

See C. Paton/J. J. Roder
1800 D. R. Hansen
1800 C. Boutin

October 19, 1971

Mr. Jim Conti
Great Lake Carbon Corp.
P.O. Box 8
Rosemead, Calif. 93560

Dear Mr. Conti:

As related to you on October 14, 1971, the Therminol FR-1 fluid in use at your plant contains polychlorinated biphenyls (PCBs) of various types. The concentration of PCB in our environment has come under critical scrutiny of various governmental agencies and scientific laboratories. In some studies certain PCBs have been found to be a persistent environmental contaminant, and possibly, injurious to certain forms of bird, aquatic and animal life. Accordingly it is very important that PCBs be kept out of the food chain.

In the pitch tank car heating application on Therminol FR-1, we feel that leakage of FR-1 cannot be avoided or controlled. In this regard your plant would be vulnerable to criticism from those agencies looking for PCB contamination.

I suggest you consider the use of an alternate Therminol heat transfer fluid for this application. I have attached literature on our Therminol 55 and Therminol 66 fluid which do not contain PCBs. While the Therminol 55 and 66 fluids are not fire resistant as is the Therminol FR fluid now in use, you can utilize these products without jeopardizing the safety of your operation.

By copy of this letter I am asking our Therminol representative in your area, Mr. Cliff Boutin, to follow up with you regarding an early conversion to our Therminol 55 or Therminol 66.

My recommendation for a flexible type hose to contain the hot heat transfer fluid at 450°F would be a corrugated metal hose with a metal overbraid. This would be similar to the hose presently used to bring fluid to the pitch cars, but of smaller diameter and of appropriate length to give the axial flexibility required at the mixer. Several companies supply corrugated

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hose and one that comes to mind is Anasconda. The best material we found for this type of hose is steel; however, some customers have used stainless steel or Monel as the hose metal.

Cliff Boutin will be in contact with you shortly regarding the conversion of your Therminol FM-1 heat transfer system. If you have any questions in the interim, feel free to call Cliff at our Santa Clara office or me in St. Louis. Cliff's address is:

Monsanto Company
2710 Lafayette
Santa Clara, Calif. 95052
(408) 243-0414

Very truly yours,

D. E. Roush
Product Specialist
Heat Transfer Fluids

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Enclosures