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The Honourable D.L. Norris,
Commissioner of the Northwest Territories,
Government of the Northwest Territories,
Yellowknife, N.W.T.
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Dear Sir:

I am writing to ask for your assistance in dealing with a matter of great concern to Royal Oak Mines -- the jurisdiction over regulating air emissions from the Giant Mine.

We have recently been notified by the Assistant Director of the Environmental Protection Division of the N.W.T. Department of Renewable Resources that it is the intent of the Government of the Northwest Territories to draft regulations under the N.W.T. Environmental Protection Act designed to reduce arsenic and sulphur emissions from the Giant Mine roaster stack in Yellowknife. We were verbally informed that a reduction of 50% in the emission level of sulphur dioxide is being sought. We understand that control of air pollutants is within the legal jurisdiction of the N.W.T. Department of Renewable Resources. However, based on what we have seen to date, we have grave concerns that this Department has the ability to deal with all of the technical and socio-economic aspects of this issue on a sound and impartial basis.

In a recent meeting between the Department of Renewable Resources and Royal Oak, the company was asked to voluntarily install continuous arsenic and sulphur dioxide emission monitoring equipment at our Yellowknife operation. The data collected from this monitoring would be used by the N.W.T. Department of Renewable Resources to model dispersion of sulphur dioxide from the roaster stack to aid the department in establishing a maximum emission standard. The company was also asked to undertake a study of technology that it could install at its Yellowknife facility to reduce sulphur dioxide emission levels by the targeted 50%. We were told that the government would like to see the mine take action within a six month period.

It was evident from our discussions, that officials from the Department of Renewable Resources do not have a full understanding of the complexity, timing or cost required to meet these objectives. The request has been made without knowledge of what specific equipment is required, whether it is available for this application, the timing required for delivery and installation or of the cost involved.



Page Two

We believe that the Territorial government has already decided to impose a 50% reduction in sulphur dioxide emissions from the Giant roaster stack without taking into account the capacity of available technology to achieve such reductions, the socio-economic impact of this action or the environmental cost benefits and are now looking to Royal Oak to provide the data required to draft appropriate regulations. This action has been taken in response to the first complaint filed under the new N.W.T. Environmental Rights Act and provides the Territorial Government with the opportunity to demonstrate to the public that the act has teeth. In support of this statement we offer the fact that up to now communication on this issue between the Territorial government and Royal Oak has been primarily through the local press. This is a major environmental initiative being undertaken by the Government of the Northwest Territories and consequently it should not proceed without a full assessment of all of the potential impacts and benefits.

As of the date of this letter, Royal Oak has met twice with the Department of Renewable Resources on this issue. The Department's request was stated verbally at both meetings but nothing has been put in written form. Royal Oak has not received any formal written communication detailing what action is being requested by the Department of Renewable Resources. To date all communication from the N.W.T. Government has either come through press releases or through meetings chaired by the Assistant Director of the Environmental Protection Division. We have heard nothing from the director of the division.

The Department of Renewable Resources has acknowledged that it does not have strong technical expertise in the field of assessing the impact of these stack emissions or knowledge of what technology can be used to achieve the targeted emission reductions. We were told that this would be left to Royal Oak to deal with.

The recent study released by the Department of Renewable Resources overstates the level of sulphur dioxide emissions from the Giant Mine by 20% and utilizes incorrect data. When these discrepancies were brought to the department's attention, we were informed that these issues were not important given that the federal air quality guideline for sulphur dioxide was periodically exceeded in Yellowknife for short periods. Health and Welfare Canada have reviewed this data and reported as follows (full report appended):

"From our examination of the data, as presented, we do not feel that an imminent health hazard exists from the sulphur dioxide levels recorded in Yellowknife. The levels detected which exceeded the one hour maximum acceptable levels are in the range at which mild, reversible, respiratory effects would be seen in sensitive individuals, particularly asthmatics. We would caution that the analytical data provided are for ambient air in the Yellowknife area and do not necessarily represent personal exposure values. Levels exceeding the one hour desirable level



Page Three

of 450 ug/m^3 may be cause for some concern to vegetation, however, these levels would not be expected to result in adverse human health effects."

The attached news article from the July 23rd edition of the "Yellowknifer" makes it quite clear that that the Territorial government intends to force reduction of sulphur dioxide emissions from the Giant roaster stack despite the fact that Health and Welfare Canada have completed a health assessment and found there to be no adverse health effects. In the article Dr. Nuttall is quoted as saying "the current level of emissions are not doing anyone any good" and "We want them to do something". This type of approach to such a critical issue is neither professional nor technically credible. These statements made through the press are inflammatory and raise public fears unjustifiably. This type of action does nothing to instill confidence that we can trust the Territorial Government to deal with this issue on a technically sound basis where both the socio-economic and environmental cost benefits of any proposed regulation are assessed.

The Giant Mine has a long history of using the best available technology to reduce emission levels of arsenic trioxide from its Yellowknife operation. This has been verified over the years by both the Canadian Public Health Association and Environment Canada in detailed studies of the emissions and control technology used at this operation. The emissions of sulphur dioxide from the Giant roaster stack are miniscule when compared to other mining centres such as Thompson, Sudbury, etc. Ambient air quality in Yellowknife is much better than that measured in these centres or in other major southern cities.

The current interest in this issue was brought about as a result of an investigation launched by the N.W.T. Department of Renewable Resources in response to a complaint filed by a well known local environmental activist under the N.W.T. Environmental Rights Act.

Our concern is two fold:

- 1) We are concerned that the N.W.T. Department of Renewable Resources does not have the technical knowledge or experience to interpret the significance of the environmental impact information collected nor to put it into historical context given that the mine has been in operation since 1946, nor to determine what course of action is technically and economically feasible in response to the information collected.
- 2) We are concerned that the Department of Renewable Resources would consider regulating emission reductions from our Yellowknife operation without knowing whether they can be achieved using currently available



Page Four

technology or without undertaking an analysis of the socio-economic impact of such regulations.

To date the Department of Renewable Resources seem more interested in appearing in the local press to be responding in a tough minded fashion to the complaint filed under the Environmental Rights Act. On several occasions the company has been informed by the local media of information relating to this issue before being informed by the Department of Renewable Resources.

Royal Oak has informed the Department of Renewable Resources that it would like to voluntarily cooperate with them in this issue but does not have the economic strength to go forward without government financial assistance. Under the current conditions, the Giant Mine has been consistently losing money over the past year.

Given all of these considerations, we would ask you, in your capacity as Commissioner of The Northwest Territories, to review this issue before it gets out of hand and becomes another contentious Royal Oak issue for local government and the press to target. We would like to explore the possibility of shifting jurisdiction over the implementation of stack emission standards back under Federal jurisdiction or at a minimum have the Federal Government monitor the action of the Territorial government on this issue. Royal Oak believes that the Federal Government has the expertise within its staff to deal with this issue on a technically sound and impartial basis. We do not feel that this will be the case under the jurisdiction of the N.W.T Department of Renewable Resources.

If we can provide further information to assist you in reviewing this issue, please feel free to contact the undersigned at your convenience.

Yours very truly,

ROYAL OAK MINES INC.

Margaret K. Witte
President and C.E.O.



Page Five

Copies to:

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