Monsanto

FROM (NAME & LOCATION): B2SC J. J. Roder

DATE: March 21, 1972

SUBJECT: Call Report

REFERENCE:

TO: C. PATON

cc D. E. Roush
1460 D. W. Stegen
1070 H. R. Ford
N. T. Johnson
T. L. Gossage
P. W. Gann

COMPANY CONTACTED: Shell Oil Company
New Orleans, La.

DATE OF CALL: Friday, March 17

PERSONNEL CONTACTED: J. Frank Davis

Summary

At the time of our visit with Mr. Davis a month ago the Shell Oil people were not really convinced that they should convert their existing four or five Therminol FR systems to a non-PCB material. Since our last visit they did have an incident where the heat exchanger failed and they leaked Therminol FR into water which apparently is used for drinking water. This system involves redistilling sea water to make drinking water and I am sure it has increased their interest in getting the PCB out of existence.

The existing systems include a heat exchanger coil imbedded directly in the sea water. They are also designing four or five new platforms for fill nearing 1972 and all of these have been redesigned so that there will be a secondary heating system to prevent direct contact of a heat transfer media with the drinking water.

Mr. Davis also felt sure that whichever fluid was selected for their present FR systems would have to be that material which most accurately fits the description of a non-toxic material. He did indicate to us that the fish kill data supplied by Dow on their Dowtherm G did scare them and that if the Therminol 66 toxicity data appeared to be better they would very likely select it as the final fill. Because of the possibility of accidental leakage they were interested in receiving whatever data we could supply on detecting small amounts of Therminol 66 leakage into drinking water. In addition to that they wanted to know what the K value between water and Therminol 66 would be.

The only other major concern to the Shell people was the comparison of Therminol 66 and Dowtherm G from a fire standpoint. On our previous visit they had been very impressed with the high autoignition temperature of Dowtherm G and because of that we ran lab tests to evaluate the fluids under circumstances similar to their own. We ran tests simulating the leakage of Therminol 66

or Dowtherm G into a hot gas drain similar to what would happen in the exhaust from their turbines. The spray of either Dowtherm G or Therminol 66 into a 900° gas drain did not result in fire and these figures impressed Mr. Davis. We did caution, however, that our tests were not exactly like their own conditions; however, it might give them some idea of an accidental leakage.

Action Required

Roder to supply toxicity data for Therminol 66 as well as possible methods of detecting Therminol 66 leakage into water. Also confirm some of the results of our fire test data obtained at the fire test lab to both Mr. Davis and Ken Arnold.

J. J. Roder

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