



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

June 27, 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 June 21, 2001, the NRC concluded its review of a terminated byproduct materials license previously issued to McChord Air Force Base, Washington. 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 125,000 curies of strontium-90 in sealed source form for use in a thermoelectric generator.

AEC Byproduct Materials License 46-15183-01 was issued during June 1972, but was terminated at the Air Force's request during August 1973. Review of docket file records did not provide adequate disposition information for the radioactive material possessed under this license. 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 is currently in the possession of the Air Force at Burnt Mountain, Alaska. The Air Force is authorized to possess the strontium-90 sealed source under the NRC master material license, Radioactive Material Permit FL-00409-00/02AFP. Since the radioactive material has been accounted for, this concludes our review of this terminated byproduct material file.

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.: 46-15183-01

Enclosure:
Terminated License Status Report

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

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RIV:DNMS:FCDB	C:FCDB	NMLB	C:NMLB	D:DNMS
RJEvans	DBSpitzberg	ADGaines	CLCain	DDChamberlain
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06/25/01	06/26/01	06/26/01	06/26/01	06/27/01

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ENCLOSURE

Terminated License Status Report

Final ORNL Score: 225

Docket No. None

License No. 46-15183-01

Licensee Name: McChord Air Force Base
1159th Technical Operations Squadron
McChord AFB, Washington 98438

Site Name: Burnt Mountain, Alaska

Site Address: Fort Yukon, Alaska

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

Status Summary:

On May 23, 1972, the Air Force applied for a U.S. Atomic Energy Commission (AEC) license to possess a thermoelectric generator containing strontium-90 as the heat source. The Air Force planned to install the generator at Burnt Mountain, Alaska. Following resolution of all AEC comments, Byproduct Materials License 46-15183-01 was issued to the Air Force for possession of 125,000 curies of strontium-90 in sealed source form for use in a Sentinel 25A thermoelectric generator, Serial Number 4.

During May 1973, the AEC was informed that the 1159th Technical Operations Squadron was being deactivated and the responsibility for the radioactive material was being transferred to the 1156th Technical Operations Squadron of Wheeler Air Force Base. Licensing actions were to be handled by the 1035th Technical Operations Group, Patrick Air Force Base. Also, the thermoelectric generator was still in Texas at that time. Installation of the generator was scheduled to occur at Burnt Mountain during August or September 1973.

However, during July 1973, responsibility for the generator was transferred by the Air Force to the 1155th Technical Operations Squadron, McClellan Air Force Base. On July 31, 1973, the AEC issued Byproduct Materials License 04-09951-03 to the Air Force for possession of the strontium-90 sealed source at Burnt Mountain through McClellan Air Force Base. The AEC subsequently terminated License 46-15183-01 on August 31, 1973.

The NRC reviewer recently contacted the Air Force Radioisotope Committee for additional information about the thermoelectric generator and its strontium-90 heat source. The NRC reviewer noted that License 04-09951-03 had been terminated by the NRC during December 1985, following the issuance of a master materials license to the Air Force. The Air Force provided the NRC reviewer with information which confirmed that the Air Force continues

to possess the Sentinel 25A thermoelectric generator, Serial No. 4, at Burnt Mountain. Permit FL-00409-00/02AFP allows the Air Force to possess the generator's strontium-90 source.

In conclusion, Region IV recommends the closure of this terminated byproduct material file because the Air Force still possesses the thermoelectric generator and its strontium-90 sealed source under the authority of the Air Force's master material license.