

40-6659

PETROTOMICS COMPANY

TIDEWATER OIL COMPANY • MANAGING PARTNER
P. O. DRAWER 2450
CARRER WYOMING

January 25, 1965

Mr. Lyall Johnson, Director
Division of Licensing and Regulation
U. S. Atomic Energy Commission
Washington 25, D. C.

Dear Mr. Johnson:

In compliance with Section 20.405, 10 CFR 20, we are notifying you of an over exposure to excessive levels and concentrations. The incident which occurred in the yellow cake drier room of the Petrotomics Mill located in Shirley Basin, Wyoming, on December 16, 1964. Atomic Energy Commission Source Material License No. SUA-551.

Two maintenance men were exposed to an air-borne concentration of natural uranium $3.74 \times \text{MPC}$ for the period December 13, to December 26. The work consisted of replacing refractory in the yellow cake drier which is a non-routine operation, this being the first repairs necessary in 33 months of operation.

At all times during this operation the men wore respirators (dust Foe #66 with dust and mist filters supplied by Mine Safety Appliances).

Corrective measures were taken when additional work had to be done on January 19, 1965. This consisted of the use of a vacuum cleaner around the work area with constant wetting with water. Survey results showed the exposure reduced to 0.18 times MPC.

The two men, James K. Cooper and Calvin L. Olson, have received written notification of the over exposure in compliance with Section 20.404, 10 CFR 20.

Very truly yours,

Petrotomics Company

By G. K. Coates
G. K. Coates
Project Manager



8507300250 850530
PDR FOIA
BURRE5-229 PDR

A/64

JOB EXPOSURE EVALUATION

BUILDING Mill

PROCESS AREA Maintenance on Y.C. Drier

OPERATOR

noon/shift

shift/day

4 men x 2 hours 15 minutes on drier, ^{men/day}
4 men x 97 hours 45 minutes on Gen. Mill Area.

Operation or Operating Area	Time Per Day	Oper. Per Shift	Time Per days Year (T)	Sample No.	Concentration Micrograms $\mu\text{c/ml} \times 10^{-11}$			TxC
					High	Low	Avg. (C)	
Opening Drier Ports	35 min	1	35	964			20.8	728.0
Cement Work	60 min	1	40	965			5.1	204.0
Cement Work	60 min	1	60	966			7.1	426.0
Gen. Mill Area	465 min	1	465	936			.4	186.0
Gen. Mill Area	600 min	9	5400	936			.4	2160.0

 $\Sigma(Y) = 6000$
$$Z(\text{TNC}) \quad 3,704.0$$

$$\frac{Z(TsC)}{Z(T)} = .617 \quad \frac{P_c/m \times 10^{-11}}{\text{XXXXXXXX}} =$$

.129

MPC

This survey report for work identical to that performed Dec. 16, 1964, demonstrates the effectiveness of the corrective measures taken.

50 Hr. Week (Normal) = $4.80 \mu\text{c/ml} \times 10^{-11}$



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JOB EXPOSURE EVALUATION

Survey Period Dec. 16, 1964

BUILDING Mill PROCESS AREA Maintenance on Y. C. Drier
 OPERATOR _____ men/shift _____ shift/day
 2 men 2 hrs. 0 min. on Drier
 98 hrs. 0 min on Gen. Mill Area.

Operation or Operating Area	Time Per day	Oper. Per Shift	Time 14 Perdays XXXXX	Sample No.	Concentration XXXXXX $\mu\text{c/ml} \times 10^{-11}$			TNC
					High	Low	Avg (C)	
Opening Drier Ports	60 min	1	60	962			841.00	50,460
Refractory Work	60 min	1	60	963			816.00	54,960
Gen. Mill Area	480 min	1	480	961			0.39	187
Gen Mill Area	600	9	5400	961			0.39	2,106



$\Sigma(T) = 6000$

$\Sigma(TNC) = 107,713$

$\frac{\Sigma(TNC)}{\Sigma(T)} = 17.95$

$\mu\text{c/ml} \times 10^{-11}$
~~XXXXXX~~

3.74

MPC

*Calculated in accordance with condition 12, License SUA-551
 for 100 hours worked in a 14-day period, Dec. 14, 1964 to Dec. 26, 1964.
 The 14-day period consisted of two 5-day, 50-hour work weeks
 separated by 2 days off.

50 Hr. Week (Normal) = 4.80 $\mu\text{c/ml} \times 10^{-11}$

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FILE - 01

Recreation Company Casper, Wyoming		DATE OF DOCUMENT:		DATE RECEIVED		NO. 354	
		LTR. x & encl.		MEMO:		REPORT:	
Lvall Johnson		ORIG. 1		CC:		OTHER:	
		ACTION NECESSARY <input type="checkbox"/>		CONCURRENCE <input type="checkbox"/>		DATE ANSWERED:	
CLASSIF. U		POST OFFICE		REG. NO.		FILE CODE: 40-6659	
DESCRIPTION: (Must Be Unclassified) Ltr. advising in compliance w/Section 20.405, 10 CFR 20, of an over exposure to two (2) individuals of excessive levels and concentrations....Attached; ENCLOSURES: (1 cy. en) Job Exposure Evaluations		REFERRED TO		DATE		RECEIVED BY	
		Recreation Company		1-28		W/ATON	
		E. Price: 1-28		Attn: Page		w/h extras	
		1-compliance cy.					
REMARKS: Mail Room Distribution: 1-file cy. (orig.—thru Recreation) ✓ <i>HANDED</i>						354	