOX 119  
GJOA HAVEN, NU X0B 1J0  
TEL: (867) 360-6338  
FAX: (867) 360-6369

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NUNAVUT WATER BOARD  
NUNAVUT IMALIRIYIN KATIMAYINGI

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File: NWB1NAN0208/G13

August 22, 2003

*By Email*

Mr. Robert Carreau  
Corporate Manager, Environmental Affairs  
Breakwater Resources Limited  
Suite 2000, 95 Wellington Street West  
Toronto ON M5J 2N7

Subject: Licence NWB1NAN0208  
Approval of Phase II Environmental Site Assessment

Dear Mr. Carreau

The Nunavut Water Board ("NWB") has completed its technical review of CanZinco Limited's ("CanZinco") Phase II Environmental Site Assessment ("Phase II ESA"), submitted January 30, 2003, as well as all submissions received from interested parties. The NWB grants conditional final approval of the revised report subject to the following terms, conditions and clarifications:

1. That CanZinco incorporate all pertinent documentation and correspondence generated from the Phase II ESA review process, in addition to any new information developed from the 2003 sampling study. A full list of references and supporting documents should be presented in the forthcoming ESA.
2. That CanZinco include, as a dedicated chapter in the forthcoming ESA, a comprehensive discussion of the 1985 Soil Geochemistry Survey for Nanisivik. This chapter should include the following: a description of the soil sampling, soil analytical and QA/QC methodologies employed in the study; the survey's historic purpose in relation to mining activity at Nanisivik; the rationale for using the survey data in the ESA as opposed to applying other existing or surrogate data sets; a discussion of how mining activity prior to 1985 does, or does not, affect the utility of the data for the purposes of developing Soil Quality Remedial Objectives.
3. That CanZinco, in the discussion of Contaminants of Concern at Nanisivik, include a full rationale for excluding PCBs, PAHs, chlorinated ethenes, mine process chemicals and nitrogen compounds from its list of contaminants.
4. That CanZinco provide as an appendix in the forthcoming ESA, a list of all reported spill events that occurred during the operating history of the mine. The list should include the time, type of chemical, extent and location of the spills.
5. That CanZinco, in the discussion of hydrocarbon impacted soils, present a comprehensive list of the past and present locations of Aboveground Storage Tanks and Underground Storage Tanks.
6. That CanZinco include a discussion on the effects of contamination to fresh water receiving bodies with particular emphasis to Twin Creek, Chris Creek and Kuhulu

Lake, as well as shallow ground water. The impacts on the Metal Mining Effluent Regulations shall be addressed within this discussion.

7. That CanZinco ensure that sampling, analytical and QA/QC methodologies are described with full rationales provided.
8. That CanZinco, in its investigation of roadway materials, ensure that protocols used to identify mineralized waste rock are provided. A presentation of a vertical cross section of roads that identifies where mineralized rock have been identified as a building material would be a valuable addition to the forthcoming ESA.
9. That CanZinco, in regards to its soil sample analysis, provide an explanation as to why samples processed in the on-site laboratory were not used despite their inclusion in the January 30, 2003 ESA. An inventory of unanalyzed soil samples should be provided so that regulators will have an idea of what information is available for further examination.
10. That CanZinco clarify whether it considers its sampling activities at the Boneyard to be adequate despite the observation of samples with high levels of Pb and Zn in the January 30, 2003.
11. That CanZinco include further discussion on issues concerning the dock and related facilities including; hydrocarbon and process chemical contamination at the chemical and fuel storage area; conclusions regarding metal-rich sediments in Strathcona Sound. Results documenting contaminant levels near the mouth of Twin Creek and/or Strathcona Sound be included and discussed in greater detail than was presented in the January 30, 2003 ESA.
12. That CanZinco consider further characterization of the following items of concern: White crystal substance found at TP02-94 and TP0297 near the solid waste facility; areas around TP02-88 and TP02-50 where hydrocarbon impacted water was encountered; soil stained blue and green at the industrial complex; reagent storage area.
13. That CanZinco clarify whether it believes that leachate generated from burning at the Solid Waste Landfill is an environmental concern that warrants further examination.
14. That CanZinco, in regards to air quality monitoring, clarify whether additional monitoring will be required.
15. That CanZinco identify in the upcoming ESA if it believes that additional investigation required or whether its ESA studies are complete.

Questions and comments about the above-listed Terms and Conditions may be addressed to Dionne Filiatrault, NWB Senior Technical Advisor.

Yours truly,

Philippe di Pizzo  
Executive Director

Cc: Distribution List