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

January 31, 1997

Lt. Colonel J. J. Donnelly
Department of the Air Force
USAF Radioisotope Committee
HQ AFMOA\SGPR
8901 18th Street
Brooks AFB, Texas 78235-5217

SUBJECT: NRC INSPECTION REPORT 030-28641/96-19

Dear Lt. Colonel Donnelly:

On December 5, 1996, the NRC completed an inspection at Wilford Hall Medical Center (WHMC), Lackland Air Force Base, Texas. This special, unannounced inspection was conducted to review circumstances associated with the temporary loss of a iodine-125 brachytherapy sealed source at WHMC on June 12, 1996. At the conclusion of the inspection, the findings were discussed with members of WHMC staff. Additionally, a telephonic exit briefing was conducted with Captain Mitch Hicks of the U.S. Air Force Radioisotope Committee (RIC) on January 10, 1997.

The inspection consisted of interviews with WHMC personnel and selective examinations of procedures and representative records relative to the use of sealed sources for brachytherapy procedures. The purpose of the inspection was to determine whether activities performed by this permittee were conducted safely and in accordance with NRC requirements, and to review the effectiveness of WHMC's and the RIC's response to the incident.

No violations of NRC requirements were identified; therefore, no response to the letter is required.

Although the inspector did not identify any violations of NRC requirements, this inspection did disclose concerns regarding brachytherapy source inventory procedures at WHMC and the effectiveness of corrective actions implemented by WHMC following this incident. Interviews with staff members at WHMC revealed that when sources were removed from the storage vault, the staff had not always completed the permittee's "Isotope Tracking Form" (brachytherapy source inventory form) at the time the sources were removed. The inspector noted that the staff routinely made entries to the source inventory form upon completion of a brachytherapy treatment, rather than logging movement of the sources in and out of storage at the time of their removal from or return to the storage area. As an example, the staff did not complete the "Isotope Tracking Form" indicating the removal of sources from the source storage safe on June 12, 1996, until the sources were returned to the storage safe on June 14, 1996. Although this example occurred prior to the date that the radiation safety officer (RSO) implemented corrective actions (September 17, 1996), the inspector noted that this was still the practice of the staff as of the date of the inspection (December 5, 1996). As noted by the RSO during the course of this inspection,

this practice appeared to conflict with the intent of WHMC procedures which focused on prompt documentation of movement of brachytherapy sources to and from the storage safe.

In a letter to the RIC, dated June 27, 1996, the RSO proposed the following corrective actions related to this incident: (1) changing the brachytherapy department's operating instructions (OI) to reflect the requirement to immediately inventory and document the removal and return of brachytherapy sources from and to the storage safe; (2) changing the brachytherapy department's OIs to reflect the requirement to immediately report any loss of radioactive material to the RSO; and (3) requiring an annual review of the OIs by all authorized users and supervised individuals. The inspector's review of OIs identified that these changes had been implemented as described above. However, interviews with the staff disclosed that training on these changes consisted only of a requirement that the staff read the revised instructions and sign a roster indicating that they had read and understood the procedures. The inspector noted that not all individuals within the department were made aware of the revised procedures and the RSO may not have adequately communicated the licensee's expectations of the staff with regard to the prompt documentation of source inventories.

As noted above, these findings were not identified as violations; however, you are encouraged to review these concerns and to implement any additional actions deemed appropriate by the RIC. In addition, we encourage that you review the results of your inspections at WHMC to determine why the concerns involving the process implemented for brachytherapy source inventories was not identified during inspections performed by the U.S. Air Force. You are encouraged to take any actions deemed appropriate based on your review of the results of previous inspections performed by U.S. Air Force personnel at WHMC.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter will be placed in the NRC Public Document Room.

Should you have any questions concerning this inspection, please contact Ms. M. Linda McLean at (817) 860-8116 or Ms. Linda Howell at (817) 860-8213.

Sincerely,

Ross A. Scarano, Director
Division of Nuclear Materials Safety

Docket No.: 030-28641
License No.: 42-23539-01AF

bcc to DMB (IE07)

bcc distrib. by RIV:
LJCallan
SJCollins
DBSpitzberg
*LLHowell
FAWenslawski
*MLMcLean
*MRShaffer
*NMI&FC\DB
*MIS System
*RIV Nuclear Materials File - 5th Floor
TTaylor, NMSS (T-8F5)

*W/IFS Form

DOCUMENT NAME: G:\NMIS.O\MRS\WHMC.MRS

To receive copy of document, indicate in box: "C" = Copy without enclosures "E" = Copy with enclosures "N" = No copy

RIV:NMI&FC/DB	NMI&FC/DB	C:NMI&FC/DB	ADD:DNMS	DD:DNMS
*MRShaffer	*MLMcLean	LLHowell	CLCain	RAScarano
01/ /97	01/ /97	01/30/97	01/ /97	01/31/97

*Previously concurred OFFICIAL RECORD COPY

050020

cc w/enclosures:
Texas Radiation Control Program Director

bcc to DMB (IE07)

bcc distrib. by RIV:
LJCallan
SJCollins
DBSpitzberg
*LLHowell
FAWenslawski
*MLMcLean
*MRShaffer
*NMI&FC\DB
*MIS System
*RIV Nuclear Materia's File - 5th Floor
TTaylor, NMSS (T-8F5)

*W/IFS Form

DOCUMENT NAME: G:\NMIS.O\MRS\WHMC.MRS

To receive copy of document, indicate in box: "C" = Copy without enclosures "E" = Copy with enclosures "N" = No copy

RIV:NMI&FC/DB	NMI&FC/DB	C:NMI&FC/DB	ADD:DNMS	DD:DNMS
*MRShaffer	*MLMcLean	LLHowell	CLCain	RAScarar
01/ /97	01/ /97	01/31/97	01/ /97	01/31/97

*Previously concurred OFFICIAL RECORD COPY