

# MEMO

**To:** File  
**From:** Larry Connell  
**Subject:** Workshop on Arsenic Releases in the Northwest Territories  
**Date:** July 17, 1997

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On July 14th and 15th Environment Canada and Health Canada sponsored a workshop on the issue of controlling arsenic releases in the Northwest Territories. The workshop was run by a team of professional facilitators contracted by the government agencies. The press were excluded from the workshop sessions to ensure open candid discussion. Attendance at the workshop was by invitation only. Groups invited to attend included:

Federal and Territorial Regulatory agencies  
First Nation Groups (Yellowknife Dene Band, the Dene and the Metis)  
Chamber of Commerce  
City of Yellowknife  
Private Environmental Watchdog Groups (Ecology North, Canadian Arctic Resource Committee)  
Public Environmental Watchdog Groups  
Association of Professional Engineers  
Labour (CAW, Union of Northern Workers)

An open public forum was held separately on the night of the 14th to which the press were invited to attend.

The primary objective of the workshop was to seek community input and comment on the need to regulate emissions of arsenic to the environment and on the appropriate management strategies to be used to achieve this regulatory objective.

The majority opinion reached at the conclusion of workshop can be summarized as follows:

- a) The majority of the community feel that it is time for the government to take action and promulgate regulations requiring the control and regulation of arsenic from the Giant roaster. The community indicated that the current status quo of no regulation of airborne arsenic emissions is not acceptable to them.
- b) The majority of the community feel that any subsequent regulation should be fair and equitable and should not force the company out of business.
- c) The workshop attendees expressed their opinion that the community believes that the single most important environmental issue in Yellowknife is the potential for release of arsenic from the underground storage vaults at Giant. The second priority would be

control of water borne releases of arsenic with control of air emissions being the third highest priority issue.

- d) The community feels that control over water borne releases of arsenic can be effectively managed under the Northwest Territories Water Board and its associated regulatory process.
- e) While the community appreciates the reductions made in air emissions at Giant in 1977, it was agreed that zero emission rates were desirable for public protection. There is recognition that zero discharge is not practical. In this circumstance the community wants government regulators to require the application of "Best Available Technology Economically Achievable" (BATEA) to reduce emissions to their lowest possible level to protect human health in the community.
- f) If it were economically possible the community leaders would like to see the Giant roaster replaced by a pressure oxidation process which would eliminate all airborne emissions of arsenic and sulphur dioxide as well as eliminating requirements for further storage of arsenic underground. They acknowledge that this is not economically feasible at Giant given the current ore reserve, however the participants told regulators that the current emission rate of 30 kg/day should be reduced to 1 kg/day using the BATEA recommended by Environment Canada's expert consultants (a roaster tail gas scrubbing process which would be an add on technology downstream of the current baghouse).
- g) The workshop attendees discussed three families of management options for dealing with the release of airborne arsenic releases, namely:

Maintain the status quo

Do further study of the environmental impacts of ongoing airborne arsenic releases

Reduce arsenic emissions by some regulatory action

The workshop attendees told regulators that the first two options were not acceptable to the community. They indicated that the public mood was that there had been too much delay on this issue and it was time for action.

- h) The workshop attendees were asked to consider three methods of taking action to regulate airborne arsenic emissions:
  - Promulgate regulations requiring reduction of airborne arsenic emissions
  - Enter into a bi-lateral voluntary agreement between Royal Oak and Environment Canada to reduce airborne arsenic emissions from the Giant roaster.

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- Enter into an agreement ("covenant") between Royal Oak, Environment Canada and the community to reduce airborne arsenic emissions from the Giant roaster.
- Enter into an agreement ("covenant") between Royal Oak, Environment Canada, the GNWT and the community dealing with a multitude of environmental issues at the Giant Mine (including sulphur dioxide emissions, airborne arsenic emissions and the fate of the arsenic trioxide stored underground).

The workshop attendees were not unanimous on recommending a course of action but the majority felt that a negotiated settlement involving the community would receive a high level of public support. For such an agreement to be successful it would have to be backed by either regulation or the threat of regulation. The attendees felt that such a "hammer" would be required to bring Royal Oak to the table to negotiate in "good faith". The community distrust of Royal Oak's intentions was made clear without rancour during the two day workshop.

Workshop attendees indicated that an agreement would be preferable on the following basis:

- it would result in quicker action than if left to government alone.
- the community would be involved and would know what is going on.

Reservation was expressed based on the following factors:

- what incentive could be provided to encourage Royal Oak to enter into such a voluntary agreement
- would such an agreement be enforceable

#### What Comes Next?

The workshop facilitators will be preparing a report on the opinions expressed at the workshop. This report will be distributed to the attendees in draft format for correction of errors or emissions, then finalized and delivered to the Federal Task Force on Controlling Arsenic Emissions in the Northwest Territories. The Task Force will complete their deliberations and deliver their recommendation on actions to be taken to the Federal Ministers of Health and Environment by the Fall of 1997. It will then be left to the Ministers to decide on what action should be taken and on what time schedule.