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

COMMENT –A-9

Source: Canadian Environmental Assessment Agency

Summary of Comment

HC had originally requested that the proponent provide an evaluation of emissions due to short-term events, such as shut-downs and equipment failure, or provide a rationale for not including such events.

The proponent's response, presented on Page 303 of Appendix 1.IV Information Requests_HC IRs indicated that these events would not appreciably increase emissions and therefore additional information about these sources was not required.

Since there is a wide range of control technologies that are used for reducing air emissions and fugitives from ore processing operations, it would be important to describe in more detail the types of control devices that will be used during the regular operations of the processing plant and in case of equipment failure.

Proposed Action

Provide more detail on the type of control devices that will be used during regular operations of the processing plant in the event of equipment failure.

Reference to EIS

Response to IR HC-6

Response

Table 8-2 from Chapter 8 of the Final EIS/EA Report outlines the environmental management, planning, monitoring and compliance strategies for all identified project/environment interactions. This table includes information on air emissions, which details the mitigation measures to be used during regular operations (as shown below).

Chapter 8 also includes Table 8-3, which outlines the proposed monitoring program considerations for air quality and vibration. In this table, Canadian Malartic Corporation has identified the indicators, monitoring methods, planned frequency and duration of monitoring for each potential effect. The air quality information from Table 8-3 is also provided below.

In addition to the mitigation measures and proposed monitoring outlined in Chapter 8, a standard condition on mining facilities' Environment Compliance Approvals for Air & Noise is to prepare and implement an Operations and Maintenance Manual (O&M Manual). The O&M Manual is expected to include:

a) Frequency of inspection and scheduled preventative maintenance;
b) Procedures to prevent upset conditions;
c) Procedures to minimize fugitive dust;
d) Procedures to prevent and/or minimize odourous emissions; and
e) Procedures for record keeping activities relating to the operation and maintenance programs.

Canadian Malartic Corporation will prepare, implement and maintain an O&M Manual for all equipment subject to approval by the MOE under Section 9 of Ontario's *Environmental Protection Act* at the Ore Processing

Facility, including all control devices at the processing plant during regular operations such as baghouses and scrubbers, once final details pertaining to the make and model of the equipment is made available. The O&M Manual will include procedures to prevent upset conditions and equipment failure based on manufacturer recommendations and standard practices.

Table 8-2: Environmental Management Planning, Monitoring and Compliance – Physical Environment (excerpt)

Project/Environment Interaction	Potential Effects	Mitigation Measures	Monitoring Objectives	Regulating Authority / Compliance Requirements	Contingency / Non-Compliance Strategy
Air emissions	■ Risk to human and ecological health ■ Increase in dust levels ■ Change to ambient air quality	■ In-design mitigation including: ▪ Dust management and a dust management plan ▪ Design to appropriate air quality standards ■ Develop and implement a greenhouse gas (GHG) emission plan to minimize releases of GHG. The plan will describe: ▪ Potential sources and factors that may influence releases of GHG; ▪ Measures to minimize releases of GHG; ▪ Monitoring and reporting programs for releases of GHG; ▪ Mechanisms to incorporate the results of monitoring programs into further improvements and updates to the plan	■ Confirmation of process emissions ■ Confirmation of predicted dust and indicator compound levels	■ MOE: Environmental Compliance Approvals ■ Ontario Regulation 419/05 under the Environmental Protection Act: ▪ Comply with airs standards in Schedule 3 of the regulation ▪ Prepare and annually update an Emission Summary and Dispersion Modeling Report used to assess compliance ■ Environment Canada's Code of Practice for Metal Mines ■ National Pollutant Release Inventory (NPRI): Report monitoring data ■ Canada/US Air Quality Agreement: Notification if required under Article V	■ Register and investigate any air quality complaints ■ Review monitoring data and, if required, make appropriate adjustments/ modifications to planned mitigation measures such as: ▪ Adjusting fugitive dust management plan, preventative procedures and control measures ▪ Modifying in-design fugitive dust control devices (e.g., enclosures, baghouses) ▪ Reviewing non-road vehicle emissions and considering alternative vehicle or fuel types, fleet sizes and/or engineered controls (e.g., diesel particulate filters)

Table 8-3: Proposed Monitoring Program Considerations - Air Quality and Vibration (excerpt)

Potential Effect	Indicator / Parameter	Location(s)	Method	Frequency	Duration
Increased risk to human and ecological health	■ Concentrations of TSP/PM_{10}/$PM_{2.5}$ and selected indicator compounds (NO_X, CO, SO_2, HCl, NH_3, NaOH)	■ Stacks that discharge significant emissions of indicator compounds	■ Source testing in accordance with applicable source testing codes	■ One time (i.e., single occurrence) testing campaign for each significant emissions source	■ Discrete testing during permitting phase
Increased dust levels	■ Silt loadings on roads	■ Access and haul roads	■ Periodic sampling road silt loadings to improve accuracy of emission estimations	■ Annually during summer months	■ Ongoing beginning at the start of operations until a consistent silt loading is established
Changes to ambient air quality	■ TSP	■ Location to be selected based on locations of mine activities	■ Installation of air quality monitoring station	■ Samples to be collected on the 6-day National Air Pollutant Surveillance (NAPS) Cycle	■ Construction phase until closure