



FORTUNE MINERALS LIMITED

140 Fullarton Street, Suite 1902, London, Ontario, Canada N6A 5P2
Tel. 519-858-8188 ~ Fax. 519-858-8155

February 29, 2012

Shannon Hayden
Environmental Assessment Officer
Mackenzie Valley Environmental Impact Review Board
200 Scotia Centre
Box 938, 5102-50th Ave
Yellowknife, NT
X1A 2N7

Dear Ms. Hayden

**Re: Undertaking Response Clarification for the NICO Project
File EA0809-004**

On February 24th, 2012, the Mackenzie Valley Environmental Impact Review Board (MVEIRB) issued an Undertaking Response Clarification request to Fortune Minerals Limited ("Fortune"). Fortune is pleased to respond to this clarification request from MVEIRB for Undertakings 1, 3 and 14. Please note that the request for a clarification under Undertaking #3 was actually in relation to Undertaking #4.

Clarification request for Undertaking 1:

Fortune is to provide a model and summary of the waste streams generated from the reverse osmosis effluent treatment facility, including all water quality, sediment quality and biotic effects. The information provided should include a discussion about where the waste streams travel, how they will be treated, final performance predictions, and downstream effects. Fortune should also include a discussion about the processing of the brine, management of the post-processed brine, water flow, and how it will be handling the precipitates from the brine process.

Please provide a summary of the predicted impacts of the reverse osmosis effluent treatment facility on sediment quality and aquatic biota.

Response:

Fortune is proceeding with the updating of the water quality model using effluent quality data from the reverse osmosis (RO) system as requested by Aboriginal Affairs and Northern Development Canada. At this time, Fortune feels that it is premature to make any firm statements about potential impacts of the RO effluent on aquatic biota without knowing the final concentrations in the receiving environment. Once the water quality model is complete, potential changes to



sediment quality and potential impacts to aquatic biota will be re-evaluated. Potential risks described in the risk assessment provided in the Developer's Assessment Report (DAR) using ion exchange will also be re-examined to determine if they have changed. The results of the water quality model under the RO will be available on April 13th, 2012.

Please provide a discussion about where the waste streams travel and the potential downstream effects.

Response:

The manner in which the waste streams (effluent) travel in the receiving environment has not changed with the switch to reverse osmosis technology in the Effluent Treatment Facility. The effluent discharge location and the characteristics for effluent dispersion will not change from that described in the DAR. The response to potential downstream effects is covered in the previous response.

Clarification Request for Undertaking 4:

Fortune is to calculate the level of disturbance and create a disturbance map showing the predicted level of habitat disturbance, including buffer zones, that the proposed NICO Project may have on the boreal caribou ranges (as identified in the Recovery Strategy for the Woodland Caribou, Boreal Population, in Canada - 2011). This should include the proposed mine footprint, the existing winter road, the proposed over-land road route and other cumulative effects as a function of existing boreal caribou habitat disturbance.

Please provide the percentage of added woodland boreal caribou habitat disturbance as a result of the NICO Project in addition to existing disturbance estimates in the Northwest Territories - South Range, as identified in the Recovery Strategy for the Woodland Caribou, Boreal Population, in Canada – 2011 (65% undisturbed habitat equals a measurable probability for local self-sustainability).

Response:

The response to this clarification request was sent to MVEIRB on February 27th. Fortune updated Undertaking #4 with the requested information and submitted it as a revised version of Undertaking #4.

Clarification Request for Undertaking 14:

Fortune is to review and report on its proposed NOX treatment methods for emission sources.

Please provide a description of the proposed NOx treatment methods for emission sources.



Response:

On February 24th, 2012, Golder Associates Ltd. contacted Ms. Aileen Stevens of ENR to discuss the further clarification requested by the MVEIRB. Below is the summary and outcome of the call between Golder Associates Ltd. and ENR.

Sincerely,

Fortune Minerals Limited

Rick Schryer, Ph.D.
Director of Regulatory and Environmental Affairs



Gibson, Jennifer

Subject: FW: Fortune Minerals Technical Question - Undertaking 14 NO2
Expires: Saturday, August 25, 2012 12:00 AM

From: Aileen Stevens [mailto:Aileen_Stevens@gov.nt.ca]
Sent: Monday, February 27, 2012 5:08 PM
To: Madland, Chris
Cc: Dave.Fox@EC.GC.CA
Subject: RE: Fortune Minerals Technical Question - Undertaking 14 NO2

Hi Chris,

Following our discussion and in reviewing the documentation you've provided to explain the modeling error, ENR is satisfied that the modelled air quality predictions are sufficient and that further efforts to investigate emission reduction technologies are not required at this time. ENR anticipates that the development and execution of an appropriate Air Quality Monitoring program will provide verification of the predicted ambient air quality, and include mitigative measures in the event that exceedances are observed.

Please call if you have any questions or concerns.

Best regards,
Aileen

Aileen Stevens, P.Eng.
Air Quality Programs Coordinator
Environment & Natural Resources
Government of the Northwest Territories

P: 867.873.7758
F: 867.873.0221
aileen_stevens@gov.nt.ca

From: Madland, Chris [mailto:Chris_Madland@golder.com]
Sent: Friday, February 24, 2012 3:19 PM
To: Aileen Stevens; Fox,Dave [Yel]
Cc: Gibson, Jennifer; Rick Schryer
Subject: Fortune Minerals Technical Question - Undertaking 14 NO2

Aileen and Dave:

Further to our discussions today, please find documentation attached indicating the response(s) to Aileen's very reasonable question regarding elevated predicted annual NO₂ predictions in the Nico DAR. You will see that the official record of Undertaking 14 is "...provide a description of the proposed NO_x treatment methods for emission sources." You will also see that in Fortune's original response and in the clarification to the response that Fortune intends to issue (attached here for your perusal in draft), that the predicted high annual NO₂ issue is in fact an artefact of an isolated error in the post-processing routine, and is unrelated to unacceptably high NO_x emissions, thereby eliminating the need to assess "treatment options". Please advise at your earliest convenience.

Sincerely,

Chris

Chris Madland (B.Sc.) | Air Quality Scientist | **Golder Associates Ltd.**

102, 2535 - 3rd Avenue S.E., Calgary, Alberta, Canada T2A 7W5

T: +1 (403) 299 5600 | **D:** +1 (403) 260 2290 | **F:** +1 (403) 299 5606 | **C:** +1 (403) 614 5779 | **E:**

Chris_Madland@golder.com | www.golder.com

Work Safe, Home Safe

This email transmission is confidential and may contain proprietary information for the exclusive use of the intended recipient. Any use, distribution or copying of this transmission, other than by the intended recipient, is strictly prohibited. If you are not the intended recipient, please notify the sender and delete all copies. Electronic media is susceptible to unauthorized modification, deterioration, and incompatibility. Accordingly, the electronic media version of any work product may not be relied upon.

Please consider the environment before printing this email.