bcc: C. Paton/D. E. Roush
J. J. Roder
J. S. Pullman - 1650

September 24, 1971

Dr. Albert Frey
Sandoz Wander Inc.
East Hanover Township, N.J. 07936

Dear Dr. Frey:

We are confirming previous conversations with your Mr. George Mahe concerning the use of the Therminol FR heat transfer fluid. The Therminol FR fluid as indicated on the labels attached to the containers contains polychlorinated biphenyls (PCB) of various types.

As you are undoubtedly aware, the PCB concentration in our environment has increasingly come under the scrutiny of various governmental agencies and scientific laboratories. In some studies, certain PCBs have been found to be persistent, an environmental contaminant and, possibly, injurious to certain forms of bird, aquatic and animal life. In addition, the FDA has established guideline levels of less than 5 ppm in meat, fish and poultry and less than 0.5 ppm in eggs and less than 0.2 ppm in milk. Accordingly, it is very important that PCBs be kept out of the food chain to prevent seizure and destruction by the FDA.

We would like to take this opportunity to remind your firm of the extreme care that must be taken by all users of PCB-containing products to prevent any entry into the environment through spills, leakage, use, disposal, vaporization or otherwise. Some specific applications where the use of the Therminol FR series should definitely be avoided are in heat transfer systems involving food or food related products, animal feeds, pharmaceutical products, packaging materials involving any of these items, and buildings where any of these items are manufactured or stored.

Since your system involves food, we confirm again that we will no longer supply any additional Therminol FR fluid for makeup. We urge that you proceed immediately with the conversion of your

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FR system to the non-PCB Therminol 55 which has been provided at no charge. We have also provided labels which can be used to attach to the used Therminol FR containers for shipment back to us for disposal. We will also pay the freight back for disposal as well as the normal disposal charge.

We again urge that you proceed without delay to convert your Therminol FR system to prevent any possible FR contamination with your product.

Your cooperation at this stage is vital to avoid possible further contamination of the food chain.

Very truly yours,

John Mason
Group Director
Monsanto Industrial Chemicals

cs

cc George Mahe

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Monsanto

Monsanto Company
1300 Post Oak Tower
5051 Westheimer
Houston, Texas 77027
Phone: (713) 821-9550

March 27, 1974

Mr. J. D. Winget
Army Core of Engineers
P. O. Box 1580
Albuquerque, New Mexico 87103

Dear Mr. Winget:

As we discussed in February, 1971 Monsanto discontinued Pydraul formulations based of polychlorinated biphenyls (PCB's). The decision to discontinue use of PCB's in Pydrauls was based on the tendency of these materials to accumulate in forms of wildlife, fish and other marine life plus their resistance to biodegradation and resulting persistence in the environment. I have enclosed a copy of the FDA Environmental Impact Statement for your reference.

I would suggest that you convert your hydraulic systems containing Pydraul 135 to Pydraul 50E at the earliest opportunity. Pydraul 50E is a phosphate ester based hydraulic fluid (bulletin enclosed) and is a fire resistant produc Pydraul 50E is Factory Mutual Approved and passes the standard fire resistance test as Factory Mutual Spray Test, Factory Mutual Channel Iron Test and the Hot Manifold Test.

The points listed below may be helpful to you in converting your system to a phosphate ester fluid.

1. Viton and Teflon seals and rod packing materials are best for Pydraul 50E.
2. The PCB fluid should be drained and incinerated. Monsanto will provide this service if you wish. You should contact Mr. Joe Kleffner at 800-325-3850 to make arrangements.
3. The reservoir should be wipped out to remove as much PCB fluid as possible and all materials incinerated.
4. The system should then be flushed with Pydraul 50E and the filter cartridges changed before the final fill with 50E.

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5. The flush fluid may be retained to flush other systems to be converted but should be incinerated when disposal is necessary.

6. Pydraul 50E may be ordered from Mr. Gary Graf at 800-325-3850. The price of 50E is $5.30/gal. F.O.B. St. Louis.

Hopefully this information will assist you in expediting the conversion of your systems to the phosphate ester fluid.

Please let me know if I can be of further assistance to you.

Yours very truly,

Jim Armentor
Area Manager
Specialty Products

JA/md
Enclosure

bcc: Doug Hansen
Bob Bevacqua
H. R. Ford
C. Paton

Note to Bevacqua - This guy called a few weeks ago and I missed getting the info to you. I expect 2-1000 gal. conversions and perhaps about 3 new fills later in the year. Assume you will pickup from here with Jerry Winget at 505-766-2389.

Regards. Jim

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