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EMC

STANDARD FORM NO. 64

PA. 36-1

PA. 36

Mined. PA. 36-1

## Office Memorandum • UNITED STATES GOVERNMENT

TO : W. B. Harris

DATE: May 25, 1951

FROM : P. B. Klevin *PK*SUBJECT: RESULTS OF AEROSOL SAMPLING AT U.S. BUREAU OF MINES, BRUCETON, PA.  
DURING VISIT OF MARCH 1, 1951

SYMBOL: HSH:PBK:hmh

Purpose of Visit

1. To obtain aerosol samples during the performance of several different types of explosibility tests.
2. To advise as to the safe handling of material.

Results

1. Following are the results of the average concentrations obtained before, during and after divers explosibility tests, in milligrams per cubic meter of air:

Sample Description	# of Samples	Concentration (mg U/m <sup>3</sup> air)		
		Aver.	High	Low
1. General Air at Test Hood prior to tests	1	0	--	--
2. Test of Ignition temperature of a layer using Uranium Hydride (Includes cleanup)	3	0.020	0.030	0
3. Test of Ignition temperature of a cloud using Black Oxide and Uranium Hydride (including cleanup)	3	0.018	0.054	0
4. Minimum Explosive concentration	1	0.047	--	--
5. Black Oxide in CO <sub>2</sub> atmosphere	1	0	--	--
6. Cleanup after tests	1	0.451	--	--
7. General Air in front of Hoods after completion of tests	1	0.018	--	--

2. The above results show only two samples exceeding the M.A.C., which is 0.050 mg/m<sup>3</sup> on a daily weighted basis. However, these samples are of operations of short duration and their contribution to the overall exposure of the workers is very small.
3. A rough calculation of the maximum weighted average exposure any

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individual might have been exposed to during the performance of these tests was 0.57 M.A.C.

4. None of the workers appear to have been significantly exposed during the performance of the explosibility tests.

CC: E. Kehoe