OFFICE OF THE DEPUTY COMMISSIONER



October 4, 1949.

Dr. G.D.W. Cameron, Deputy Minister of National Health, Department of National Health and Welfare, Ottawa, Ontario.

Dear Doctor Cameron:-

I am in receipt of your letter dated September 29th referring to the subject on precipitation of arsenic trioxide from roaster smoke in the Yellowknife area.

As you know, the standard methods of removing injurious ingredients from metallurgical smoke, involve very costly equipment. To reduce this cost, the Consolidated Mining and Smelting Company have produced through research and experimentation an entirely new method of arsenic removal from roaster smoke. The chief problem connected with this new method is the storage or disposal of the arsenic after it has been removed from the smoke. At present, Consolidated Mining and Smelting Company have metallurgists and chemists engaged in research on the storage of the arsenic trioxide as it is in a liquid solution containing 20 per cent solids when removed by this new method.

Giant Yellowknife Gold Mines, being confronted with the same problem, are planning on adopting this method of removal. They too are confronted with the storage problem of arsenic trioxide in a liquid form. During a discussion with Mr. Muir, General Manager of Giant Yellowknife Gold Mines, and their Metallurgist, Mr. W. Hubler, the question arose as to the possibility of combining calcium and magnesium with the arsenic to form an insoluble calcium-magnesium-arsenate. The Bureau Mines are now conducting experiments along this line to deter the feasibility of this approach. It has been suggested that an area be reserved somewhere away from the settlement where there is no likelihood of drainage creating a public health hazard. The mines could then haul the arsenic into this section.

which would be securely closed from the public and known as a contaminated area.

Both Consolidated Mining and Smelting Company and Giant Yellowknife Gold Mines will keep us posted as well as the local Medical Health Officer in Yellowknife on each phase of progress. We feel that if you were to designate someone to assemble all available data on this problem, that as developments take place, discussions could be held from the standpoint of ensuring the maximum possible protection of public health in the community.

Yours very truly,

My

R.A. Gibson, Deputy Commissioner.

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