

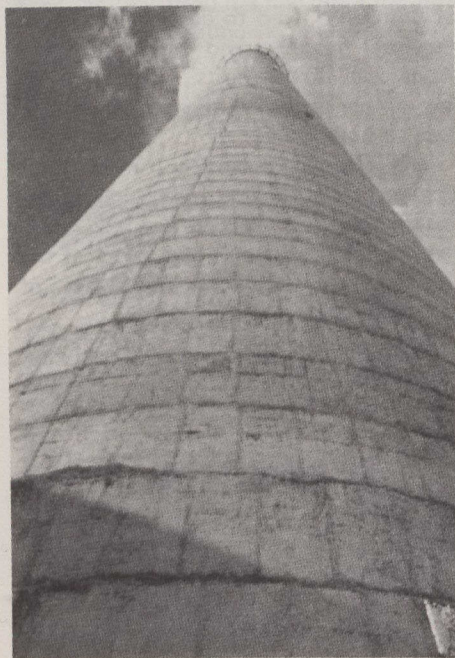
about 3.8 million tonnes because of the recession.

Possible controls

In a recent interview, Environment Canada acid rain expert Alex Manson outlined possible controls that could be used on the biggest polluters east of Saskatchewan.

The Inco Ltd. smelter in Thompson, Manitoba, fourth biggest source of sulphur dioxide in North America at more than 400 000 tonnes a year, could get a plant to capture roughly 70 to 80 per cent of the gas as sulphuric acid. This contained acid can be sold for industrial uses. The plant would cost about \$100 million.

The Hudson Bay Mining and Smelting Co. Ltd. plant in Flin Flon, Manitoba, which puts out about 300 000 tonnes, is under study to see if a new process can be introduced to reduce its pollution.



Friends of Boundary Waters Wilderness

Inco Ltd. in Sudbury is the target of further sulphur dioxide reductions.

In Ontario Inco Ltd. in Sudbury, North America's largest single source of sulphur dioxide, has long been targeted for further reductions. Now regulated to 729 000 tonnes a year from its two Sudbury smokestacks Inco could reduce that to as little as about 100 000 tonnes.

A large chunk could be accomplished by rebuilding the nickel smelting section, which would offer some payback by lowering production costs. The rest of the cleanup would involve adding pollution controls to the copper smelting area.

Cost of the cleanup is about \$600 mil-

lion or more in new equipment.

The neighbouring Falconbridge Nickel Mines Ltd. in Sudbury could be cut from a permitted limit of 154 000 tonnes a year to as low as about 18 000 tonnes at a cost of about \$60 million.

Ontario Hydro has already been ordered to reduce to about 260 000 tonnes a year from its big coal-burning power plants by 1990. Much of this is based on a switch to nuclear power and potentially the utility could get even lower if the atom power runs smoothly.

Quebec has the continent's No. 2 polluter in the Noranda Mines Ltd., Horne Smelter at Rouyn near the Ontario border, with a 1980 regulated capacity of 552 000 tonnes a year.

Experimental plan too dear

An experimental plan to mix asbestos tailings with sulphur dioxide to produce gypsum has been written off by Noranda as too expensive, leaving the old suggestion of a sulphuric acid plant.

Two solutions have been proposed: a 40 per cent sulphur dioxide reduction costing about \$45 million and a 70 per cent cut costing \$120 million.

Quebec's other big smelter identified for a possible cleanup is Gaspé Copper Mines Ltd. operation at Murdochville. A small reduction in its 91 000 tonnes a year of pollution could be made by improving the sulphuric acid plant.

New Brunswick and Nova Scotia both have coal-burning power plants but the federal-provincial task force on acid rain control must determine whether expensive pollution removal equipment is worthwhile.

There are hundreds of smaller industries burning sulphur-laden oil. There are two ways of reducing the pollution: oil desulphurization and the off-oil program encouraging a switch to electricity and natural gas.

Acid rain is caused by the emissions of sulphur dioxide and oxides of nitrogen from industry, coal-fired electricity plants and automobiles. These substances are transported hundreds of miles, transformed into sulphates and nitrates and fall to earth in rain, snow or dust.

Acid rain damages water systems so they can no longer sustain fish life. Acid rain is threatening forests, slowing their growth and killing seedlings. It is also capable of contaminating drinking water supplies by leaching metals from soils and water pipes. Buildings and monuments are also showing the effects of acidic erosion.

Record oil surplus for 1983

In 1983, Canada became the second-biggest exporter of oil products to the United States, after Mexico, boosting Canada's surplus in oil trade to a record \$2 billion, federal figures show.

In fact, according to new figures released from the Department of Energy, Mines and Resources, Canada had a record-setting year in terms of energy exports of all kinds.

Americans bought \$5.2 billion worth of Canadian crude oil, home heating oil, gasoline, butane and propane. That more than offset the \$3.2 billion worth of crude oil imported from all sources for that portion of eastern Canada beyond Montreal where the oil pipeline from western Canada stops.

In mid-February, the merchandise trade surplus was released by Statistics Canada, but there was no actual breakdown of sales by the industry sector.

In 1983, oil, gas, electricity, coal and uranium sales world wide represented \$8 billion, or more than half of the country's over-all merchandise trade surplus of \$15 billion, officials said. That was up from \$6.3 billion in energy exports during 1982.

Natural gas sales dropped to \$3.958 billion from \$4.754 in 1982, electricity exports were up to \$1.225 billion from \$1.115 billion.

Coal posted a net trade surplus of \$306 million, up slightly, while the surplus in uranium ores, concentrates and isotopes dropped to \$415 million from \$776 million.

Biggest contributor to the increase over 1982 was the new, \$2-billion oil trade surplus. The previous highest surplus was posted in 1974, when \$1 billion more oil was sold by Canada than bought. That year, Canada sold \$4 billion worth of oil almost entirely to the US, but bought \$3 billion from across the world. Now the situation is similar.

"You are now the second largest exporter to the US," said a spokesman for the US state department. "We import four million barrels a day of oil and oil products, and Canada supplies a total of 560 000 a day, or 14 per cent of our imports."

The net result was that in 1983, Canada sold \$262 million more crude oil than it bought; \$1 million more home heating and residual fuel oils, or gasolines, mostly to the US; another \$855 million more butane and propane than purchased.