



## MINES AND GEOLOGY DIVISION

ANY REPLY OR SUBSEQUENT REFERENCE TO THIS COMMUNICATION SHOULD BE ADDRESSED TO THE COMMISSIONER OF MINES NOT TO ANY OFFICER BY NAME AND THE FOLLOWING REFERENCE QUOTED:- HOPE GARDENS P.O. BOX 141 KINGSTON 6, JAMAICA, W.I. PHONE: (876) 927-1936-40 FAX: (876) 977-1204 E-MAIL: <u>commissioner@mgd.gov.jm</u> WEBSITE: <u>www.mgd.gov.jm</u>

January 25, 2021

Mr. Peter Knight Chief Executive Officer National Environment and Planning Agency 10-11 Caledonia Ave, Kingston 5

## RE: PROPOSED MINING OPERATIONS IN SML 173, IN THE PARISHES OF ST. ANN AND TRELAWNY BY NORANDA BAUXITE PARTNERS II

## BACKGROUND

The Mines and Geology Division (MGD) is in receipt of the Environmental Impact Assessment (EIA) for proposed mining activities in SML 173 located in the parishes of St Ann and Trelawny. A review of the EIA reveals a number of potential environmental impacts associated with the proposed mining operation, most notably, potential loss in vegetation and change in topography within orebodies and haul roads, dust emission, surface and groundwater contamination, as well as potential loss of biodiversity and destruction of heritage sites. The Division is however satisfied that the aforementioned environmental impacts were addressed using a wide range of mitigation measures documented in the EIA. The Division further wishes to provide the following comments and recommendations:

- Deep slope cuts in excess of 6m should be benched to enhance slope stability. Bench design must however be guided by the geotechnical properties of the rock material (e.g. the degree of weathering, rock strength, extent of fracturing, etc.). Hence, more conservative bench designs (low bench height and wide berms) may be required where less competent material is encountered.
- The Division is concerned with the potential dust generated (particularly in dry season), from movement of trucks along haul roads, and stock piles of material. It is therefore recommended that the dust suppression regime indicted in the EIA be fully implemented and strictly monitored.
- 3. Groundwater contamination is perceived to be negligible given the depth to groundwater within the upper watershed areas is greater than 100 metres, and the sources of contamination are relatively limited. Further, bauxite pits are generally mined in such a manner that significant soil material is left atop the limestone which assists to filter out particulate matter. The Division however notes the difficulty to accurately quantifying the potential risk for groundwater

contamination given the lack of historical data. As such, the Division recommends that groundwater monitoring be strictly carried out.

- 4. Section 8.1.2 of the EIA indicates that mining activities will not be conducted within the confines of sinkholes, and haul roads will not traverse sinkholes. The Division further recommends that haul roads be constructed with a minimum setback of 10m from sinkholes identified onsite.
- 5. Berms are to be applied to elevated haul roads to minimize the risk of over-travel and overturning of mobile equipment.
- 6. A detailed five (5) year mine plan should be presented to the Commissioner of Mines for approval prior to commencement of mining in the lease area. In addition, an annual update of the rehabilitation plan is required with regard to what was achieved during the prior period and plans for the upcoming year.
- 7. Rehabilitated lands considered for housing/subdivisions must be approved by the Mines and Geology Division. Approval will therefore be subjected to the requirements of the Hillside Development manual, and the provision of a details soil investigation report (geotechnical report).
- 8. Mined out pit walls over 1.5m in vertical height and over 30° in slope shall be fenced or barricaded to prevent persons or animals falling over them.

## DECISION

A review of the EIA indicates a number of potential environmental impacts are associated with the proposed mining operation. The mitigation measures highlighted in the EIA are however deemed satisfactory; nonetheless the full implementation of mitigation measures and subsequent monitoring of activities will be required to ensure full compliance.

The Mines and Geology Division therefore recommends approval of the proposed mining activities in SML 173 given that the abovementioned recommendations are adhered to. Notwithstanding, further dialogue is required with the planning authority as to the inclusion of the modified 'clawed back area', as the preferred alternative.

Yours truly

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Stacey Plummer (Mrs.) Deputy Commissioner of Mines for Commissioner of Mines