



SINCLAIR RESEARCH, INC.  
400 EAST SIBLEY BOULEVARD  
HARVEY, ILLINOIS

July 6, 1962

12/11  
file

12-140-4

U. S. Atomic Energy Commission  
Washington 25, D. C.

Attention: Director, Division of  
Licensing and Regulation

Gentlemen:

In accordance with the requirements of our Byproduct Material Licenses No. 12-140-4 (G63) Amendment No. 6 and No. 12-140-6 (D64) we are hereby reporting byproduct material transfers in accordance with Section 30.24(h)(2) 10 CFR 30. The reporting period as required runs from July 1, 1961 to June 30, 1962.

1. License 12-140-4 (G63) Amendment No. 6. Gasoline containing hydrogen-3 at a concentration not to exceed  $8 \times 10^{-5}$  microcuries per milliliter in accordance with section 19 of this license.

<u>date</u>	<u>Refinery Location</u>	<u>Material</u>	<u>Quantity H-3 Transferred, Curies</u>	<u>Maximum Concentration H-3 in Product, <math>\mu</math>c/ml</u>	<u>Volume of Product, ml</u>
11-8-61	East Chicago, Ind.	Gasoline	0.90	$6 \times 10^{-5}$	$1.5 \times 10^{10}$
12-20-61	"	"	0.60	$4 \times 10^{-5}$	$1.5 \times 10^{10}$
2-14-62	"	"	0.60	$4 \times 10^{-5}$	$1.5 \times 10^{10}$
6-5-62	"	"	0.546	$4 \times 10^{-5}$	$1.4 \times 10^{10}$
6-20-62	Wood River, Ill.	"	<u>0.550</u>	$3 \times 10^{-5}$	<u><math>1.8 \times 10^{10}</math></u>
			Total 3.196		Total $7.7 \times 10^{10}$

2. License 12-140-6 (D64) Bunker C fuel containing cobalt-60 at a concentration not to exceed  $7 \times 10^{-6}$  microcuries per milliliter in accordance with section 14 of this license.

One-hundred millicuries of cobalt-60 were used at Houston, Texas on April 23, 1962 and appeared in Bunker C fuel. This material was shipped in four different loadings. Concentrations of cobalt-60 in individual loadings in microcuries per milliliter were  $5.5 \times 10^{-7}$ ,  $9.5 \times 10^{-7}$ ,  $2.3 \times 10^{-6}$ , and  $9.5 \times 10^{-7}$ . Minimum volume of product shipped was  $4.4 \times 10^{10}$  ml.

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As can be seen from the data given above, we have stayed well within the concentration limits for the byproduct materials allowed by the licenses concerned.

Yours very truly,

SINCLAIR RESEARCH, INC.

A handwritten signature in cursive script that reads "A. I. Snow".

A. I. Snow,  
Chairman, Radioisotope Committee

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