April 20, 2001

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE -- PNO-IV-01-016

This preliminary notification constitutes EARLY notice of events of POSSIBLE safety or public interest significance. The information is as initially received without verification or evaluation, and is basically all that is known by the Region IV staff on this date.

Facility
St. Joseph's Regional Health Center
Hot Springs, Arkansas
License No.: ARK-342-BP-04-02
State of Arkansas Licensee

Licensee Emergency Classification
___ Notification of Unusual Event
___ Alert
___ Site Area Emergency
___ General Emergency
_X_ Not Applicable

SUBJECT: MEDICAL MISADMINISTRATION

DESCRIPTION:

On April 12, 2001, the NRC was notified by the Arkansas Department of Health (ADH) of a therapeutic medical misadministration involving the superficial treatment of skin cancer using iridium-192 in a Varian VariSource High Dose Rate Remote Afterloader. The event occurred at St. Joseph's Regional Health Center located in Hot Springs, Arkansas. The Medical Physicist for the licensee notified the ADH of the misadministration on April 12, 2001. ADH staff conducted an investigation of the misadministration on April 13, 2001. The details of the investigation were provided to the Region on April 19, 2001.

The investigation determined that the licensee's Radiation Oncologist had prescribed a total dose of 60 gray to the hand webbing between the index and middle fingers of the patient's left hand to be delivered during 30 fractions of 2 gray each. The patient had received 24 of the 30 fractions, beginning March 6, 2001, through April 11, 2001, for a total of 48 gray before the misadministration was identified. The treatment was administered using a custom-made applicator with imbedded FlexiGuide needles. On April 11, 2001, the Radiation Oncologist requested that the Physicist verify the treatment site. Positioning of the treatment delivery system was confirmed by autoradiograph and the length of the FlexiGuide needles were confirmed to be 25 centimeters long. The Physicist had assumed that the needles were 20 centimeters long instead of the actual 25 centimeters. This resulted in the iridium-192 source being incorrectly positioned approximately 5 centimeters from the intended treatment site. The patient has been notified of the misadministration and a revised treatment plan has been developed. The licensee has not completed an evaluation of the possible health affects to the patient.

Region IV received notification of this occurrence by the State on April 12, 2001. Region IV has informed OEDO, NMSS, OSTP, and the Region's SLO and PAO.

This information has been discussed with the State and is current as of 9:30 a.m. on April 20, 2001.

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