COMPANY CONFIDENTIAL

Distribution list

Dielectrics
~~USSR~~
Russia

Brussels :	A. Arpino
	D. E. Cox
	M. Goodwin
	J. N. Haggart
	F. MacDonald
	P.J.A Marsh
	R. Thompson
	G. Wilde
Louvain-la-Neuve:	R. A. Baxter
	H. A. Vodden
Ruabon :	Dr. R. P. Kup
St. Louis :	T. L. Gossage
	R. H. Munch
	C. Paton
	E. P. Wheeler
	D. Wood

Brussels, 21st November 1974
JNH:ad

VISIT TO MINISTRY OF ELECTROTECHNICAL INDUSTRIES OF THE U.S.S.R.

Tuesday, November 19th 1974

Present for the Ministry :

Mr. M. M. MOROZOV	- Deputy Director of Moscos scientific industrial organisation "Kondensator" master of Science. Laureat Gosudarstvennoj Premii. ("State Premium").
Mr. K. V. GALAKTIONOV	- Chief of Division Foreign Relations Department.
Mr. D. S. VARSHAVSKIJ	- Senior Professor at the Electrotechnical Institute of the Ust-Kamenogorsk University. Head of Laboratory of Power Capacitors. Master of Science.
Miss L. P. STRELCHENYA	- Senior Engineer Foreign Relations Department.

Present for Golodetz :

Mr. I. GATES	- part time
Mr. J. GELLER	- part time
Mr. S. ZVEREV	- Moscow

Present for Monsanto :

Mr. H. A. VODDEN	- Louvain-la-Neuve
Mr. G. WILDE	- Brussels
Mr. J. N. HAGGART	- Brussels

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SUMMARY :

Commercial :

Usage of PCB impregnants is growing so 1975 demand will be greater than in 1974.

The Japanese were cited as active competition.

Will probably recommend to their purchasing Ministry that 1342 be ordered in preference to 1242.

Latest on closing the contract for 500 tonnes is that negotiations will be delayed till Tuesday November 26, 1974.

Technical :

A brief meeting (1 hour) in which they appeared more concerned about human toxicity and safe handling than environmental problems.

Introduced high d.k. askarel (SPE 7402) and epoxide concentrate (SPE 7404) which they will evaluate. They didn't ask for a price (but I would have quoted approx. $ 1500 per tonne FOB Antwerp if asked).

They gave us an evaluation of 1242 El but interest in epoxide likely to be delayed till they move to mixed paper/film dielectrics.

ADDITIONAL NOTES :

1. More interested in human toxicity than enviro. as in the past they have had problems in their factories.
2. Fire resistance - prepared to compromise if a more innocuous product was available.
3. Epoxide evaluated 1242 El found it gives satisfactory characteristics but wanted a quicker method of evaluation.
4. Going to look at SPE 7402/7404 no immediate reaction but looked very interested.
5. Only real interest is in large power factor capacitors and coupling capacitors. Interest is to have a steady capacitance independent of frequency and temperature.
6. Interested in both paper/plastic film dielectric and 100 % film dielectrics and asked for our suggestions as to impregnants.
   Present state of knowledge suggested 1342 perf. OK for paper film but for film only development work necessary and that a lower viscosity fluid would be required.

   Gained impression that they are not yet using polypropylene film which would explain their present lack of interest in 1242 El. However, they are interested in film for the future which will increase their interest in epoxide.

7. Mentioned castor oil in context of alternative impregnants overall impression that if would be reasoured on toxicity side would want to continue with PCB's.

8. They were disappointed documents were not in Russian and we agreed to translate and mail them copies.

9. Gave them copies of :

   NEAMA guidelines,
   FDA Rules & Regulations July 6, 197,
   EPA Task force report May 1972.

10. The Japanese were cited as being active competition. Suspect a spot lot but should be checked if possible.

ACTION

-JNH Organise translations of :
   Agenda
   Summary of W. Country position
   Toxicity studies summary
   Vodden - BEAMA paper
   CIGRE document. pp. 11-31 incl.
   Aroclor data sheet
   SPE 7402 data sheet

   Summarise Monsanto actions and work to justify use of PCB's and then translate.

   Get drum lebel from Newport and send to Russians.

-G Wilde Confirm name of senior scientist.

-HAV Obtain toxicity / safe handling letter from Medical Department and organise translation.

-HAV Coupling capacitors + fluid proposals (MCS 1043 ?).

-HAV Comment on evaluation of 1242 El.

-JNH Check status of GE negotiations with Russia re licensing MAGVAR.

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-G.Wilde Confirm Russians not at present interested in purchasing 1242 El in commercial quantities.

-G.Wilde Advise on best way of corresponding on technical matters with the Ministry (via Golodetz or direct etc.)

-D. Wood Please comment on Japanese activity and find out if this is a real threat to our business.

J. M. HAGGART