

FAX MESSAGE

FAXED  
June 12/96



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CC. LARRY  
CONNELL

TO: JOHN STARD

TELEPHONE:

FAX NO: 873-2980

FROM: ED COLLINS

COMMENTS:

INFORMATION FOR OUR MEETING  
ON THURSDAY JUNE 13 AT  
2:00 pm ?

<sup>MTB</sup>  
SOCIAL ECONOMIC  
CONSULTANT ALONG  
WITH ED COLLINS.

NUMBER OF PAGES 4 (INCLUDING HEADER) (short) (long)

DATE: JUNE 11/96

R-10 - Ph. C.  
MAGINIA  
- BRIAN  
PENNY

\* PLEASE ATTEND.

If any problems occur in transmission please call (403) 920 6060



# RFI

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## FAX

Tel: (613) 241-1001  
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To: John Stard  
From: Vic Nishi

Fax:  
Date: June 11, 1996

### COMMENTS/REMARQUES:

Dear John:

Thanks for taking the time to meet with me later this week. I have attached a short backgrounder briefly summarizing the arsenic issue, the Federal Government Task Force mandate and the terms of reference for this socio-economic assessment. In preparation for the meeting, could you please track down the following for me.

#### Information about the Mine

1. annual reports for Royal Oak for the last 5 years; any public financial figures on the mine
2. mine production over the last five years (tonnes mined and gold produced);
3. trend in ore quality over the last 5 years;
4. current estimate of ore reserves, estimated ore quality and general outlook for the future;
5. exploration plans and estimated investment in exploration and capital equipment;

#### Information about Regional Economic Impact

1. employment trend, current levels and any future estimates;
2. total payroll and per employee average income;
3. estimated impact on the regional economy (any figures on overall \$ contributed to economy?)
4. any other figures on contribution to local economy (taxes, local purchases, community halls, local sponsorships etc.)?

#### Information about Emission Control Equipment

1. regarding the current arsenic technology, what condition is it in, what is its projected lifespan and when is the next scheduled minor and major overhaul planned?
2. are the cost estimates for new arsenic control technologies accurate in your opinion?
3. how might these costs affect the viability of the mine?
4. how might the combined effect of SO<sub>2</sub> and arsenic controls affect the viability of the mine?
5. have you discussed ways to meet both requirements simultaneously at lower cost?
6. confirm emission measurements cited in Hatch 1996 report;
7. identify any other ambient arsenic measurements (air, soil, water) taken by the mine;

#### General Questions

1. In your opinion, what are the main environmental, human health, social and economic issues surrounding arsenic from the Giant Mine?
2. What are the solutions; where are the areas for compromise?
3. What is your reaction to the three management options under consideration? (I will describe these in more detail in the meeting)

Thanks for your attention to these information requests and questions. It is a long list, but hopefully much of the information is readily available. I look forward to our meeting later this week.

Best Regards,

# **Socio-economic Study of Management Options for Arsenic**

## **Background**

Arsenic is a naturally occurring substance found most often in compounds with sulphur either alone or in combination with various metals. It is found in the environment because of natural sources and human activities including metal processing, the use of arsenical pesticides, coal-fired power generation and the disposal of domestic and industrial waste material.

In 1994, the federal government concluded that arsenic and its inorganic compounds were "toxic" under section 11 of the Canadian Environmental Protection Act (CEPA). Under the Government's Toxic Substance Management Policy, arsenic is to be managed as a Track 2 substance, with the goal of reducing releases to the environment to the greatest extent practicable.

In 1995, the House of Commons Standing Committee on Environment and Sustainable Development released its report "It's about our Health! Towards Pollution Prevention". Chapter 13 of this report dealt with "The North" and Recommendation No. 107 urges the Minister of the Environment and the Minister of Health "to conclude their determination of the measures they plan to apply to arsenic by December 1995.

In response to this recommendation, the federal departments of Environment and Health undertook a study of arsenic releases in Canada. The results of the first phase of this study indicate that arsenic releases to the environment from most anthropogenic sources are being adequately addressed by existing regulations or will be addressed by the Strategic Options Processes (SOPs) for base metal smelters, coal-fueled power plants, iron and steel mills and wood preservative facilities, but arsenic releases from gold roasting operations in the Northwest Territories are not covered by either existing regulations or current SOPs.

In August 1995, Environment Canada assembled a Task Force to investigate possible management options that might be applied to gold roasting operations. The Task Force has expertise in pollution control technology, environmental modeling and sampling, health issues, economics and legal issues. Its objectives are to:

1. determine the effectiveness of the existing regulatory regime and control measures;
2. determine if further reductions in arsenic releases should be recommended given current human and ecological exposure and/or release levels, and taking into account scientific, technological and socio-economic considerations;
3. if reductions are recommended, assess various management options for reducing arsenic releases; and
4. recommend the most cost-effective and environmentally efficient option of implementation.

The tasks required to achieve these objectives were categorized into five areas:

1. Existing Situation
2. Control Technology Options
3. Environmental Inputs
4. Socio-economic Impacts
5. Management Options
6. Technical Report

This report forms the basis of tasks 4 and 5, and will contribute to task 6.

### ***Terms of Reference for this Study***

The purpose of this study is to:

- assess the costs and benefits of three management options for reducing arsenic releases to the air from gold roasting.
- recommend the management option which would be the most cost-effective and environmentally efficient should further reductions be recommended.