

Environmental Health Assessment Services
Safe Environments Programme, HECS Branch
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CS-02-005

December 8, 2006

Ms Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0

Subject: Doris North Project Nunavut Water Board Application - Health Canada Review

Dear Ms Beaulieu,

Thank you for your e-mail of November 9, 2006, inviting Health Canada (HC) to provide comment on the Miramar Hope Bay Ltd application to the Nunavut Water Board for the Doris North Gold Mine. We have the following comments on the application:

Regarding the Air Quality Management Plan:

Section 3.1, Emissions management

More details regarding the achievement of emissions management are desired. Specifically, please provide details of what an aggressive fuel conservation effort consists of. Also, how will driving at designated speeds on site roadways be enforced? Health Canada appreciates the inclusion of the measure to divert chlorinated plastics away from the incinerator.

Section 3.2, Air Quality monitoring program

- Health Canada would like to receive the raw results of the baseline monitoring that has occurred as a result of this environmental assessment for interpretation. In addition, what knowledge has been learned from taking this baseline data? Are there the correct number of sites for monitoring to adequately represent spatial distribution of emissions?
- Concerning section 3.2.1.1, there was a lot of effort placed in calculating the number of sample locations, however a number was never determined - how many sampling locations there will be?
- Concerning site selection, Health Canada suggests that the proponent completes replicates (co-located samples) as well as field blanks for more thorough analysis.

- It does not appear as though there will be any samplers located within the camp site and ore processing facilities. Sampling within the camp site area is encouraged in order to monitor what is going on and what human exposure to the pollutants may be.

Section 3.2.3.2, Sampling Methods

- Please provide the manufacturers of the passive SO₂, NO₂ and O₃ samplers.
- Regarding the samples being taken every 30 days, this means a total of 12 samples over the year. As mentioned, duplicates (co-located) as well as field blanks are suggested. If the proponent is only reviewing this data annually, they are not going to be able to respond to elevated concentrations of any pollutants in a timely manner. Also, by taking only one sample per month, the proponent is averaging all of the highs and the lows into one average value. Health Canada requests that more samples be taken per month (at least every 2 weeks) and that the results be reviewed quarterly or every 6 months.

Regarding the noise abatement plan:

From the information provided by the proponent, it appears unlikely that there will be significant adverse health effects resulting from the project. However, the following information needs to be considered and/or provided to finalize, or potentially change, this tentative conclusion.

- Noise levels must, at a minimum, be in accordance with applicable occupational and environmental legislation as well as applicable Federal and Provincial guidelines and policies to help reduce impact on human health. Please provide a statement as to the occupational noise legislation that will be met regarding noise exposure levels and workplace noise levels. The methods that will be utilized to meet the applicable occupational noise legislation should be outlined.
- Please verify that there is a hearing conservation program in place to protect against noise induced hearing loss.

Should you have any questions concerning our comments, please feel free to contact me via e-mail at carolyn_dunn@hc-sc.gc.ca, at (613) 948-2875, or fax (613) 941-8921.

Sincerely,

Carolyn Dunn
Environmental Assessment Coordinator

c.c. :

DJ Smith (HC)
Doris North project team