Monsanto

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September 27, 1974

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MINUTES OF "SAFE HANDLING OF PCB FLUIDS AND MATERIALS FOR DISPOSAL OF WASTE FLUIDS" AND "INDUSTRIAL BENEFITS OF POLYCHLORINATED BIPHENYL DIELECTRIC FLUIDS"

International Dielectrics Symposium 9/23/74

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D. Wood
B2SC

Safe Handling of PCB Fluids and Methods for Disposal of Waste Fluids

J. R. Savage reviewed incineration - controlled burning conditions for PCB's.

W. B. Papageorge discussed liquids and solids disposal for PCB materials.

Liquids can be handled by (1) Chem-Trol Pollution Services located and headquartered in Model City, N. Y., (2) Rollins Environmental Services headquartered in Wilmington, Delaware with plants located in Logan Township, Bridgeport, New Jersey, and Scotlandville, East Baton Rouge Parish, La.

Solids - landfills are a reluctant second choice for disposal.

E. M. Potter reviewed the handling of PCB and the return of scrap material for incineration.

> Problems occurred with the bottom of drums collapsing on long hauls about three years ago. The corrective action was to switch to 16 gauge drums to replace the 18 gauge units used at the time of the problem. Return material must be shipped in suitable drums. Spillage could cause food contamination.

J. R. Savage discussed our procedure for cleaning and disposal of waste material from drums.

> He advised customers to check the disposal techniques employed by their customers and, if necessary, crush or destroy the drums to prevent them from falling into the wrong hands. The skyrocketing cost of drums makes the proper disposal of PCB-containing drums more difficult.

C. Paton discussed our policy for transformer make up and continuing the supply to transformer fluid users.

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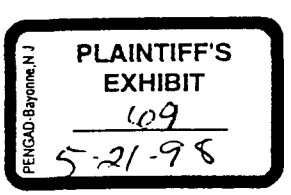

Questions and Answers

Q: What is the problem in having Monsanto recycle the drums, i.e., a return deposit? - Bruce Hayworth - CSI

A: Jim Savage - The problems with product quality control prevent this from happening. No one is willing to chance product quality on a material as sensitive as Aroclor for the price of a container.

At this time E. Wheeler was brought in to reply to Dr. T. Dokan's question concerning acute human toxicity of Aroclor type products. E. Wheeler reviewed studies of many years involving chlorinated biphenyls, napthalenes, etc. for cable impregnations. Wheeler also reviewed the requirements necessary within Monsanto to produce new products. He expressed the intent of these requirements is to prevent a reoccurrence of the PCB type situation.

Q: P. G. Benignus asked Dr. Nerf of Liljeholmes Kabelfabrik about tests on humans exposed to Aroclor.

A: Dr. Nerf replied that tissue as well as blood samples had been taken from humans for over 6 years and had thus far indicated nothing.

Q: Bob Meyer, St. Regis Paper - Should we not undertake some retroactive study on the effects of PCB on humans?

A: There were no volunteers.

Q: Ernie Bergenstein, Ferranti Packard - He is concerned about spills we have had or that we are going to have.

1. What should he do?

2. Can Monsanto make some distribution to the public on the fact that the askarel does not disperse?

A: W. B. Papageorge replied that Monsanto plans to publish the data on the soil studies.

Harry Sheppard, Westinghouse, replied as to what Westinghouse had done; that is:

1. All the transformers are labeled as to the contents.

2. The carrier is educated as to what he has and what he is to do.

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Q: Ed Raab - G.E., Pittsfield - The (MOCAR) rapid transit system uses askarel in electric locomotives. Has the E.P.A. talked with DOT?

A: W. B. Papageorge - The E.P.A. has talked with DOT.

C. Paton suggested that ANSI C-107 should be reconvened.

A. Salazar - NEMA - felt that C-107 should be reconvened.

P. G. Benignus stated he felt that the EIA should represent the small capacitor group.

Q: P. G. Benignus - How well is the transformer user informed on what to do (in case of a spill)?

A: Jim Kinney - G.E., Rome, Ga. - replied that G.E. supplies an instruction manual with the transformers. He also stated that the soil migration data probably is not too helpful as was the case of their spill in Tennessee. More important one must consider the area involved.

Industrial Benefits of Polychlorinated Biphenyl Dielectric Fluids - E. L. Raab - G.E., Pittsfield

The industrial precipitator transformer business has grown tremendously because of the E.P.A. requirements for clean air.

MOCAR multiple-unit self-propelled railroad cars have created quite a demand for askarel-type transformers. Askarel units are safer and more reliable than mineral oil type transformers.

PCB transformers unavailability would affect power distribution, railroads, electrical energy supply, hospitals and shopping centers.

The unavailability of askarel-type transformers would add to the energy crisis. It would adversely affect one billion dollars in new construction.

The loss of PCB devices on the lines which would have to be replaced by oversized generators, etc., would cost over one billion dollars.

Q: H. Sheppard - Westinghouse - How long do you think askarel transformers can continue on PCB?

A: Raab - G.E. - This question could best be directed at Monsanto but the market could withstand prices as high as 4 times the present askarel price of $4.00 per gallon without any significant loss of business.

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Q: Courtade - Niagara Transformer - Where does anyone presently buy askarel at $4.00 per gallon? He figured the cost of askarel to him was more like $5.46 per gallon.

A: Benignus pointed out the difference could well be in that G.E. blends their own mix.

Q: Vern Mulhall - Canadian G.E. - What is the price going to do if the transformer industry starts to use A-1016 or A-1242?

A: P. G. Benignus - C. Paton - The price will certainly go up because the high-boilers must be destroyed.

Q: Vern Mulhall - Canadian G.E. - Can you modify the process to reduce penta levels?

A: J. Savage - There have been some results which show a reduction in the higher chlorinated materials for batch type operation instead of continuous.

H. Sheppard of Westinghouse said this would depend on the definition of the acceptable materials spelled out by the E.P.A.

W. Courtade of Niagara Transformer again expressed his fear that askarel is being priced off the market. By next June, Courtade stated that askarel transformers could go up by 39%, oil by 30% and dry by 25%. He predicted that dry would take over in high-rise apartments, networks. The overloadability of dry is a problem and in this application there may be difficulty in replacing the askarel with dry type. The noise level comparison, Courtade felt there was no technology but thought the dry could be made to perform as well as the askarel. Raab felt that askarel has a definite advantage in this respect.

Courtade feels that askarel vs. dry type transformers is presently on the brink.

Q: Eric Bergenstein of Ferranti Packard - Is an asakrel transformer non-explosive?

A: Raab - G.E. Pittsfield - replied that an askarel is non-flammable but it could explode. Raab stated that the definition of an askarel had recently be changed.

Bergenstein: "I have had experiences which I shall relate to you later." Statement directed at Raab of G.E.

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Raab stated that G.E. no longer holds steadfast to the arc formed gas situation but they are willing to give in this area if necessary. His statement on price (4x present) he said was given in conjunction with the arc formed gas situation to give wider parameters in trying to develop a replacement. Raab felt this was in line with W. R. Richard's discussion of various alternates studied but unacceptable.

J. G. Bryant

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