

Electrolysis of the zinc sulphate solution also forms sulphuric acid, which is used for the treatment of a fresh quantity of roasted ore, so that little or no fresh acid is needed for this purpose.

The sulphur driven off in the roasting furnaces is nearly all in the form of sulphur dioxide, which is the gas that is smelled when a sulphur match is burned and which is sometimes used to disinfect houses. If all this gas were allowed to escape into the air there would no doubt be a noticeable smell in the direction in which the wind blows from the furnaces, and the gas might affect vegetation over which it passed. The intention is to clean the furnace gases, removing dust and fume by electrical precipitation and other means, and to convert the sulphur dioxide into sulphuric acid, which would be a marketable by-product of the zinc plant.

In reply to a letter from your President, Mr. S.G. Blaylock, Vice-President and General Manager of the Consolidated Mining and Smelting Company, wrote on February 15th:--

"If our Company builds a Zinc Plant in any settled districts around Montreal it will, of course, be necessary to install dust catching devices and also to put all the gases through a sulphuric acid plant in order that the plant would not be a nuisance to the surrounding country.

Our Company has worked out a process which will enable us to convert practically all the sulphur dioxide into sulphuric acid. It is the sulphur dioxide gas which causes the damage to vegetation.