

(continued)

Interoffice Communication

To C. E. Gremillion

From P. L. Fetzner

Date March 9, 1977

Subject Deregulation of the Laboratory Regulated Area

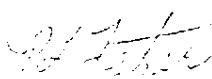
The tank car samples are normally analyzed between 0800 and 1200 hours each day there are shipments. The attached tables I, & II shows the individual fixed point monitoring data for the Laboratory during this time period. The four hour, one-hour and highest twenty minute averages are shown for each day that data was available. An asterisk indicates those days when tank cars were loaded.

This data shows the highest twenty minute average to be 2.1 ppm, well below the fifteen minute limit of 5.0 ppm. The highest value for any one hour exposure was 1.06 ppm and the four hour value was 0.41 ppm. These values indicates the high-exposure previously experienced during the tank car analysis has been corrected.

The fixed point monitor hourly summary sheet was examined for January and February. Only six values out of 1416 data points exceed 1 ppm, the highest value being 4.0 ppm.

The number of Laboratory dosimeter testing during 1976 were tabulated for the time periods, January thru August, September thru December and January thru February for 1977. These periods correspond to the time prior and following enclosing the space above the vent hood. The data (see table III) shows that no exposures above 1 ppm has occurred since this corrective step was taken.

Based on the evaluation of this data, it is recommended that the Laboratory regulated area be deregulated.



P. L. Fetzner

br

cc:

JAD-SLF

VVC 000020508

*done from 12/19/76
 12/20/76
 12/21/76
 12/22/76
 12/23/76
 12/24/76
 12/25/76
 12/26/76
 12/27/76
 12/28/76
 12/29/76
 12/30/76
 12/31/76*

supported by diameter testing

TABLE I
 LABORATORY FIXED POINT MONITORING DATA
 JANUARY --1977

DATES	Time				Averages			
	0800-0900	0900-1000	1000-1100	1100-1200	20 min.	1 hr.	4 hr.	
1-1	.1, .1, .1, .1, .1	.1, .1, .1, .1, .1	.1, .1, .1, .1, .1	.1, .1, .1, .1, .1	.1	.1	.1	.1
1-2	.1, .1, .1, .1, .1	.1, .1, .1, .1, .1	.1, .1, .1, .1, .1	.1, .1, .1, .1, .1	.1	.1	.1	.1
1-3*	.2, .2, .2, .3, .2, .2	.1, .1, .0, .4, .7, 2.5, 1.7	.7, .4, .2, .1, .1, .1	.1, .1, .1, .1, .1, .1	2.1	1.06	.41	.18
1-4*	.1, .1, .1, .1, .1, .2	.2, .1, .1, .1, .1, .1	.1, .1, .4, .2, .1, .1, .2	.2, .1, .2, .6, .9, .1	.75	.35	.11	.20
1-5	.1, .1, .1, .1, .1, .1	.2, .1, .2, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.15	.35	.11	.10
1-6*	.3, .2, .3, .2, .1, .1	.1, .1, .7, .9, .2, .1	.1, .2, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.80	.10	.10	.10
1-7	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.10	.10	.10	.10
1-8	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.20	.13	.11	.16
1-9	.3, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.55	.35	.16	.19
1-10*	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .2, .3, .4, .4, .7	.50	.25	.25	.25
1-11*	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.6, .3, .1, .1, .1, .1	.1, .1, .1, .1, .6, .1	.65	.38	.15	.30
1-12*	.1, .7, .2, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .9, .4, .1, .1	.1, .1, .1, .6, .7, .7	.15	.43	.10	.10
1-13*	.2, .2, .2, .2, .2, .2	.1, .2, .2, .1, .4, .2	.2, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.10	.10	.10	.10
1-14*	.1, .1, .1, .3, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.7, .2, .1, .1, .1, .1	.10	.10	.10	.10
1-15	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	1.05	.53	.22	.13
1-16	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.40	.20	.15	.23
1-17*	.1, .1, .1, .1, .1, .1	.4, .1, .1, .1, .1, .1	.1, .5, .1, .4, .7, .4, .1	.1, .1, .1, .1, .1, .1	.30	.25	.30	.13
1-18*	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .7, .1, .1, .1	.1, .1, .1, .1, .1, .1	1.05	.57	.23	.30
1-19*	.3, .2, .3, .3, .2, .2	.1, .1, .1, .1, .1, .1	.1, .1, .3, .1, .1, .1	.1, .1, .1, .1, .1, .1	.125	.57	.30	.13
1-20*	.3, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.5, .1, .0, .1, .1, .6, .1, .1	.9, .1, .6, .3, .2, .2, .2	.25	.20	.15	.11
1-21*	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.5, .2, .5, .3, .3, .8	.1, .1, .1, .1, .1, .1	.140	.57	.31	
1-22	.2, .2, .2, .2, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1				
1-23	.1, .2, .2, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1				
1-24*	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1				
1-25	.1, .1, .1, .3, .3, .3	.1, .1, .1, .1, .1, .1	.1, .2, .2, .2, .2, .1, .1	.1, .1, .1, .1, .1, .1				
1-26	Not Available							
1-27	"							
1-28	"							
1-29	"							
1-30	"							
1-31*	.2, .2, .5, .1, .1, .1	.1, .1, .4, .5, .6, .4	.2, .3, .2, .1, .3, .2	.1, .1, .1, .1, .1, .1	.55	.35	.22	

