

14 February 2012

Project No. 09-1373-1004.9500

Dr. Rick Schryer
Fortune Minerals Limited
140 Fullarton Street
Suite 1902
London, ON
N6A 5P2

RESPONSE TO ADDITIONAL INFORMATION REQUESTS NICO DEVELOPER'S ASSESSMENT REPORT

Dear Sir,

In an email dated 19 January 2012 to Dr. Rick Schryer of Fortune Minerals Limited (Fortune), Natural Resources Canada (NRCan) requested clarification on the below points following review of Responses to Information Requests submitted to the Mackenzie Valley Review Board on 13 December 2011. A conference call took place on 26 January 2012, between NRCan (John King, Dogan Paktunc, Charlene Hogan, and Rob Johnstone); Fortune (Rick Schryer, Keith Lee), and Golder Associates Ltd. (Ken DeVos, Michelle Nause, and Jennifer Gibson) to provide further clarification to the additional information requests.

The information below, as requested by NRCan, provides a written clarification of the verbal discussions on 26 January 12, with supplemental rational for the findings presented in the Developer's Assessment Report (DAR) and the subsequent Response Information Requests. During this conference call NRCan agreed that a letter containing supplemental discussion would be an appropriate forum to address these concerns.

NRCan_1.1 (1)

In NRCan's reply to the Fortune Information Request (IR) response 1.1 NRCan states "The ARD evaluations including ABA tests must be supported by geochemical and mineralogical data and other tests; therefore, the concern raised is still valid and requires a proper answer. Please provide further clarification and discussion around this."

During the conference call, NRCan clarified that they would like more discussion of what the CaNP values are and why Fortune maintains the conclusions are valid in light of the numbers. NRCan agreed that a letter containing supplemental discussion would be an appropriate forum to address the concerns. Provided below is some additional explanation and why the conclusions are considered sound in consideration of the mineralogy, NAG testing, kinetic testing, and site deposition strategy.

Response

For geochemical evaluation and determination of potential for acid generation and metal release there are several guidance documents available; it is common to refer to these documents, complete multiple tests on multiple samples, and look at several different types of testing and lines of evidence to develop conclusions



related to the ARD potential of the materials. It is also then necessary to consider the overall flow system and conditions on-site, including any proposed mitigation strategies to understand the overall influence on acid generation potential, and the potential for release of acidity and/or metals to the environment. Golder considers that our interpretation of NPR is consistent with the Price (1997) guidelines, particularly NPR as determined following the methods in Section 8.1.2 of Price which defines NPR as Sobek NP/TAP (where TAP is the acid production based on total S (%)). Golder's interpretation is also consistent with the criteria provided in Table 8.4 of Price, which uses NPR rather than CNPR.

It is recognized in Price, and furthermore by Golder that CaNP is an important line of evidence in the overall interpretation of ARD potential, and that all lines of evidence must be considered. Golder does not propose to change the guideline interpretation of these criteria however we offer the following discussion in consideration of these and other guidance documents, and in consideration of other available test data for clarification purposes.

Geochemical testing and factors considered in determination of ARD potential, rock classification, and mitigation possibilities for the NICO site are as follows:

- ARD potential - Using NPR (over 300 samples as described in Annex A of the DAR).
- CaNP determination – (Included in Annex A of the DAR) has been considered and as a result it is recognized that NP must come from not only carbonate but other minerals if there is sufficient sulphide and reaction rate to produce appreciable acidity.
- Sulphide (and total S) – This is the primary criteria we use in the rock management plans (along with elemental concentrations of As, and Bi). In the deposit less than 15 % of rock has total sulphide content of greater than 0.3 wt. %, therefore it is considered that there is sufficient storage capacity within the CDF to encapsulate this material.
- NAG test results – Confirm that low sulphide content materials are non-acid generating.
- Mineralogy – Limited number of samples show that aluminosilicates are present that could potentially provide some buffering capacity if reaction rates are slow.
- Kinetic testing – Results confirm that low sulphide content materials are non-acid generating.
- Field testing – Results confirm that low sulphide content materials are non-acid generating
- Mitigation (deposition) strategy – It is recognized that there is some rock with potential for acid generation. There will be an operational monitoring program and acid generating materials will be placed within the pile, co-disposed with net neutralizing tailings, such that oxidation of the acid generating materials will not be realized. Should oxidation of the materials occur, the placement measures will ensure that the materials do not release acidity.
- AG materials - There is ample capacity to store all of the AG materials regardless of whether NPR or CaNPR is used as the criteria. During operations an operational monitoring program will be implemented and supplemental data will be analysed on a routine basis to confirm predictions.

