



Environment Canada **Environnement Canada**

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Via Email

Re: NWB2REP0507/TR/I1 – BHP Billiton World Exploration Inc. – Submission of Qilalugaq Abandonment and Restoration Plan, October 2005

On behalf of Environment Canada (EC), I have reviewed the above mentioned application. The following specialist advice has been provided pursuant to Environment Canada's mandated responsibilities for the enforcement of the *Canadian Environmental Protection Act*, Section 36(3) of the *Fisheries Act*, the *Migratory Birds Convention Act*, and the *Species at Risk Act*.

BHP Billiton World Exploration Inc. (BHP Billiton) has submitted an Abandonment and Restoration (A&R) Plan for its Qilalugaq Project in accordance with its licence requirements. The Qilalugak Project is in an exploration phase and is located on the Repulse Bay Property, having camp coordinates of 66°38'57"N, 88°22'30"W. This site is approximately 15 km northwest of Repulse Bay. All abandonment and restoration plans are to be completed by June 30th, 2006 and selected sites will be monitored until September 30th, 2006. Abandonment and restoration activities will be directed from the proponent's Vancouver office with field personnel based in Repulse Bay.

The proponent's A&R Plan addresses the removal of camp infrastructure and materials stored on site as well as the remediation of diamond drill, reverse circulation drill, and spill sites. All materials stored at the camp site will be prepared (crated, stacked, and wrapped) for removal via Hercules transport aircraft from the camp's winter air strip during the winter and spring of 2006 (February – May). The project camp consists of Weatherhaven tents (sleepers, storage, kitchen, offices, generator, and medical tents, etc.), a sewage treatment plant, storage containers, temporary wooden buildings and storage containers, storage areas for core and fuel, and assorted items associated with exploration activities (e.g., drill muds, salts, sand, and drums which contain contaminated fuel or material recovered from spill sites). Non-flammable refuse will be removed from the project area by airplane.

Heavy equipment (e.g., drill rigs and drill rig components, support equipment for drilling, dozers, loaders, etc.) will be brought to Repulse Bay for return transport via barge to Churchill, Manitoba. Equipment that is required for the demobilization and loading of camp infrastructure into aircraft will remain in either the hamlet or at the camp site. This equipment will be removed from the project area on the final transport flight.



Diamond drilling and reverse circulation drill sites will be cleared of refuse material and receive inspection for residual spills (proponent will take photographic records). Contaminated materials collected from spill sites will be collected and transported to the camp site, then flown to appropriate handling facilities in Churchill.

BHP Billiton will monitor three components of its Qilalugaq Project as part of this A&R Plan. These are as follows:

1. Previous spill sites and the effectiveness of remedial action taken
2. Camp location and immediate surrounding areas (lakes)
3. Storage areas such as fuel storage (empty, full, and contaminated areas)

GENERAL

- The proponent shall not deposit, nor permit the deposit of any fuel, drill cuttings, chemicals, wastes or sediment into any water body. According to the Fisheries Act, Section 36(3), the deposition of deleterious substances of any type in water frequented by fish, or in any place under any conditions where the deleterious substance, or any other deleterious substance that results from the deposit of the deleterious substance, may enter any such water is prohibited.
- Environment Canada recommends that ground surface reclamation measures be included in the proponent's A&R Plan. Lands affected by exploration activities should be restored to their natural conditions. This may entail the scarification of transportation routes, man-made structural foundations, and the removal of culverts. However, it is recognized that the proponent may want to use this infrastructure in future project activities. If so, the A&R Plan should communicate this fact and state that the ground surface will be restored prior to the project's final abandonment.
- The proponent shall, by way of confirmatory delineation, ensure that all hydrocarbon spills are remediated. If in-situ remediation or landfarming is adopted as the preferred treatment method for hydrocarbons, EC recommends that monitoring be continued until such a time as remediation criteria are met.

CAMPS

- Environment Canada recommends the use of an approved incinerator for the disposal of combustible camp wastes.
- The proponent shall ensure that any non-combustible waste is disposed of appropriately at an approved facility.
- Any sumps, including those for the disposal of drill cuttings, shall be backfilled and contoured to match the surrounding landscape.
- The proponent shall ensure that any sludges contained within the sewage treatment plant receive proper treatment and disposal prior to dismantling and final closure.

Monitoring

- Environment Canada recommends that the proponent specify what components of the Qilalugaq Project will be monitored. For instance, the A&R Plan states that camp locations and immediate surrounding areas will be monitored. However, no details are given regarding the parameters that will be monitored or the establishment of thresholds that will indicate that remedial actions of some sort should be implemented.

If there are any changes in the proposed project, EC should be notified, as further review may be necessary. Please do not hesitate to contact me if you have any questions or comments with regards to the foregoing at (867) 975-4631 or by email via david.abernethy@ec.gc.ca.



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Regards,

David W. Abernethy
Environmental Assessment Technician

Cc: Colette Spagnuolo (Environmental Assessment and Contaminated Sites Specialist)