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VIA EMAIL

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Dear Melissa and David,

Re: Notification of Emergency Shock Chlorination of Doris Camp Potable Water System

Analytical results of potable water sampling received Aug 12/10 indicated that a colonization or bloom of blue-green algae was occurring within the camp domestic water distribution system. Regular monitoring of lake algal levels had not indicated any spike in cell counts in the raw water, but despite daily filter changes of the 1 and 5µm water filters on the water intake lines, cells penetrated past the filtration and treatment system and entered the distribution system. Further investigation of the occurrence is being conducted.

The species identified (*Aphanizomenon sp.* and *Aphanothece sp.*) are both known to be potential microcystin toxin producers. No microcystin was detected in the sampling, and there have been no toxin detections in regular weekly sampling in the raw lake water or within the camp. The algal cell detections occurred at several outlets post-treatment, with the exception of the water supply at the Reverse Osmosis (RO) outlet, which is the final protective barrier in the camp water treatment system. The entire camp was re-sampled for algae and microcystin Aug 13/10 at 18 outlets and samples were sent to the lab for rush analysis.

Emergency measures were instituted and signage was posted throughout the camp directing personnel to obtain drinking water from the RO outlet only, and a supply of bottled water was shipped in for additional drinking water and for minor hygiene use ie: toothbrushing.

The immediate course of action undertaken was to conduct a shock chlorination of the distribution lines to kill the algal growth followed by a flush of fresh water to clear the lines of the shock solution. This took

place in accordance with previously established procedures developed last year specifically for the Doris Camp system.

Additional signage was prepared and located at every water access point to inform camp residents of a water system shut-down overnight Sunday, Aug 15/10. A strong sodium hypochlorite solution was prepared and run through the distribution system until detectable at the far end point of each line throughout the camp. This solution was then allowed to reside in the lines for several hours before being drained to the camp lift stations that had been pre-prepared with dechlorination bricks. Outlets in the camp were run until only minor residual free chlorine or no chlorine was detectable to ensure the solution had been flushed from the system. No chlorine solution was released at any time directly to the sewage treatment plant; instead the shock solution and flush water was directed for temporary storage to a holding tank in the new membrane plant on-site but not yet in use.

Measures were undertaken before and during the process to ensure protection of camp residents, protection of components of the water treatment system and protection of the sewage treatment plant. A water/wastewater treatment specialist from Sanitherm on site monitored the execution of the treatment and will be involved in the plan to ensure all treatment solution and flush water used is completely neutralized before being scheduled for controlled batch releases into the active sewage treatment bio-membrane plant. Compliance of the discharge from the plant at monitoring station ST-8 will not be compromised and additional sets of compliance samples will be taken.

A follow-up will be provided with the results of the investigation into the breach of the treatment system, results of additional sampling conducted at ST-8, and corrective actions developed to prevent a recurrence. Algal enumeration and speciation samples will be re-taken throughout the camp to verify the efficacy of the shock chlorination and these results will be included in the follow-up.

HBML apologizes for not being able to provide prior notification of the shock chlorination, but the urgency of the situation demanded immediate action for the protection of the health of camp residents.

If you have any questions please feel free to contact the undersigned at [chris.hanks@newmont.com](mailto:chris.hanks@newmont.com).

Sincerely yours,

Chris Hanks  
Director of Environment and Social Responsibility  
Hope Bay Mining Ltd.