f/ Div, Canada

Monsanto

FROM (NAME & LOCATION): David Wood-St. Louis-B2SD

DATE: October 16, 1975

CC:

SUBJECT: NOTES ON VISIT TO CANADA

REFERENCE:

TO:

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Call reports and action programs will be circulated by H. G. McPhaden. We met during the week with major customers, provincial and federal environmental authorities and the two major utilities.

A. Customers

Ferranti-Packard

FP estimates they will take 1.8M lbs. of Inerteen 70/30 in 1975, and currently forecast a similar performance in 1976. Their order book is currently well-filled through March, 1976. To put this forecase in perspective, at this time last year they were forecasting 2.4M lbs. for 1975.

FP are vulnerable in that they only manufacture liquid-filled transformers, oil and askarel. While it is obvious that steps have been taken to clean up operations within their facilities, they are still, to my mind, over complacent about the PCB situation given their vulnerability. They were aware of the front page articles in the Ontario Globe on Saturday and Monday (to be followed by further articles on Tuesday and Wednesday) expressing public alarm about PCB levels in fish in Lake Ontario and the Credit River. They do request that we keep them intimately involved with any developments that we make in non-PCB transformer fluids.

MONS 072052

Westinghouse, Canada

At Westinghouse, one sensed concern about the future of PCB in capacitors, but reliance on research activity in the United States resolved the problem. They seemed to be locked into some major projects for the

next two to three years and expect steady off-take of capacitor fluid. There was much less concern about the possible discontinuation of askarel use in transformers, the implication being that this was a minor part of their business.

We were given a detailed organization chart covering the various Westinghouse, Canada, locations and describing who would be responsible for decision making if there were to be any major change of dielectric.

General Electric

Here again, concern was at a low level, although there was an awareness of the current problems at G.E., Hudson Falls, and of environmental activity in the Great Lake area. They will rely on Hudson Falls research to solve capacitor problems. Askarel transformer business plays a very small part in C.G.E.'s profit picture.

Again, we were given an organization chart which indicated that the people we contacted on this visit will be of some importance in technical liaison with the parent companies in the states, but will have little say in the decision as to what dielectric may be finally selected if there is a move from PCBs.

2. Environmental

Ontario Ministry of Environment

We met Bob Phoenix who heads up the State Department of the Environment dealing with chemical pollutants. Mercury is very high on their list of priorities right now. Although Rick Abbot (in Bob's department) had been quoted in the Toronto Globe as being fairly strongly against PCBs, Bob's attitude was he expected things to quiet down after a few days, and he felt that PCB was pretty well under control in Canada at the present time. If there was to be any change in PCB status, it would be prompted by Federal action rather than by an Ontario State initiative. They have a laboratory close to Toronto which has been working on PCB detection methods, and they feel that they have made some advances of their own in PCB analysis. We said we would like to meet their analytical group at some time to compare notes, and it was suggested that this should be arranged.

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Federal Ministry of Environment - Ottowa

Saw Jim Bryden and Morris Millson. While mercury was still the key issue, PCB is high on their list of materials to be regulated as soon as Bill C-25 passes through the House of Commons in Canada. It has passed two readings and is expected to pass final reading in December, 1975.

Millson, who seems most intimately involved with PCBs, is convinced that Aroclor 1016 is very different from the high chlorinated materials, and at the present time, subscribes to the view that its continued use in capacitors would present no danger to the Canadian environment. He equally believes that the use of Aroclor 1254 in the transformers is a controllable situation. Bryden's view was that the first moves they would make when C-25 was passed was essentially to legalize Monsanto's market restrictions in Canada. They also believe that some actions may have to be taken to control the final disposal of transformers containing askarel. The third main area will be to identify and prohibit other uses of Aroclor based on imported materials from Europe.

We may receive a request from the Ministry for notification of Aroclor customers in Canada. I asked that any such requests be directed to us in writing. In responding to any such requests, we should pay attention to Section 4, Subsection 4, we need to indicate in our reply if we wish information to be considered as confidential. They, themselves, are currently considering the "sting in the tail" of Subclause 4 which states that they shall not disclose such information except as may be necessary for the purposes of this Act. Nobody has been able to put very precise limits around this controlling sentence as yet.

3. Utilities

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Ontario Hydro

We met a large group of engineers from Ontario Hydro covering both capacitor and transfer applications. They were interested in potential PCB replacements for capacitors and recognized at the end of our presentation that there was considerable further test work to be

completed before our fluids could be considered to be fully proven alternates. They have carried out surveys on their own systems to gather statistics on loss of Aroclor from power capacitors and will be prepared, on written request, to share this data with us. Their use of askarel transformers is limited. They could think of a number of cases where discontinuation of askarel transformers would be a major problem to them--not so much from the point of view of the askarel transformer initiating a fire, but more from a flammable fluid being able to spread a fire within a substation. They are becoming increasingly selective in their installation of askarel equipment (transformers). They are currently collecting all transformers going out of service-both from their own network and from the Toronto municipal network, and arranging for incineration of the askarel at Chemtrol. Failed capacitor units are also shipped to Chemtrol for landfill.

Hydro-Quebec, Montreal

Very similar pattern of discussion to that with Ontario Hydro, although there seemed to be a greater awareness of developments with Dow Corning silicones and Dow capacitor fluids. They referred to an incinerator close to Montreal in Canada which was disposing of askarels. John Buchanan will check further.

They had also carried out capacitor leakage studies and, again, are prepared to share this data with us.

They brought up the subject of long-term shortages in electric grade oils and expressed interest in MCS-1238 as a potential fluid for cables. They consider that its low temperature properties and dielectric constant could solve problems currently experienced in jointing cables in cold climates. They asked for a one-gallon sample of MCS-1238 for preliminary electrical evaluation. Harvey and John will follow to find out exactly what they have in mind.

David Wood

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