
HAMMOND REEF GOLD PROJECT RESPONSE TO COMMENTS ON FINAL EIS/EA

COMMENT – T-11

Source: Canadian Environmental Assessment Agency

Summary of Comment

Health Canada considers PM₁₀ and PM_{2.5} to be non-threshold substances, meaning that health effects may occur at any level of exposure. The International Agency on Cancer Research (IARC) has recently classified particulate matter as being carcinogenic to humans (Group 1).

Health Canada considers that the risk associated with fine particles, particularly PM_{2.5}, is higher than the health risks associated with coarse PM or total suspended particulates (TSP, a measure of total suspended particulates, including liquid and solid particles, without particle size differentiation). Therefore, using 30 µg/m³ as a daily threshold, as done in the assessment, to calculate the Acute Inhalation Risk Quotient does not measure the risk adequately.

Proposed Action

Revise the exposure assessment to include PM, PM_{2.5} and PM₁₀ (non-carcinogenic) in order to more accurately predict potential health effects from this Project, or provide additional rationale as to why they have been excluded in the assessment.

Reference to EIS

HHERA TSD, Section 4.6.2

Response

Canadian Malartic Corporation understands that Health Canada is concerned about the potential health effects of PM, PM_{2.5} and PM₁₀.

The classification of particulate matter as carcinogenic by the IARC occurred in October 2013, eight months after the Draft EIS/EA Report was published. The assessment was conducted using the accepted standards at that time. The screening threshold of 30 µg/m³ set by the CCME and adopted by the MOE was used as the daily threshold as it was the relevant regulatory guidance at the time when the Human Health Assessment in support of the EA was being prepared.

Although PM is now classified as a carcinogen, we are not aware of any regulatory agency that has developed an inhalation unit risk factor for PM_{2.5}, making evaluation of carcinogenic effects difficult. The only particulate species for which an inhalation unit risk factor has been developed is diesel particulate matter (DPM). DPM was evaluated in the EA as a carcinogen and it was concluded that while there are residual effects, they are of low significance.