

Mobil Research and Development Corporation

November 20, 1981

CENTRAL RESEARCH DIVISION
P O BOX 1025
PRINCETON, NEW JERSEY 08540
TELEPHONE (609) 737-3000

P B WEISZ
MANAGER

Mr. J. Bruce Carrico
Material Licensing Branch
Division of Fuel Cycle and Material Safety
U. S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Carrico:

The following responds to the questions in your letter of October 30, 1981, regarding renewal of License No. 29-00505-15:

1. Use of Licensed Material

No changes have occurred or are anticipated in the use of Licensed Material. Our use will remain exclusively in research on hydrocarbon fuels.

2. Instrument Calibration Procedures

Since only beta-emitters, in low concentration, are used, emphasis on surveys is placed on wipe samples as detailed in our previous communication. A Nuclear-Chicago Model 2612 portable survey counter is available and is maintained in the event of spills--which have never occurred. Calibration of that meter is performed, at two sensitivity levels, with an Amersham/Searle Model 184100, Ra-222, 0.9 μ C, standard. Sensitivity of the counter extends to below 300 cpm. Sensitivity in our wipe samples at background was 36.5 cpm.

3. Instructions to Personnel

Picking up, receiving and opening of packages of radioactive material is always performed by the user himself. There has never been a case of breakage. Breakage, like a spill, would constitute an emergency, to be handled by the professional user/scientists. Clean-up would be required until surveys and wipe samples reach baseline. Our radiation safety officer would be immediately contacted, and subsequent action would be based on his judgment. (For information, our largest purchase of C-14 labelled hydrocarbons involved 1 millicurie; our largest inventory, <2 millicuries.)

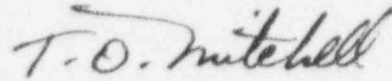
COPIES SENT TO OFF. OF
INSPECTION AND ENFORCEMENT

9705050231 970425
PDR FOIA
MARSHAK97-111 PDR

03/17

I hope this information will answer your questions.

Sincerely yours,

A handwritten signature in cursive script, reading "T. O. Mitchell".

T. O. Mitchell
Administrative Coordinator

TOM:aet