

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

NATIONAL EXPOSURE RESEARCH LABORATORY ECOSYSTEMS RESEARCH DIVISION 960 COLLEGE STATION ROAD ATHENS, GA 30605-2700

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OFFICE OF RESEARCH AND DEVELOPMENT

September 5, 2013

NRC License No. 10-10146-01

Division of Nuclear Material Safety U. S. Nuclear Regulatory Commission Region 1 2100 Renaissance Blvd., Suite 100 King of Prussia, PA 19406-2713

03604004

SUBJECT:

Removal of U.S.E.P.A. Field Research Annex, 625 Bailey Street, Athens, GA

from NRC license no. 10-10146-01

We request that the Field Research Annex (FRA) be removed from our NRC license and be released for unrestricted use. Although the Agency, the U.S.E.P.A., will retain possession of the facility to be used for contractor support and field staging activities, it will be administered under the EPA's Region 4 Office, rather than the Office of Research and Development.

SITE IDENTIFICATION - The Field Research Facility is located at 625 Bailey Street, Athens, Georgia 30605.

SITE HISTORY - Originally the site was constructed and used by the Department of Interior from 1964 until 1968. At that time it was covered by an Atomic Energy Commission license no. 10-10146-01. From 1968 until 1973 the site was occupied by the University of Georgia. The University's Radiation Safety Officer, Jody Jacobs, stated that no radioactive materials were used in research during that time. In 1973 the site was returned to the Agency and used for research and staging of field work until the present time. In the support documentation included with this request you will find an Excel file, Rad\_Mat\_used\_at\_ERD. This is a synopsis of the radioactive materials used at our facility from 1964 until the present. When able, it was noted which materials were specific to the FRA. As of this date no radioactive materials are either stored or in use at the FRA. All radioactive waste materials have been disposed.

SURVEY - It was decided to complete a multi-approach survey of the FRA. For the actual survey the interior of the building was divided into 352 grids approximately 3.6' X 3.5' not accounting for walls. The exterior dimension of the building is 115.5' X 38'. Two portable instruments were used to conduct the interior scans, a Ludlum model 3 GM counter with a model 44-9 pancake probe (calibrated on 4/1/2013 by Ludlum – Used after 4/5/2013), a Ludlum Model 2 GM counter with a model 44-9 pancake probe (calibrated 4/5/2012 – Used until 4/5/2-13), and a Berthold LB-122 gas proportional counter with a xenon detector (the 200 square centimeter window has an effective size of 100 square centimeters due to the protective screen. A functional test was made on the instrument by Ludlum on 6/6/2012. Proper operation was confirmed using

581708 NMSS/RGN1 MATERIALS-002 'the Sr-90 field calibration source prior to and after the surveys were conducted) was used with an "open" Beta window.

GM scans were made in each gird scanning at a rate of approximately one grid a minute at approximately ½" from the surface. The LB-122 was placed in a random area of each grid for 5 minutes and the value recorded. Care was taken to space the areas so that they would not be bunched and the readings would be representative.

In addition to the scans 100 cm<sup>2</sup> wipe samples were taken in each grid and counted for two minutes each on a Packard Tri Carb 1600 TR liquid scintillation counter. The counter was standardized daily. Blank samples and unquenched standards were counted with each set of samples.

A sewer water sample was taken by Region 4 EPA personnel at the point where all lines converge prior to entry into the Athens/Clarke County POTW and analyzed by the University of Georgia's Center for Applied Isotope Studies for Gamma and beta emitting isotopes. Gamma counts were conducted using a high purity Germanium detector, Beta analysis was conducted on filtered and unfiltered samples using a Quantalus liquid scintillation counter (see included certificate of analysis).

After the completion of the initial survey an additional survey of thirty-five randomly selected area was performed. This is approximately 10% of all the areas surveyed. The field data sheet, grid, and accompanying LSC results are included on the disk so that the process can be seen.

ANALYSIS OF SURVEY RESULTS — Survey results indicated that there were no levels of radioactive materials remaining in the FRA greater than normal background. Sewer sampling results indicated similar levels in the sewer. Individual room reports are included on the included disk.

Quality Assurance results were within normal ranges and expectations. They are included in a file (QAqcReport) and are specific for each room.

Please contact me at 706-355-8043 or <u>kitchens.james@epa.gov</u> if you have any questions or require further information.

James Kitchens, RSO USEPA/ORD/NERL/ERD 960 College Station Road Athens, GA 30605-2700

This is to acknowledge the r	receipt of your letter/application dated
There were no administra	ative omissions. Your application was assigned to a se note that the technical review may identify additional
Please provide to this off	ice within 30 days of your receipt of this card
Branch, who will contact you	een forwarded to our License Fee & Accounts Receivable u separately if there is a fee issue involved.
Your action has been assign When calling to inquire about You may call us on (610) 33	ned <b>Mail Control Number</b> 581708. ut this action, please refer to this control number. 37-5398, or 337-5260.
NRC FORM 532 (RI)	Sincerely,