NRCan_1.1 (2i, 2ii)

In the NRCan reply to the Fortune IR response NRCan 1.1 (2i, 2ii) NRCan states “What does “if processed” mean? If arsenopyrite and pyrite make up 6.5% and 2% of the ore as stated in the report, they will have to be processed. So, the requests 2i and 2ii remain unanswered. Please provide further clarification to this.”

During the conference call with NRCan on 26 January 2012 Golder provided further clarification. NRCan agreed that summarizing this information in a letter containing supplemental discussion would be an appropriate response to their concern. This discussion is provided below.

Response

2i) In general all ore fed to the Mill will be crushed and ground to liberate individual minerals. The ground/slurried ore will be dosed with xanthate, a flotation reagent, where primarily sulfide minerals will be recovered in a flotation process. The recovered minerals will be dewatered in filtration equipment, bagged, and shipped to the Saskatchewan Metals Processing Plant (SMPP) The barren tailings stream will be thickened and pumped to the Co-Disposal Facility (CDF) for disposal. The only mineral processing will be the physical breaking of the bulk ore into finer sizes - the minerals will not be chemically broken down in the milling process.

2ii) The majority of the arsenic will be recovered in the final concentrate product and shipped off-site to the SMPP. The recovery of arsenic will be between 90 to 95% on lab tests, including pilot plant runs (minerals are not measured but assay the metals/elements in the solids). Arsenic is in both Cobaltite (CoAsS) and Arsenopyrite (FeAsS). The mineralization in this ore indicates the 2 minerals are actually a cross-blend, where in the arsenopyrite several Fe atoms are replaced with Co atoms. As the ore grades change with regard to Co, more Fe atoms are replaced in the mineral lattice with Cobalt to make the mineral closer to Cobaltite than Arsenopyrite. This mineral blend is what Fortune is after. The concentrates containing the arsenic minerals will be shipped off-site to be processed in the SMPP.

NRCan_1.1 (4)

In the NRCan reply to the Fortune IR response NRCan 1.1 (4) NRCan states “Clarification is needed as to whether the erroneous labels will be corrected in the revised document.”

Response

Fortune will most likely be issuing an erratum for the DAR following the February technical meetings in Yellowknife.

NRCan_1.1 (5)

In the NRCan reply to the Fortune IR response NRCan 1.1 (5), NRCan states “If measured NP is greater than the carbonate NP, an explanation as to the sources of the excess NP should be provided. If there are other fast dissolving minerals, they should be mentioned and their realistic contribution to the neutralization of acid should be discussed. Otherwise, the discrepancies in the measured and assessed NP values would indicate uncertainties in the static test results. A more conservative approach to assessing the static test results is recommended.”

Response

Please refer to response for NRCan_1.1 (1).

NRCan_1.1 (8)

In the NRCan reply to the Fortune IR response NRCan 1.1 (5) NRCan states “The results could lead to confusion without an explanation of the discrepancies. If there are uncertainties in the reported mineral quantities, these should be stated (e.g. sampling, analytical).” As discussed in the conference call of 26 January 2012 provided below is clarification.

Response

There are many reasons that there may be differences between concentrations measured through elemental analyses and mineralogical determination:

Sampling

Mineralogy samples are much more localized in nature (i.e., only a small amount of sample can be placed under a microscope) whereas it a larger sample that is used for elemental analyses. Furthermore, during an investigation it is possible to analyse many more elemental samples relative to the number of samples that can be analysed for mineralogical properties, therefore the elemental analyses provides a greater certainty with respect to the overall amount of a given element. Mineralogical analyses do however provide valid and necessary supplemental information on the types of mineral assemblages that may occur and lead to reactions.

