

Belo Horizonte, March 20<sup>th</sup> 2015

**To the Public Authorities of Paracatu**

Re: Clarifications on the reports conveyed in the media

Dear Sirs,

As coordinator of the research project "Environmental impact assessment and human health due to the occurrence of arsenic in the region of the Morro do Ouro Mine, Paracatu, Minas Gerais, Brazil", I hereby strongly **reaffirm** the **results obtained by our group**, which **contradict** the news published by the media regarding the health risks to the human population in Paracatu.

The study, which began in 2010, aims to provide Kinross Brazil Mining (KBM) the scientific data needed to provide reasoned answers to any questions related to the potential availability and mobility of arsenic in Paracatu, both natural (background) and anthropogenic. The approach to assess human health risk was based on the determining population exposure rates, considering the main routes of exposure, such as ingested (food + water + soil dust) and inhaled (dust) arsenic (As). Exposure to arsenic measurement was compared to the reference dosage of BMDL<sub>0.5</sub> (BMDL- benchmark dose limit), established by the Expert Committee on Food Additives of the World Health Organization (WHO) and the Food and Agriculture Organization (FAO) (JECFA).

To calculate the ingested and inhaled arsenic, the study focused on the town of Paracatu near the Morro do Ouro mine. Samples from the city's surface water supply (COPASA) and wells used by the population were analyzed as well as atmospheric dust filters (total particulates - TSP and below 10 micrometers - PM<sub>10</sub>) and settled dust samples collected in residential / commercial areas. The latter were subjected to the bioaccessibility tests – BAC (refers to the soluble fraction in the gastrointestinal tract and therefore available for absorption). A survey of commonly consumed food items purchased in supermarkets and local fairs, was also conducted.

The **main conclusion** of the study is that **the total exposure or ingestion of arsenic, considering all sources, was about 15% of the reference dosage (BMDL<sub>0.5</sub>) of 3 µg/kg/day and therefore can be considered low. The general results of the study, which were confirmed by CETEM**, were presented and discussed with the scientific community in the Arsenic 2014 Event in Argentina (1). The event brings together leading experts in research on arsenic from various parts of the world. Other international publications with data obtained from the study are in the preparation and submission phases.

As such, the aim of this letter is to provide clarifications and reassure the population of the city and its representatives, which have been exposed to either distorted data or taken out of context by local and national media. These reports **ignore the conclusions of detailed studies** coordinated by UFMG and the CETEM, which indicate **a low exposure risk**, as well as the fact that **epidemiological studies have shown no evidence of abnormal indexes of city pathologies when compared to the State of Minas Gerais or national data.**

Finally, I thank you for your attention and I make myself available for any clarifications that may be requested, in person or by any other means, regarding the results of our study.

Sincerely,



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*(1) Ng, J.; Gasparon, M.; Silva, G.C.; Ciminelli, V.S.T. (2014). Health risk assessment of arsenic near a gold mine in Brazil. In: 5th International Congress on Arsenic in the Environment - As 2014. One Century of the Discovery of Arsenicosis in Latin America (1914-2014). London: Taylor & Francis Group, p. 607-9.*