



February 23, 2009

Hudson Bay Mining & Smelting Co. Ltd.  
P.O. Box 1500  
Flin Flon, MB R8A 1N9

Attention: Stephen West

**RE: Water Use Application QZ08-083 (amend. to QZ99-046), Tom Valley  
Property**

I have completed my review of the above referenced water use application. To continue processing your application, the following information and/or clarification is required:

1. Please confirm and explain in detail whether any environmental testing has been conducted to confirm the assumption that the iron precipitate sludge is stable under reducing (anoxic) conditions. If no testing has been conducted, do you have any existing samples of the sludge that may be potentially used for geochemical testwork?
2. In review of your proposed sampling plan, there is a potential gap in data between November 2009 and June 2010.
  - a) Since your proposed sampling plan is based on monthly sampling for two months (weather dependency), please explain how you plan to adequately characterize effluent chemistry during the initial flushing phase given the uncertainty over its duration and its occurrence during the latter stages of the open flow season.
  - b) Please provide details of consideration given to additional winter sampling at sites with safe access and year-round flow and if this is possible provide an updated sampling plan and monitoring locations.
  - c) If the stations differ from the monitoring stations already identified in the licence, please provide the station #, location, description, easting and northing coordinates for the Board to consider.
3. What consideration has been given to the potential for ferric oxidation to occur within the flooded workings given the low drainage pH?
4. Does the proposed Adaptive Management Plan (AMP)(section 3.14.2) contain plans to address potential periods of non-compliance during the flushing and short term period, especially given access conditions to the site during these periods?

5. The current timelines and methodology proposed for the AMP indicates an evaluation and review and mitigation process for periods of non-compliance that would be at least 90+ days. The application outlines an approach to evaluate exceedances of water quality thresholds but does not appear to be able to respond to potential periods of non-compliance during initial flushing period. The 30 day timeline for submission of the conceptual AMP does not allow for much consideration of the contents in advance of the start of construction. Please explain whether an earlier submission of this information is possible.
6. Has consideration been given to the effects of exposure of the concrete aggregate to acidic conditions, as part of the design process?
7. The location of the sludge pond is within an area identified as being affected by avalanches.
  - a) Since the contents of the sludge pond are proposed to remain in situ for 2 years prior to capping, has the potential for avalanche activity influencing the sludge pond contents been considered in the design of this structure?
  - b) Does the AMP contain details on monitoring of the sludge pond and its contents?
  - c) Is there potential for sludge mobilization as a result of avalanche activity in the spring or during snowmelt due to potential additional snow within the facility?

I look forward to your response. If you have any questions, please contact me at (867) 456-3983.

Sincerely,



Kelly Boutilier  
Licensing Officer

C: Register QZ08-083, Exhibit 4.1

Kai Woloshyn, AECOM (by email)