TABLE II
LABORATORY FIXED POINT MONITOR DATA
FEBRUARY - 1977

DATES	TIME				AVERAGES		
	0300-0900	0900-1000	1000-1100	1100-1200	20 min.	1 hr.	4 hr.
2-1-77 *	.5, .3, .1, .3, .3, .2	.1, .2, .2, .1, .4, .2	.1, .1, .1, .1, .1, .1	.1, .1, .2, .1, .1, .2	.40	.28	.18
2-2-77 *	.1, .1, .3, .2, .1, .1	.1, .1, .1, .1, .7, .2	.7, .5, .1, .1, .2, .1	.1, .1, .1, .1, .1, .1	.60	.28	.19
2-3-77	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.10	.10	.10
2-4-77	.2, .2, .4, .5, .3, .1	.1, .1, .1, .0, .1, .1	.1, .1, .1, .1, .1, .1	.7, .7, .2, .2, .2, .1	.70	.35	.24
2-5-77	.1, .1, .1, .1, .1, .1	.1, .1, .4, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.25	.13	.11
2-6-77	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.10	.10	.10
2-7-77 *	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.10	.10	.10
2-8-77 *	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .3, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.20	.13	.11
2-9-77 *	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .3	.1, .1, .1, .1, .1, .1	.20	.13	.11
2-10-77 *	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .3, .1, .1, .1	.1, .1, .1, .1, .1, .1	.20	.13	.11
2-11-77 *	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.10	.10	.10
2-12-77	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.10	.10	.10
2-13-77	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.10	.10	.10
2-14-77	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.15	.12	.11
2-15-77 *	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .4, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.25	.15	.11
2-16-77 *	.1, .1, .1, .3, .2, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .3, .1	.1, .1, .1, .1, .1, .1	.25	.15	.12
2-17-77 *	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.10	.10	.10
2-18-77 *	.1, .7, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.7, .3, .2, .1, .1, .1	.1, .1, .1, .1, .1, .1	.50	.25	.16
2-19-77	.1, .1, .1, .1, .1, .1	.5, .2, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.35	.18	.12
2-20-77	.1, .1, .1, .2, .1, .1	.1, .1, .1, .1, .1, .3	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.20	.13	.11
2-21-77 *	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.10	.10	.10
2-22-77	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.1, .1, .1, .1, .1, .1	.10	.10	.10

VVC 000020510

TABLE III
LABORATORY PERSONNEL
DOSIMETER DATA

*Approx. 14 samples - but 11/16
checked for positive exposure*

<u>1976</u>	<u>No. Analyzed</u>		<u>No. Over 1 ppm</u>	
Jan thru Aug (Before enclosing Hood)	20	7	3	(1.66 highest value)
Aug thru Dec	9	2	0	
<u>1977</u>				
Jan thru Feb	4	1	0	
	<u>33</u>	<u>10</u>	<u>3</u>	

VVC 000020511