



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
611 RYAN PLAZA DRIVE, SUITE 400  
ARLINGTON, TEXAS 76011-8064**

September 6, 2001

Lt. Colonel Kristin Swenson  
Department of the Air Force  
USAF Radioisotope Committee  
HQ AFMOA/SGZR  
110 Luke Ave, Suite 405  
Bolling AFB, DC 20322-7050

**SUBJECT: TERMINATED LICENSE REVIEW**

Dear Lt. Col. Swenson:

On September 4, 2001, the NRC concluded its review of a terminated byproduct material license previously issued to Randolph Air Force Base, Texas. Details of this technical review are provided in the enclosure to this letter. In summary, the Air Force was licensed by the U.S. Atomic Energy Commission (AEC) to possess radioactive material for use in research and development activities. The locations of use were listed as Randolph Air Force Base and the Balcones Research Center at the University of Texas.

AEC Byproduct Material License 42-01864-01 was issued in January 1957 and expired during December 1960. Review of docket file records did not provide adequate information concerning the final radiological status of the locations of use. As a result, the NRC elected to conduct an independent review of this license file.

Based on our technical review of the docket file, we have determined that the radioactive material was transferred during 1959-1960 to Brooks Air Force Base. Four locations of use were listed in the docket file for Randolph Air Force Base. Three of the four buildings have since been demolished, and the fourth was recently radiologically surveyed and was confirmed to be free of radioactive material. The former radioactive waste disposal pit at Randolph Air Force Base was reclaimed under the Air Force master material license. Also, the current radiation safety officer for the University of Texas has confirmed that there are no previously licensed radioactive or waste materials at the former Balcones Research Center.

Since the radioactive material and the locations of use have been accounted for, this concludes our review of this terminated byproduct material file.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/NRC/ADAMS/index.html> (the Public Electronic Reading Room).

Should you have any questions concerning this letter, please contact Dr. D. Blair Spitzberg, Chief, Fuel Cycle & Decommissioning Branch at (817) 860-8191 or Mr. Robert Evans at (817) 860-8234.

Sincerely,

***/RA/***

Dwight D. Chamberlain, Director  
Division of Nuclear Materials Safety

Docket No.: None  
License No.: 42-01864-01

Enclosure: Terminated License Status Report

cc w/enclosure:  
Texas Radiation Control Program Director

bcc w/enclosure (via ADAMS distrib):  
 EWMerschoff  
 DDChamberlain  
 LLHowell  
 DBSpitzberg  
 CLCain  
 ADGaines  
 RJEvans  
 JTBuckley, NMSS/DWM/DCB  
 NMIB/NMLB  
 MIS System  
 RIV Nuclear Materials File - 5th Floor

DOCUMENT NAME: s:\dnms\fcdb\rje\10186401.wpd Final r:\ dnms

RIV:DNMS:FCDB	C:FCDB	NMLB	C:NMLB	D:DNMS
RJEvans	DBSpitzberg	ADGaines	CLCain	DDChamberlain
<i>/RA/</i>	<i>/RA/</i>	<i>/RA/</i>	<i>/RA/</i>	<i>/LHowell for/</i>
09/04/01	09/05/01	09/05/01	09/06/01	09/06/01

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## ENCLOSURE

### Terminated License Status Report

Final ORNL Score: 774

Docket No. None

License No. 42-01864-01

Licensee Name: Department of the Air Force (Air Force)

Site Names: School of Aviation Medicine  
University of Texas Radiobiological Laboratory

Site Addresses: Randolph Air Force Base, Texas  
Balcones Research Center, University of Texas, Austin, Texas

Regional Contact: Robert Evans, PE, CHP, Health Physicist  
Fuel Cycle & Decommissioning Branch  
Division of Nuclear Materials Safety  
Region IV

#### Status Summary:

By application dated November 16, 1956, the Air Force applied for a U.S. Atomic Energy Commission (AEC) broadscope byproduct material license for its School of Aviation Medicine at Randolph Air Force Base. The licensee planned to use the radioactive material for research and development activities. Following resolution of all AEC comments, including a pre-licensing inspection, the AEC issued Byproduct Materials License 42-01864-01 to the Air Force on January 25, 1957. The authorized locations of use were the School of Aviation Medicine and the Radiobiological Laboratory, Balcones Research Center.

Amendment 1 to the license dated July 31, 1958, increased the amount of tritium that the licensee was authorized to possess. Amendment 2 dated December 17, 1958, renewed the license and extended the expiration date to December 1960.

During 1959, the Air Force decided to transfer its radioisotope program from Randolph Air Force Base to Brooks Air Force Base. A byproduct materials license application was submitted by the Air Force to the AEC for use of radioactive material at Brooks Air Force Base. The AEC issued Byproduct Materials License 42-05834-01 on October 30, 1959, which allowed the Air Force to transfer operations from Randolph Air Force Base to Brooks Air Force Base. Transfer of the radioactive material occurred during the 1959-1960 time frame. Accordingly, the Air Force allowed License 42-01864-01 to expire on December 31, 1960.

The docket file for License 42-01864-01 was reviewed by Oak Ridge National Laboratory, and the reviewer was primarily concerned with the status of the former locations of use since decommissioning and final radiological survey records were not provided in the file. Also, there were references in the docket file to a radioactive material burial site at Randolph Air Force Base. Although there were no radioactive material disposition records in the docket file, there

was some evidence, including hand-written notes, that an AEC license reviewer (1961) and later an NRC license reviewer (1982) were satisfied that all radioactive material had been transferred to Brooks Air Force Base.

By letter dated September 26, 2000, the NRC requested additional information from the Air Force regarding the status of the former locations of use at Randolph Air Force Base. The locations of use listed in the docket file were Buildings 661, S673, S732, and S735. According to the Air Force, Buildings S673, S732, and S735 had been demolished and no longer existed. Building 661 still exists, and the Air Force conducted a final radiological survey of this building during August 2001. No radioactive material was identified during this survey. Also, the Air Force provided the NRC with documentation confirming that the former radioactive waste burial pit at Randolph Air Force Base had been reclaimed in the early 1990's under Air Force Permit 42-30313-1AFP.

The NRC reviewer recently contacted the radiation safety officer at the University of Texas for information regarding the current status of the Radiobiological Laboratory. This facility was part of the Balcones Research Center, currently called the J. J. Pickle Research Campus. The locations of use included an underground vault as well as the Radiobiological Laboratory. According to information provided in the University's letter to the NRC dated July 23, 2001, the Laboratory ceased operations in 1964, and the University currently has no radioactive material or radioactive waste remaining from the 1957-1964 time frame.

In conclusion, Region IV recommends the closure of this terminated byproduct material file because the radioactive material had been transferred to another AEC license during the 1959-1960 time frame. The Air Force has confirmed that the former locations of use at Randolph Air Force Base have either been demolished or was free of radioactive material. The former burial pit at Randolph was reclaimed by the Air Force. The University of Texas has confirmed that the former locations of use in Austin are also free of radioactive material and waste material.