

\*\*\* Confidential\*\*\*

## RECORD OF MEETING

Yesterday I met with Mr. Jim Sparling with the GNWT's Environmental Protection Division here at the mine site to discuss the next steps with regards to our joint cooperation study in evaluating sulphur dioxide emissions.

He had heard that we had submitted a report to Environment Canada that provided information on the roaster operation. He was wondering if they could obtain a copy of this report. Jim was told that the information in the report was basically an information booklet on how the roaster operates etc. I told Jim I would check with upper management prior to releasing to him but felt it would not be a problem.

Jim thanked us for the copy of the Dillon Mechanical Feasibility report we had forwarded on to him but felt the report was lacking details that would be required to conduct dispersion runs on the model. He felt Dillon could have done a better job than this, report looks like a few phone calls made and a report was written. We discussed this lacking information and narrowed down the missing data which was as follows:

- the report outlines the costs and the potential benefits for the various heights that could be added to the existing stack as well as the heights for entire new stacks up to 400 feet but does not provide the exit diameter of each of these stacks. Will they remain the same? The diameter of these stacks will be required to conduct model dispersions; and
- another area that will have to be evaluated is if the exit velocity would change at the various stack heights or would it remain the same. Even though the report states that exit velocity would not significantly reduce concentration this should be verified for modelling purposes. Jim suggested possible Phil MacIntyre or even the manufacturers of these stacks could answer this question.

The report does outline that various temperature changes that could possibly be undertaken, therefore this is not lacking.

If the above missing data could be obtained, a combination of dispersion runs can be conducted to evaluate the various options, for example:

1st run - 200 foot stack (x) certain diameter of stack (x) 300 oF;  
2nd run - 300 foot stack (x) certain diameter of stack (x) 400 oF; etc, etc, etc.

From these dispersion runs, the most effective option to reduce ground emission could be determined, then the socio-economics would have to be evaluated.

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Jim suggested that since Royal Oak funded the mechanical feasibility study that they could fund the dispersion runs. He would look into this and get back to us.

I questioned Jim what the status of "Draft" Regulations were. He indicated that they have a new Minister - Mr. Steve Kakwi, who is presently being briefed on the situation but is aware of it as he used to be the Minister of Renewable a few years ago. Jim figured that no "Draft" regulations would be released until sometime in the new year..

Jim is to draft a memo to us on the missing data that they require in order to conduct dispersion runs. I informed Jim that we would either discuss this missing data with Dillon or I would obtain the data by myself by contacting the suppliers Dillon had talked too.

Jim commented that he was happy with the progress we were making and is glad to see that we can cooperately work together to hopefully address this emission issue, knowing that what is eventually decided upon will most likely not go over well with the public and other interest groups.



Erik Madsen  
December 7, 1995

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