



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

Your File: 2AM-LUP0008
Our File: 9545-2-1.2AM.LUPA

January 13, 2008

Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU, X0A 1J0

Re: 2AM-LUP0008 – Type A, Water Licence Renewal Application – Lupin Mines Inc. (Zinifex Canada Inc.) – Written Public Hearing, Final Closing Statements from Interested Parties

Indian and Northern Affairs Canada (INAC) has completed a review of Zinifex Canada Inc (OZ Minerals) response to the Final Submissions made by Government Agencies (Federal/Territorial), Inuit Organizations and local community concerns regarding the Lupin Mine water licence renewal application. The proponent submitted their response to the Nunavut Water Board (NWB) on January 6th, 2009. In conducting our review, INAC referred to the document on the NWB's FTP-site under 2AM-LUP0008, 2008 Renewal – OZ Minerals Response Document "2AM-LUP Type A Water Licence Renewal Public Written Hearing Lupin Mines Inc".

In summary INAC has a concern with Zinifex Canada's proposed mitigation strategy for exposed tailings at the Lupin site. This item should be addressed before a new licence is issued to Zinifex Canada Inc. Please note the attached technical review comments and concerns.

Please feel free to contact me should you have any questions or comments. I can be reached at (867) 975-4568 or by email at Ian.Rumbolt@inac-ainc.gc.ca.

Sincerely,

Original signed by



Ian Rumbolt
Regional Coordinator

Written Public Hearing Final Closing Statements to the Nunavut Water Board on the Renewal of Zinifex Type A Water Licence for the Lupin Gold Mine Site

Introduction

Lupin Gold Mine is located approximately 285 Km southeast of Kugluktuk on the west side of Contwoyto Lake (project coordinates of N65° 46' W111°15'). The Lupin project was originally owned and operated by Echo Bay mines and was first issued a Type A water licence in 1981. The site had been in operation since 1982 with the exception of temporary suspensions of activities between January 1998 and April 2000 and again between August 2003 and March 2004. In 2006 Wolfden Resources (which became Zinifex Canada Inc.) acquired the Lupin Mine Site. Production at the mine ceased in 2005 and the site has been in a state of Care and Maintenance since 2006. It will remain in this state until Zinifex decides if it is economically feasible to resume operations.

In September 2008 an emergency discharge was requested by the proponent due to the accumulation of run-off into the on-site sewage lagoon and possible failure of the lagoon berms. The NWB considered this request and proposed to the Minister of Indian and Northern Affairs Canada (INAC) that an extension to the licence would be the appropriate option given the circumstances. The Minister approved this request and extended the licence to March 31st, 2009.

The NWB decided to precede with a written Public Hearing for the renewal of the current Type A water licence. Interested parties were given until October 27th, 2008 to provide comments/concerns to the Board in the regard. A Prehearing Conference was held on November 7th, 2008 and the Public Hearing notice and schedule were sent out to all interested parties on November 25th, 2008. On



December 9th, 2008 final submissions from Interested Parties regarding the renewal application were provided to the NWB and a final response to these submissions by the proponent was submitted to the NWB on January 6th, 2009.

Summary of Previous INAC comments and Proponent Response

General:

INAC Comment #1:

A water and wastewater plan should be implemented at the Lupin Site to manage run-off and sewage while the project is in Care and Maintenance. This plan should include regular site inspections as a proactive measure to avoid problems with the accumulation of run-off water as well as wastewater retention and release.

Proponent Response:

OZ Minerals will develop and implement a storm water management plan for the Lupin site to manage run-off. This plan will be submitted with the Annual report by March 31 2009.

INAC Comment #2:

The Lupin Project is considered to be in a state of Care and Maintenance (C&M). It is suggested that Zinifex Canada Inc provide a formal C&M Plan for the Lupin Project which would include water quality monitoring, fuel storage, equipment storage, site maintenance, water usage and all other components associated with the Lupin site.