Mineralogical Analysis

Mineralogical analyses are conducted using a microscope, microprobe, and X-ray-diffraction. These types of analyses can only be completed on very small samples, therefore the total quantity of materials estimated by this method may contain more uncertainty than the total quantities obtained by elemental analyses if the sample is meant to represent a large amount of material. Furthermore, in the case of petrographic analyses the quantities estimated are generally the subject of the interpretation of the mineralogist who completed the analyses, thus are limited by the ability of the human brain to distinguish various minerals, and estimate how much is observed.

Elemental Analysis

Elemental analyses were completed on many samples from throughout the waste and ore zones of the proposed mine. The analyses consisted of completely digesting a sample (through addition of a strong acid) followed by analyses using an instrument such as an ICP-MS.

This method provides a much more accurate estimate of the overall quantities of a given element that may occur in a sample, and in the waste and ore zones. The number of samples collected also then allows for statistical evaluation of distributions of elements. Elemental analyses however can only provide a limited understanding of the mineral phases that are encountered.

Interpretation

Interpreting the data to develop an understanding of how a specific rock type will react involves investigating and interpreting multiple sources of information. With respect to mineralogical and elemental data, these 2 analyses are used together, with the elemental analyses providing the best evidence with respect to how much of any given element is present, and the mineralogical analyses providing a better understanding of how these elements are structured or put together.

Differences

The end result of this is that differences between mineralogical results and elemental results are expected. Both values are valid for the analyses performed, however they are used for different purposes, with the elemental

values providing more certainty with respect to overall quantities or amount of material, and the mineralogical data providing more certainty with respect to the types of materials these elements are present in.

NRCan_1.1 (9)

In the NRCan reply to the Fortune IR response NRCan 1.1 (9) NRCan states “There is a difference between the “10 times greater” and “greater than 10 times”, so it is not a simple “wording issue”. Furthermore, it is not appropriate to state it as “10 times greater than” to describe differences of 50 to 5000 times and 50 to 250 times the crustal abundances.” During the conference call with NRCan on 26 January 2012 Fortune provided further clarification. This discussion is provided below.

Response

This is the criteria Fortune uses to highlight what requires further consideration as the geochemical and water quality evaluation proceeds on the NICO Project. These values may not be related to how much of the material actual results in leachate or water quality concerns (for example solid phase aluminum in aluminosilicate minerals is ubiquitous throughout many areas of the earth's crust, but the aluminium in this material does not directly relate to how much aluminum can leach from the material).

There is no intent to be misleading in the choice or definition of criteria, Golder does consider the criteria as relevant since the values used as criteria result in more of the elements undergoing more thorough review. For example, samples at 10 times greater than crustal abundance would receive the same additional scrutiny as samples 100 times greater than crustal abundance.

NRCan_1.1 (10)

In the NRCan reply to the Fortune IR response NRCan 1.1 (10) NRCan states with respect to detection limits “These should be stated as such in the report.”

Response

Fortune will most likely be issuing an erratum for the DAR following the February technical meetings in Yellowknife.

NRCan_1.1 (11, ii)

In the NRCan reply to the Fortune IR response NRCan 1.1 (11.ii) NRCan states with respect to rock classification during operations “Reasonable explanation – but verify as to whether there is an adequate supply of Type-2 waste rock for use as the perimeter dyke.”

Response

A Rock Management Plan is provided in Section 3 and in Appendix 3.1 of Section 3 of the DAR, which discusses material quantities and classification. Both Type 1 and Type 2 rock as defined in this Plan would be suitable for construction of the perimeter dyke. As stated in Table 3.7-2, approximately 11.9 Mt of mine rock is required for perimeter dyke construction. Based on available information in the block model there is approximately 26 Mt of Type 1 material.

Closure

NRCan has reviewed the information contained in this memo and is satisfied that it covers the issues discussed during the conference call of 26 January 2012.

If any additional information is required, please contact the undersigned.

GOLDER ASSOCIATES LTD.



Ken DeVos
Principal, Senior Hydrogeochemist

c.c.: NRCan (John King, Dogan Paktunc, Charlene Hogan, Rob Johnstone)

JG/MN/KDV/jg/jm

\\vedm1-s-filesrv1\data\active\2009\1373 aquatics and water resources\09-1373-1004 fortune nico lake ea\ncr-#3918402-v1-enviro._assessment_mvrma_frameworkshop_#2_nov_9-feb142012.docx