Government Organization Act, 1970 STATUS OF MERCURY LOSSES IN LIQUID EFFLUENTS FROM CANADIAN CHLOR-ALKALI PLANTS

PLANT	Production Chlorine Tons/Day	Effluent Mercury Losses			Anticipated Losses on Completion of Current - Abatement Program	
		1969 lbs/ton chlorine produced (a)	Dec. 1970 lbs/ton chlorine produced (b)	Reduction Percent 1969-1970	lbs/ton chlorine produced (c)	Completion
FMC Chemicals Ltd., Squamish, B.C.	170	0.15	0.0118	92.1	0.0029	Feb. 1, 1971
Interprovincial Co-operatives Ltd., Saskatoon, Sask Dryden Chemicals Ltd., Dryden, Ont Dow Chemical of Canada Ltd., Thunder Bay, Ont	85 33 80	0.30 (c) 0.21 (c) 0.15	$0.001-0.002 \\ 0.007 \\ 0.0009$	99.3 96.7 99.4	0.005	June 1, 1971
American Can of Canada Ltd., Marathon, Ont	37.5	0.27 (c)	0.012	95.6	0.01	April 1, 1971
Dow Chemical of Canada Ltd., Sarnia, OntNo. 1 No. 3	$160 \\ 250$	0.15	0.0017	98.9	0.0009	Dec. 31, 1971
CIL, Hamilton, Ont	88 120 110	0.10 (c) 0.10 (c) 0.15	0.0008 0.007 0.016	99.2 93.1 89.3	0.0008	June 30, 1971
CIL, Shawinigan, P.Q.	100	0.10 (c)	0.006	94.0	0.001	June 30, 1971
Aluminum Company of Canada Ltd., Arvida, P.Q	110	0.20 (c)	0.026	87.0	0.01	April 1, 1971
Domtar Ltd., Lebel-sur-Quevillon, P.Q CIL, Dalhcusie, N.B. Canco Chemicals Ltd. (e), Point Tupper, N.S	72 85 55	0.15 0.10 (c)	$0.0416 \\ 0.0024 \\ 0.0035$	$72.3 \\ 97.6$	0.0097 0.0003	April 1, 1971 June 30, 1971

## Nores.

- (a) Based on Departmental estimates of mercury losses in liquid effluent of 0.15 lbs per ton chlorine produced.
- (b) Based on measured effluent concentrations.
- (c) Based on estimates by the Company.
- (d) Standard Chemical Co. Ltd. will have a new plant on line early in 1971 which will replace the existing one. Their mercury losses are estimated to be 0.01 lbs per ton chlorine produced.
- (e) Plant commenced production in 1970.

Mr. Davis: In looking over this table, you will note that some plants have done better than others. Some have already reported a loss figure of less than 0.005 pounds of mercury per ton of chloride produced. This is excellent. It is well below the target figure which Swedish experts recently considered to be the limit of modern technology, namely 0.01 pounds per ton of chlorine produced.

Our ultimate aim, nevertheless, is perfection. We want to make our Canadian chlor-alkali industry as antiseptic as possible. We want to bring the mercury content of its effluent down to the point where there is no net addition to the background levels already present in nature. In other words, our target is for the industry to tend to take mercury out of its natural water supply rather than add new mercury. This is actually happening in one or two Canadian localities now. It must become the objective of all chlor-alkali plants in Canada and our fisheries regulations will be drafted so as to make this performance compulsory from coast to coast.

To be even more specific, the target set in our regulations is 0.01 pounds of mercury per ton of chlorine by April 1, 1971. The target for September 1, 1971 for all plants is 0.005. The target for the end of 1971 is the local background level or better. A year from now all our chlor-alkali plants should, in effect, be improving on nature. They will be taking mercury out of their natural surroundings rather than adding mercury to them.

Now, let me turn to the question of clean air. We have a lot of new teeth in so far as water is concerned. We have an amended Fisheries Act, an amended Canada Shipping Act, and a brand new Canada Water Act. These were all put in place in 1970. Now, we need a new clean air act. We need it in 1971. We need to supplement the powers which the federal government already has in respect of water and soil. We need it because the potential polluter has a choice. He can choose to burn his waste products and send them up the chimney rather than dump them in a neighbouring stream or bury them in the ground.

As in the case with water, we are working closely with the provinces. We are asking them for their advice. We are asking them how our new federal clean air legislation can complement their own provincial laws. We are asking them also how they would like us to deal with motor vehicles and other products which are sold throughout Canada and which can be a serious source of atmospheric pollution unless they are designed and equipped in the proper way at the factory itself.

I have already been talking to my opposite numbers in the provinces about transborder situations and international situations. I have been trying to head off jurisdictional wrangles. I have stressed our willingness to complement provincial law and to avoid unnecessary duplication. I have stressed the need for national ambient air quality objectives, and on all these scores, Mr. Speaker, I have met a favourable response in one provincial capital after another.

## • (4:30 p.m.)

That there is a federal role in respect of air, I have no doubt. Its movements are broadly continental in their