



Water Resources Division
Nunavut Regional Office
Iqaluit, NU
X0A 0H0

NWB File: 2BE-GEO1015
CIDMS #: 652767

Mar 28, 2013

Re: 2BE-GEO1015 – Request for Open Burning 2013– George Lake – Sabina Gold and Silver Corporation (Sabina).

Please be advised that Aboriginal Affairs and Northern Development Canada (AANDC) have completed a review of the request for open burning for water license 2BE-GEO1015 (George Lake) submitted by Sabina Gold and Silver Corp. The NWB circulated the request for open burning for comments on Feb 28, 2013. All documents related to the request posted on the NWB ftp site under 2BE-GEO1015 were included in my review (See attached Technical Review Memo).

Should you have any questions or comments, please do not hesitate to contact me at (867) 975-4282 or by email at Ian.Parsons@aandc-aadnc.gc.ca.

Sincerely,

Original signed by

Ian Parsons
Regional Coordinator

Cc. Murray Ball, Manager of Water Resources – Aboriginal Affairs and Northern Development Canada, Nunavut Regional Office



Technical Review Memorandum

To: Phyllis Beaulieu – Manager of Licensing, Nunavut Water Board

From: Ian Parsons – Regional Coordinator, AANDC.

Re: 2BE-GEO1015 – Request for Open Burning 2013– George Lake – Sabina Gold and Silver Corporation (Sabina).

Background

The George Lake project is located in the Kitikmeot Region of Nunavut 100km South of Bathurst Inlet. The George Lake Project is part of the much larger Back River Project which includes several other properties. Existing facilities at George Lake consists of a gravel airstrip, 4 helipads and other site structures associated with running and maintaining an exploration drilling operation that can accommodate a maximum of 60 people.

Recommendations/Comments

First, AANDC would like to state that the open burning of wood waste as a form of disposal is not encouraged. AANDC has concerns that if the open burning is ineffective then there is a real threat to the environment involving Dioxins, Furan's, Nitrogen Oxides (NOx's) and Polycyclic Aromatic Hydrocarbons (PAH's).

AANDC would also like to state and recommend that if wood products and supplies can be brought to a remote location, then the proponent (licensee) should be able to remove those same products and supplies the same way they got the products and supplies to the remote location.

AANDC therefore recommends either the re-use of products or, if this is not possible, the removal, off site, of all waste products and supplies to an appropriately approved facility rather than burning.

In the event that reuse or removal cannot be accomplished, AANDC has the following recommendations:

1. The sampling of water bodies before and after burning that are within but not beyond 500 meters of the open burning area and that are downwind of the prevailing winds. Parameters to be tested would include, but are not



- limited to the following Dioxins, Furan's, Nitrogen Oxides (NOx's) and Polycyclic Aromatic Hydrocarbons (PAH's).
2. Only wood products that have **not** been treated in any form shall be burned.
 3. No treated wood or wood products, plywood or any other material treated or contaminated with petroleum based products should be burned.
 4. All non-combustible materials associated with the waste wood (i.e., plastics, tar paper, floor coverings, shingles, insulation, wiring, and tents) shall be thoroughly **removed** prior to the burning of the waste wood
 5. The products mentioned in (1) above shall be in a size that is manageable and will ensure that a complete burn of the product(s) will occur.
 6. The burn shall remain in a **'hot phase' or 'hot burn'** until complete combustion of the product(s) has taken place and no unburned wood debris is left over. Air assistance to the fire should be considered to improve complete combustion of the waste.
 7. After the burn is complete, any ash or other residual debris (i.e nails) found shall be cleaned up and disposed of in an appropriate matter.
 8. Little evidence should remain that a fire occurred at the chosen location.
 9. Soil sampling may also be required at the inspector's discretion.

AANDC would like to remind the proponent that if approval for open burning is granted by the NWB, then strict adherence to the conditions of issuance is required. AANDC Inspectors will include open burning permits in their site inspection to ensure compliance.

AANDC would like to reiterate that open burning is not encouraged and that any and all other methods for the re-use and/or disposal of the wood waste products should be investigated.

Cc. Murray Ball, Manager of Water Resources – AANDC, Nunavut Regional Office
Erik Allain, Manager of Field Operations – AANDC, Nunavut Regional Office