

11 February 2019

Ms Amy Sinclair
Regional Representative for Australia, New Zealand & Pacific
Business & Human Rights Resource Centre
AUSTRALIA

Dear Ms Sinclair

Subject: Invitation to Respond to Report Published by Radio New Zealand (14 January 2019)

We acknowledge receipt of your email dated 4 February 2019 and thank you for the opportunity for Newcrest and specifically its wholly owned subsidiary Lihir Gold Limited (LGL) to respond to a recent report published by Radio New Zealand “***Landowners on PNG’s Lihir seek compensation for water usage***’. This report provides information on detailed discussions and exchanges with the Londolovit community over several years that involves not only the Londolovit Sagomana Association (LSA) and LGL, but also the Lihir Mining Area Landowners Association (LMALA) and the Government of Papua New Guinea represented by two regulators the Mineral Resources Authority (MRA) and Conservation and Environmental Protection Agency (CEPA).

Some additional context to support our response is outlined in this letter along with a description of the parties involved, the interrelated nature of the issues and some technical information around water extraction and mine waste disposal.

LGL are aware of the Londolovit Sagomana Associations’ (LSA) claims of ownership over the Londolovit river, in terms of the water that flows through it, and the consequent compensation demand for PGK113 million. LGL has engaged on these claims for several years with the LSA.

The current situation: LSA’s issues and objectives

LSA’s issues are that;

- i) they, and not the Government of PNG, are owners of the water in the Londolovit river, in contradiction to PNG law. And, as such
- ii) they should receive a ‘royalty’ for water used by LGL in its operations;
- iii) they should be compensated PGK113 million = K1 per litre of water estimated to have been extracted above permit levels during the period 2013-2015
- iv) the importance of the water to the mining operation is not recognised in local compensation and benefits arrangements;
- v) as water resource owners they have been ignored by the umbrella landowner association (LMALA) in its management of substantial benefits received from LGL;

- vi) the law of PNG needs to be amended to accommodate their position on water resource ownership.

The LSA has also set out their objectives in a published article on 17 October 2016. Each objective is associated with a distinct institution which to quote that article are as follows:

- a) *To get LMALA to acknowledge them as “water” resource owners and remit adequate benefit as possible under the Integrated Benefit Package (IBP) of the Lihir mine Agreement which stand is justified on the premise that water is fundamental in gold processing without water there will be no gold;*
- b) *LGL to acknowledge and sign a new water use and impact agreement with them as the current water impact agreement was obsolete since it was first created in 1998 and does not include payment for water use except environment impact; and*
- c) *[PNG] State to acknowledge them as original and traditional owners of the Londolovit river and not [re]state [the law on water ownership] as stipulated in the Environment Act 2000 so that State to create a separate facility (trust account) for them [LSA] to share with State all monies paid to State by LGL as issuer of water permit and “owner” (in their stead) of Londolovit river. [Our parenthesis]*

As has previously been communicated to the LSA in correspondence from both LGL and CEPA (as PNG’s regulator responsible for the environment and water resources), the position under PNG law does not support their assertions or claims. This is because Section 79 (1) of the *Environment Act 2000* expressly vests the ‘the right to the use, flow and control of water’ in the PNG State. Accordingly, under the laws of PNG, it is the PNG State that owns water resources (and through CEPA under the Environment Act) grants environmental permits authorising companies like LGL to extract water from rivers and other bodies of water for use in their operations. LGL is authorised to extract water under its Environmental Permit and CEPA then charges LGL a water extraction fee for this privilege. Being the property of the State, it is the State that receives the prescribed statutory payment for the use and consumption of water.

Contributing factors: Legal requirements, mining agreements, community benefits packages

In accordance with the requirements of PNG law LGL undertook an extensive pre-mining compliance and assurance process before being awarded a special mining lease (SML 6) to mine on Lihir Island. Lihir is located 900 km northeast of Port Moresby in the New Ireland province and has a current population of approximately 30,000 people. As part of the grant and approval of the special mining lease LGL was also granted a permit to extract water, the technical details of which are set out below (in Appendix 1) included the requirement to maintain a minimum flow rate in the Londolovit river. LGL is fully compliant with the

requirements of its extraction permit but has on occasion extracted higher instantaneous rates of water in what can be described as extreme or anomalous circumstances. This did not however lead to exceedances of the annual permitted volumes for the 2013, 2014 and 2015 calendar years).