Proponent Response:

OZ Minerals will submit a care and maintenance plan for the Lupin site taking into consideration water quality, equipment storage, site maintenance, water usage and all other components associated with the site. Oz Minerals will submit this plan along with the annual report required by the Nunavut Water Board by March 31 2009.



INAC Comment #3:

The proponent is reminded that even though the Lupin Mine is in Care and Maintenance an annual report for the year ending December 31st, 2008 is due by March 31st, 2009. The report must include but not limited to items listed in Part B, Section 5 (a) through (k) of the current licence #: 2AM-LUP0008.

Proponent Response:

Included in previous response #2.

Abandonment and Restoration Plan:

INAC Comment #4:

The tailings containment area should be completely covered in accordance with the present abandonment and restoration plan, which forms part of the current water licence, or, otherwise in a manner that prevents the dispersal or off-site deposition of contaminants (i.e. Metals) associated with the tailings containment area.

Proponent Response:

One of the common inquiries from all respondents related to the means by which dust migration from the exposed tailings areas would be mitigated. At present there is approximately 20 hectares of exposed tailings, a portion of which is covered either seasonally or year-round with water. The remainder of the tailings were covered by approximately 1 m of sand and gravel as part of the implementation of the Abandonment and Restoration Plan (A and R Plan) by Kinross Gold. Much of the currently exposed tailings areas are in low lying areas and therefore not overly prone to excessive drying and subsequent wind-blown dust migration, however we recognize that interim measures are appropriate to contain the tailings given the period of time the site may remain under care and maintenance circumstances. To contain the tailings solids that are not covered with water year-round we propose to cover these areas with a thin layer of sand and gravel by bulldozing material from the adjacent tailings cover. This would be an interim measure only and the final design grades for the tailings cover would be restored once the final A&R plan is implemented. The actual thickness of the cover over the currently exposed tailings will vary depending on the current surface grades and traffic ability of the tailings; however, the



amount of cover will be sufficient to isolate the tailings solids from the wind and limit evaporation of water from the tailings mass. This will preclude wind-borne transport of the tailings solids to the adjacent areas outside of the Tailings Containment Facility. The areas where the tailings are currently covered by water will remain as-is until the final A and R plan is implemented as they would not be subject to wind-blown dispersion effects.

INAC Comment #5:

All petroleum hydrocarbon contaminated soils must be disposed of appropriately. The proponent should consult with the appropriate government agencies and the NWB to determine disposal options prior to any final disposal including land filling, land farming, etc.

Proponent Response:

Existing petroleum hydrocarbon contaminated soil will be disposed of at final closure through an appropriate method. The intended method will be consulted upon with the appropriate Inuit and government agencies prior to disposal to determine the best possible method.

INAC Comment #6:

Any **waste** fuels, chemicals, and hazardous materials should be packaged and disposed of at an approved facility off-site. Zinifex is reminded that in order to ship hazardous waste around or out of Nunavut they must be registered with the Government of Nunavut, Department of Environment.

Proponent Response:

Identification, quantity, packaging and disposal of all hazardous waste on site will be addressed within the care and maintenance plan to be submitted no later than March 31 2009.

INAC Comment #7:

All roads and the old airstrip should be ripped and scarified to the contour of the land to promote natural re-vegetation and for erosion control.

Proponent Response:



All roads and airstrips are needed throughout care and maintenance and final closure. At final closure OZ Minerals will have all such infrastructure ripped and scarified to the contour of the land. OZ Minerals will consult the water board during the finalization of the interim abandonment and restoration plan to retain the airstrip, as it constitutes a significant piece of infrastructure in the area.

Spill Contingency Plan:

INAC Comment #8:

In Section 5.4 Mine Water – Mining operations and dewatering may be resumed at some point in the future. Any mine dewatering activities would have to be approved by the Nunavut Water Board first and would have to be tested for compliance with the water quality criteria listed as part of any renewed water licence or the applicable MMER.

