



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
ENVIRONMENTAL RESEARCH LABORATORY  
SABINE ISLAND  
GULF BREEZE, FLORIDA 32561-3999

June 2, 1989

Carol A. Connell  
U.S. Nuclear Regulatory Commission  
Region II  
Nuclear Materials Safety Section  
101 Marietta St., Suite 2900  
Atlanta, GA 30323

Dear Ms. Connell,

We are requesting our license be amended to allow the use of  $^{14}\text{C}$  and  $^3\text{H}$  by ERL, Gulf Breeze/EPA personnel in the EPA Laboratory in Valdez, Alaska from June 5, 1989 to September 30, 1989. Personnel currently listed on our license, specifically Dr. Parmely H. Pritchard and Dr. James R. Clark, will be conducting research in the EPA Laboratory at Valdez, Alaska during the summer of 1989 and we are requesting the use of  $^{14}\text{C}$  and  $^3\text{H}$  as tracers for this research, (copy of the research summary attached). The research is being conducted at the EPA Laboratory, 300 B Breakwater St., Valdez, Alaska 99686. Dr. Pritchard will be responsible for receipt of isotopes and following all procedures outlined in our license and CFR 10, including proper waste disposal.

Thanking you in advance for your immediate attention to this amendment. Please FAX approval to ERL, Gulf Breeze, FTS 686-9201 (904-932-5311).

Sincerely,

A handwritten signature in dark ink, appearing to read "Leonard H. Mueller".

Leonard H. Mueller  
Radiation Safety Officer

Attachment

FEE EXEMPT

## EPA Valdez - Microbiology Study Summary

Radiolabelled  $^{14}\text{C}$  and  $^3\text{H}$  will be used for ecological assessment of bioremediation procedures in Prince William Sound, Alaska. All work will be conducted in the EPA Laboratory in Valdez, Alaska. Tritiated thymidine will be used to measure bacterial production.  $1.1 \mu\text{Ci } ^3\text{H}$  will be used per sample, approximately 50 samples per day will be processed for a total of  $55 \mu\text{Ci } ^3\text{H}$  per day.  $\text{H}^{14}\text{CO}_2$  will be used to measure primary production.  $1.0 \mu\text{Ci } ^{14}\text{C}$  will be used per sample for 50 samples per day, total  $50 \mu\text{Ci } ^{14}\text{C}$  per day. For both radiolabels approximately 10% of the material will be trap on filters and transported to Gulf Breeze, Florida. Therefore, 90% will be disposed of at the EPA Laboratory in Valdez, Alaska. The total for each isotope will be less than  $50 \mu\text{Ci/day}$  in a total volume of approximately 20 liters. Quality control will be accomplished with wipe test of areas in which the isotopes are being used.