As previously mentioned, while there is no legal requirement to pay royalty or compensation to landholders for the water extracted, extensive benefits are afforded to the communities on Lihir (including those represented by the LSA) under the various benefits and services agreements including the community hospital operated and maintained by LGL, support for local schools, domestic waste management and road construction programs. In 1995 the umbrella landowner association, LMALA, negotiated substantial gold royalty and other benefits from the PNG Government and LGL respectively, referred to collectively in point (a) of the LSA's objectives above as the IBP. Included here was the installation of a filtered, potable water system for the Londolovit village independent of the river system that is maintained by LGL and provides drinking and sanitation water to the Londolovit community. This water supply is based on water extracted from the Londolovit weir supplemented by groundwater and it should be noted that during the brief periods when water extraction rates were exceeded the supply of water to the Londolovit community and local households was not impacted. The focus of the claim for compensation by LSA is on potential environmental impacts on Londolovit River from changes in streamflow and is not related to access to potable or sanitary water.

Benefits in the overarching community benefits package are essentially three-fold in nature: First is a recognition of the impact incurred because of the use or loss of their customary land for each tenement landholder group (i.e. airport, weir (water), camps, town, mine pit, plant site, stockpile and so on) and the important contribution this was to the establishment of the mine. Second are a broad range of in-kind social, commercial and substantial financial benefits which are provided for all other inhabitants of the island group which are currently valued at approximately PGK 51 million per annum.

Third, the National Government also provides significant financial benefits through monthly royalty payments to the local level government currently valued at approximately PGK 23 million per annum. The LSA members, as tenement landholders or island residents are beneficiaries of these three streams of direct and indirect benefits. Specifically, the Londolovit community (related to the LSA group) has since 2012 received an annual payment of K300,000 (plus CPI), as well as a one-off payment of K1,020,000 for community projects and programmes under the Londolovit Community Settlement Agreement. This means that the total amount received by the Londolovit community since 2012 is well in excess of K3 million.

There is a periodic review of these agreements and the second of which, the Lihir Agreements Review (LAR), is currently underway. It is in the context of this review that the LSA has tabled issues and objectives, possibly in part because of frustration with the processes for distribution of benefits flowing through LMALA. To this end certain landholders have set up their own associations and as mentioned in objectives (b) and (c) above, and the LSA have sought to establish new direct and revised benefits agreements with LGL and the PNG Government respectively through various press releases and correspondence.

Way forward - formalised agreements review process with relevant parties

LGL, the Government and the landholders including representatives from the Londolovit area have set up a formal review process which considers tabled issues with the aim of updating and agreeing to new benefits packages. This review includes an overhaul of all current direct and indirect agreements and associated benefits streams and the role and function of the umbrella landholder association (LMALA). Included here was an extensive island wide consultation process with all groups including members of LSA. However, although LGL and the Government has invited the LSA to participate in the review process, the LSA is presently declining to formally participate and is currently acting outside of a charter agreed to by all other landholder groups on Lihir and relevant PNG Government agencies.

We continue to encourage the LSA to engage with the rest of the Londolovit community through the ongoing LAR process as this is the best way to have their issues heard and addressed.

Should you require any additional clarifications on this matter, please do not hesitate to contact Chris Maitland - Head of Investor Relations & Media in the first instance.

Yours sincerely,

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Appendix 1

Technical information: Permitted extraction of water from Londolovit River and regulatory approved mine waste management

Following the temporary exceedance in water extraction rates at Londolovit River which was observed and voluntarily reported to the regulator by LGL, a regulatory audit and review by a third party environmental specialist was conducted and outcome shared with the local community. Further information on this review process is provided below.

Water extraction from Londolovit Weir

To provide freshwater for the mine and local communities LGL constructed a weir (approximately 2 metres high) on the Londolovit river upstream of a coastal village called Londolovit. Lihir Gold Limited has an approved environmental permit in place (Environment Permit WE-L3 143) with the Independent State of Papua New Guinea for the extraction of water from Londolovit Weir for mining, processing and human consumption requirements. The weir noted in the article was constructed by the company in the mid-1990's to not only provide water to the Lihir gold mine and processing plant but also to the local lower Londolovit community, township and camps.