Proponent Response:

OZ Minerals will meet all territorial and Federal legal obligations prior to any dewatering or discharging activity.

INAC Comment #9:

Fuels/Chemicals Management Plan - All fuels, chemicals and reagents should be inspected regularly and a plan must be developed for long term storage. These items must be stored in a manner that ensures there will be no environmental impact. This item could be addressed under a Care and Maintenance Plan.

Proponents Response:

Fuels, chemicals and all hazardous materials will be inspected regularly, this will be addressed in the care and maintenance plan to be submitted no later than March 31 2009.



INAC Comment #10:

There shall be no open burning of petroleum products or other wastes such as plastics, wood treated with preservatives, electrical wire, Styrofoam, asbestos or painted wood to prevent the deposition of waste materials from incomplete combustion and/or leachate from contaminated ash residues from impacting any surrounding waters. Any incineration of wastes shall be done in an incinerator approved by the NWB.

Proponent Response:

Incineration will take place within an incinerator approved by the NWB.

INAC Comment #11:

The entire mine site should be routinely inspected to check for fuel/oil spills. Any contaminated soil should be removed immediately and placed in drums until it can be treated or disposed of appropriately.

Proponent Response:

Existing petroleum hydrocarbon contaminated soil will be disposed of at final closure through an appropriate method. This method will be consulted upon with the appropriate Inuit and government agencies prior to disposal to determine the best possible method. The care and maintenance plan will outline specific time frames for routine inspections on site to check for spills.

INAC Comment #12:

If a spill should occur while the mine is in care and maintenance it should be reported immediately to the Spill Line (867-920-8130) as per the Spill Contingency Plan. The contact information for INAC is listed below.

Manager, Field Operations
Tel: (867) 975-4295
Fax: (867) 979-6445

Melissa Joy, Water Resource
Officer
Tel: (867) 982-4302
Fax: (867) 982-4307
Email: Melissa.Joy@inac-ainc.gc.ca



Baba Pederson, Resource
Management Officer
Tel: (867) 982-4306

Fax: (867) 982-4307
Email: Baba.Pedersen@inac-ainc.gc.ca

Proponent Response:

All spills will be reported immediately to the spill line as per the spill contingency plan.

Final Closing Statement in Consideration of Proponent Responses

Zinifex Canada Inc (OZ Minerals) has made a good effort to address most of the concerns that were noted in INAC's final submissions to the NWB. INAC is also satisfied that the proponent will address these concerns in the Care & Maintenance, Spill Contingency and A&R plans, as well as in the Annual Reports. However, INAC would like to see all of these plans approved prior to the issuance of a new water licence. Therefore, prior (i.e. 30 days) to the current licence expiry the Board should require the proponent to submit an appropriate Care and Maintenance Plan, Storm-water Management Plan, updated Spill Contingency Plan and updated Interim Abandonment and Restoration Plan. These plans must incorporate the commitments stated in OZ Minerals Jan 6th, 2009 response to interveners concerns. The reason for this is that interveners could review the plans for approval before the Mar 31st, 2009 licence expiry date thus allowing for Board approval before the renewal is issued.

In addition it is our opinion that the exposed tailings area should have a minimum of 1m cover without disturbing the previously covered tailings area. As this is a low lying area, using existing cover from higher elevations could possibly affect cover effectiveness within these higher elevated areas. INAC would not be opposed to an Interim cover amount less than the 1m if a schedule of activities for final cover was provided in the updated A&R plan.

Should you have any questions or comments, please do not hesitate to contact me at (867) 975-4568 or by email at Ian.Rumbolt@inac-ainc.gc.ca.

Sincerely,

Original signed by

Ian Rumbolt
Regional Coordinator

Cc. Kevin Buck, Manager of Water Resources – Indian and Northern Affairs
Canada, Nunavut Regional Office