

MINUTES OF MEETING

Giant Mine Atmospheric Emissions

Fourth Meeting with Mine Officials - 14 July 1994

In attendance: Larry Connell, Manager of Environmental and Metallurgical Services, Royal Oak Mines
Dave Anthony, Manager of Environment, NWT, Royal Oak Mines
Emery Paquin, Director of Environmental Protection, GNWT
Jim Sparling, Air Quality Specialist, Environmental Protection Division, GNWT

The meeting was convened at the request of the Environmental Protection Division.

Adoption of the Air Quality Guideline was confirmed. Company representatives then asked what was expected of them. In response, Paquin stated that eventual reductions in sulphur dioxide emissions to meet the ambient standards will be expected. The sulphur dioxide ambient standards as contained in the Air Quality Guideline were now the "starting point" for actions in controlling sulphur dioxide emissions. No timetable was provided but the limited progress achieved since the initial meeting in July 1993 was considered unacceptable and the GNWT expects to see progress towards meeting the ambient standards. Connell agreed that no substantive progress had been made in the control of sulphur dioxide but that this was in part due to not having a "starting point".

Subsequent actions to be taken were discussed. It was agreed that a determination of the stack emission rate necessary to meet the ambient objective is now required. Paquin suggested that best progress would be obtained by both parties working together to arrive at this emission rate. This would considerably reduce the likelihood of subsequent disagreement with the calculated emission rate. It was agreed to immediately draft computer dispersion modelling study terms of reference which would then be contracted to an independent consultant. The cost sharing of the study would be finalized once cost estimates are obtained but Larry Connell suggested a 50/50 ratio. Dave Anthony and Jim Sparling will work together to draft the terms of reference and identify consultants capable of undertaking this work.

Discussions then took place regarding the need for continuous in-stack monitoring. Larry Connell stated that no further consideration of this requirement had been taken since our last meeting in March but that planning for such capital expenditures would have to wait until at least the next budget planning process in October-November 1994. It was suggested that such monitoring would be required if emission controls were ever put in place and further, that it would assist in confirming the dispersion modelling work. Larry Connell agreed to look into the availability, costs, etc. of such monitoring equipment in preparation for future discussions. He also indicated that an opacity monitor had been installed on the flue leading to the stack but that he was unaware whether it was operable or of use.

Discussions then took place regarding the recent arsenic studies. A complete copy (volumes I and II) of the snow core survey were provided to company representatives. It was confirmed that our intention was to publicly distribute the report within the next week or two. The study results were discussed including the lack of confidence in comparing this with previous studies because of differences in sampling and analytical protocols. Larry Connell explained that chronic maintenance problems encountered with the baghouse during, and following, the labour dispute could partially account for the rise in ambient arsenic concentrations. They could not however, account fully for the rise in arsenic deposition rates identified by the report. Copies of the NAPS annual geometric and maximum daily graphs were provided to company representatives and discussed. Emery Paquin confirmed that Royal Oak would be advised of the report release date.

Minutes were prepared by Emery Paquin on July 15, 1994
and approved by the parties on 25 July 1994 (Dave Anthony on behalf of Royal Oak).