

Water Resources

"Stop phosphorus going into the lakes", the researchers said, and they will be healthy as can ever be hoped by 1986.

Failure to stop phosphorus inflow into Lake Erie within the three-year limit, the report warns, will bring the prospect of the lake regenerating its own pollution from phosphorus in the bottom muck.

While the report continually uses the word "phosphorus" the researchers made it clear they were referring largely to phosphorus compounds such as phosphates, which is phosphorus combined with oxygen.

These compounds occur in municipal sewage—coming largely from detergents housewives rinse down the sink—and in fertilizers and some industrial processes.

Four years of study by the pollution experts who wrote the report convinced them that phosphorus was the key to pollution in the lower lakes area where population has increased 100 times in the past 150 years.

The phosphorus—44,000 tons annually into the two lakes from all sources—is plant food for the algae rapidly coating lagoons and beaches. The more plant growth there is in the lakes the less oxygen is available for fish and for the biological processes necessary to neutralize other sewage.

Then, the report continues and points out the following:

Even more vital, one of the researchers commented, is that the same process is taking place in all Canadian lakes. Within this century the same point-of-no-return could be reached in Lake Superior or Huron.

How to stop the phosphorus?

Cut it off at the source, says the report.

About 67 per cent of all the phosphorus input into the two lakes comes from municipal sewage; another eight per cent comes from industrial wastes. Of the municipal share anywhere from 50 to 70 per cent is directly related to the phosphates in detergents.

So the report recommends an immediate reduction to minimum practical levels of the phosphorus in detergents and the complete elimination of such phosphorus compounds by 1972.

How practical is this?

Phosphates make up about 30 per cent of a box of detergent.

● (12:30 p.m.)

One U.S. manufacturer already has a brand on the market with 25 per cent less detergent than other products and sales are going well, according to one researcher.

The article concludes:

If the detergent companies do replace their harmful products by 1972 that action will probably save Canadian taxpayers \$5 million annually in sewage treatment costs alone.

This indicates that the problem we are having is phosphates, the main source of which is the detergents used by women.

I think I should relate to members of the House that just recently one of the research

experts at the University of Toronto has come forth with a phosphate free detergent. I should like to ask the Minister of Energy, Mines and Resources (Mr. Greene) to call that expert before the committee to give us the benefit of his findings. I ask that the minister contact that professor, if he has not already done so, so that we could have the joint cooperation of the professor and possibly of the Polymer Corporation of Canada to produce this phosphate free detergent because the main source of the phosphate in the detergents comes from ERCO, the Electrical Reduction Company. Just this week that company was fined \$40,000 for infractions to the Combines Investigation Act. It seems to me that we have a public duty, if a professor has found a phosphate free detergent, to use a crown corporation like the Polymer Corporation which would be suitably geared to produce this detergent and make it available.

Mr. Speaker: I have to interrupt the hon. member to remind him that his time has expired. He may continue if he has the unanimous consent of the House to do so.

Some hon. Members: Continue.

Mr. Gilbert: I will not trespass on the generosity of hon. members any longer than about five minutes at the most.

As I said, I would like the minister to take immediate action with regard to the finding made by the professor from the University of Toronto, and also to delve into the feasibility of the Polymer Corporation, which I understand is looking for other lines to produce, developing this product.

I could go on ad infinitum on the problems of pollution in the air, but before doing so I should like to say that we also have a problem of oil pollution in Lake Ontario. The other day the Gulf Company of Canada was charged by the Ontario Water Resources Commission with polluting Lake Ontario. Again the International Joint Commission studied this problem very seriously, and in the *Globe and Mail* issue of December 3, 1969 the findings of that commission are reported as indicating a conflict between the Ontario and the federal officials with regard to the possible effects of oil in Lake Ontario.

The article reads:

Six submissions from the gas and oil industry argued against any curtailment of drilling. A thick brief from the Ontario Petroleum Institute Incorporated told of elaborate plans to deal with a leak should one occur—