Water abstraction from the weir is monitored by LGL as part of its environmental monitoring and management requirements to ensure that water required for operational purposes does not exceed the permitted abstraction limit (4,400 cubic metres per hour). However, due to trialling of a revised processing strategy in April 2015 which consumed more water than expected over a four-hour period, there were reduced water inflows into the weir, causing instances where there was short term reduction in flow from the weir which were not responded to in a timely manner by LGL to curtail water extraction activities to alleviate this matter. It is noted that annual precipitation for the 2015 calendar year was less when compared 2013 and 2014, due to advent of El Nino conditions at Lihir. After stakeholders expressed their regarding visible reduction in flow on the lower reaches of the Londolovit River (downstream of the weir) at the same time, CEPA engaged an independent third party to undertake an environmental assessment of LGL's management of the weir, which resulted in the company being issued an environmental improvement plan (EIP) to review their then management of the weir including an evaluation of the potential environmental impacts on the ecological health of the river downstream of the weir. This EIP has been recently completed with the following measured observations and improvements noted:

- Findings from the measurement of impacts to the composition of macroinvertebrate assemblages as well as species richness and abundance in the lower reaches of the Londolovit River showed that it did not differ significantly when assessed against the lower reaches of an undisturbed river system on Lihir Island (Wurtol River).
- Results from surveys conducted in the third and final survey to measure impacts in the lower reaches of the Londolovit River (August 2018; with previous surveys conducted in March 2017 and November 2017), indicated that there was sufficient flow across the weir to maintain ecological processes downstream of the weir.
- Additional water monitoring equipment (including radio telemetry) has been installed to more accurately measure inflows into the weir as well as equipment to measure instantaneous flows past the weir to maintain downstream flows. This has been coupled with increased operational control of the pumping systems at the weir.

Mine waste management

Government and environmental approvals for the Lihir gold mine were granted in 1995 following several years of comprehensive, environmental, technical, and social studies and risk assessments. These included comparing the risks and benefits of Deep Sea Tailings Placement (DSTP) as opposed to land-based tailings storage, to determine the preferred tailings management solution for the mine. Factors that were considered included: the high rainfall on Lihir Island, the limited space for a tailings storage facility on the small island, the use and availability of land for farming, the regular seismic activity in the region, and the suitability of the oceanographic conditions and deep off-shore marine environment for a DSTP facility. Based on these comprehensive studies, DSTP was identified as the preferred tailings management option for Lihir and was approved by the PNG Government. Prior to disposal, plant tailings are chemically stabilised to reduce reactivity and diluted before being discharged from a subsea pipeline (drilled through rock layers) at approximately 125 meters depth, below the biologically active upper layers of the ocean, where it then travels as a 'density current' down the very deep ocean bed (greater than 1000 metres).

In parallel, disposal of unprocessed soft (clay) and hard waste rock from the mine via transport in marine barges within the shallow marine area of the SML was identified as the most appropriate method for waste rock management, due to the potential for acid mine drainage (AMD) from atmospheric exposure of the waste rock, limited land availability for waste dump construction and risks associated with, local seismic activity. This approved unprocessed waste rock management process is also carefully monitored in accordance with regulatory permit conditions.

Monitoring programs

A comprehensive Environmental Management and Monitoring Plan (EMMP) was approved by the regulator to support ongoing monitoring, management and reporting on performance of the DSTP system as well as off shore waste rock disposal and associated environmental aspects at Lihir. Since commencement of operations, monitoring in accordance with the EMMP has reinforced that these mineral waste management practises remain the most appropriate for Lihir. This programme also includes dedicated research studies on the DSTP system which are ongoing (e.g. in FY17 a state-of-the-art research vessel was commissioned by Lihir to survey the seabed and ocean currents near the island). Annual environmental reports based on EMMP monitoring in accordance with permitted regulatory conditions are provided each year to the regulator (CEPA) and the LMALA community representative group.