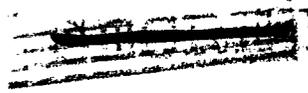




1. K. Z. Morgan
2. J. E. Wirth
3. E. S. Stone
4. W. A. Rodger
5. E. Perlman
6. R. Firminhae
7. G. Koval
8. Central File
9. Readers File
10. E. C. Bell
11. R. W. Richards

10/13/44

K. Z. Morgan  
George Koval



Health-Physics  
Health-Physics

**PRODUCT CONTAMINATION OF THE AIR  
REPORT OF October 2-7, 1944.**

Dust samples were collected in Bldg. 706A and Bldg. 205 by electrostatic precipitation. Samples were counted on alpha counter #7-712. Results were corrected for radium and thorium active deposit counts.

Above tolerance concentrations of  $7.19 \times 10^{-9}$  and  $1.34 \times 10^{-8}$   $\mu$  gas of product per cc. of air were obtained in Room 64, Bldg. 706A on October 4, 1944. The laboratory was being reconstructed and 2 hoods were taken down. These were the hoods in which large quantities of product solutions had been handled. People working in the laboratory wore respirators. The room was thoroughly cleaned and benches were repainted. Surveys made on October 5 and October 6 showed no concentrations greater than  $7.07 \times 10^{-10}$   $\mu$  gas/cc.

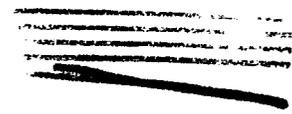
An above tolerance concentration of  $1.89 \times 10^{-8}$   $\mu$  gas/cc was found in Room E, Bldg. 205 on October 7. A cake containing about 40  $\mu$  gas of product was being dissolved in  $H_2SO_4$  with the precipitron intake 2" from the sample. This procedure is a special one and will not be repeated.

All other concentrations determined were below the tolerance level of  $5 \times 10^{-10}$   $\mu$  gas of product/cc. of air. The results of all surveys are listed below.

George Koval

GK/v

3/2/51  
Mellon B. Strauss



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<u>Location</u>	<u>Time of Precipitation</u>	<u>Count/min. due to Product</u>	<u>Curies of Product per cc of air</u>	<u>µ gas of Product per cc of air</u>
706A, Rm. 54, W. hood	10/4/44 12:25 PM	5	$7.3 \times 10^{-13}$	$1.15 \times 10^{-11}$
706A, Rm. 64, E. side	10/4/44 10:58 AM	3155	$4.61 \times 10^{-10}$	$7.19 \times 10^{-9}$
706A, Rm. 64, W. side	10/4/44 10:36 AM	5927	$8.58 \times 10^{-10}$	$1.34 \times 10^{-8}$
706A, Rm. 54, N hood	10/4/44 10:45 AM	0	0	0
205, Rm. D-Front of panel	10/4/44 2:45 PM	0	0	0
205, Rm. D. Near tank #11	10/4/44 2:05 PM	0	0	0
706A, Rm. 65-63, NW end of center bench	10/4/54 3:45 PM	0	0	0
706A, Rm. 65063. E. center table	10/5/44 2:05 PM	0	0	0
706A, SW, Cell #4	10/5/44 11:07 AM	4	$5.84 \times 10^{-13}$	$9.11 \times 10^{-12}$
706A, SW, Cell #6	10/5/44 10:10 AM	11	$1.61 \times 10^{-12}$	$1.52 \times 10^{-11}$
706A, Rm. 64, Center	10/5/44 1:20 PM	0	0	0
706A, Rm. 54, E. hood	10/5/44 2:35 PM	15	$2.19 \times 10^{-12}$	$3.42 \times 10^{-11}$
706A, Rm. 15, E. hood	10/5/44 9:00 AM	4	$5.84 \times 10^{-13}$	$9.11 \times 10^{-12}$
706A, Rm. 34, N. hood	10/5/44 1:10 PM	4	$5.84 \times 10^{-13}$	$9.11 \times 10^{-12}$
706A, Rm. 64, W. side	10/6/44 10:30 AM	17	$2.48 \times 10^{-12}$	$3.87 \times 10^{-11}$
706A, Rm. 64, E. side	10/6/44 10:35 AM	30	$4.38 \times 10^{-12}$	$6.83 \times 10^{-11}$
706A, Rm. 64, W. side	10/6/44 2:20 PM	31	$4.53 \times 10^{-12}$	$7.07 \times 10^{-11}$
706A, Rm. 64, E. Side	10/6/44 2:20 PM	22	$3.21 \times 10^{-12}$	$5.01 \times 10^{-11}$
706A, SW, Cell #3	10/6/44 1:30 PM	10	$1.46 \times 10^{-12}$	$3.84 \times 10^{-11}$
706A, Rm. 54, W. hood	10/6/44 2:00 PM	9	$1.31 \times 10^{-12}$	$3.60 \times 10^{-11}$
706A, Rm. 65 2' from spill	10/6/44 3:30 PM	28	$4.09 \times 10^{-12}$	$6.38 \times 10^{-11}$
205, Rm. E, bench	10/7/44 10:00 AM	2	$2.92 \times 10^{-13}$	$4.55 \times 10^{-12}$
205, Rm. E, bench near sample being fumed	10/7/44 10:30 AM	8257	$1.21 \times 10^{-9}$	$1.89 \times 10^{-8}$
706A, Rm. 54, W hood	10/7/44 1:30 PM	18	$2.63 \times 10^{-12}$	$4.10 \times 10^{-11}$

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