File	✓	
Destroy		
CDB		
JTG		
WHH	✓	✓
MNJ	✓	✓
REK	✓	✓
RAM		
EPW	✓	✓
GJL	✓	✓

January 26, 1972

Mr. Robert F. Billue
Technical Director
Thiele Kaolin Company
P. O. Box 1056
Sandersville, Georgia 31082

Dear Mr. Billue;

Mr. Papageorge has referred to me your letter of January 20, in which you ask several questions concerning Therminol FR-1. I will try to answer them serially.

PCB vapor poses a potential hazard should the concentration rise too high. The TLV for Therminol FR-1 is 1 mg/cubic meter. This is rarely reached at ambient temperatures except in confined areas. In the absence of knowing your concentration and in the absence of knowing whether these leaks come from hot metal, I find it hard to say whether you do have a hazard. I can tell you, however, that with the exception of two cases, both of which involved rather gross leaking, we have had no reports of any ill effect from the users of Therminol FR-1. As you remarked, the material does have a nauseating effect and has a rather pungent odor. This usually should suffice as enough warning signal so that the leak could be repaired.

You asked about whether personnel in contact with PCB vapor should be given medical examinations. This, again, is hard to answer, depending upon their exposure. Certainly, to be on the safe side, if one were to take blood samples and check for enzymes (SGOT and SGPT) this would be sufficient. Any physician would know about the enzymes. If, however, you just have an occasional leak and get it repaired, I doubt if even this precaution is necessary.

Sincerely,

R. Emmet Kelly, M. D.
Medical Director

REK/ln
cc: Mr. W. B. Papageorge

DSW 552668

Table I

AROCLOR 1242, SANTOSOL 300, MIPB: Four-Day Static Fish Toxicity Studies

Product	Test conc. (ppm)	Rainbow Trout 4-day mortality	Rainbow Trout TL_{50}[a] (ppm)	Bluegills 4-day mortality	Bluegills TL_{50}[a] (ppm)
AROCLOR 1242	100	10		10	
	10	1	25.1[b]	0	31.6
	1	0	(15.8-39.8)	0	(NRC)
	0.1	1		0	
SANTOSOL 300	100	9		9	
	10	2	21.5	1	27.8
	1	1	(8.60-54.0)	1	(12.8-60.5)
	0.1	0		0	
MIPB	100	10		10	
	10	0	27.8[b]	0	31.6
	1	1	(20.9-37.0)	0	(NRC)
	0.1	1		0	

[a] 95% confidence limits are shown in parentheses. NRC= no range calculable.

[b] Death at 0.1 ppm omitted in order to calculate TL_{50}.

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