February 21, 2003

THIS EVENT IS NOT FOR PUBLIC DISCLOSURE PER AGREEMENT STATE REQUEST UNTIL 2/25/03.

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE -- PNO-IV-03-012

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
University of California Medical Center
Orange, CA
License No.: 0278-30
California Agreement State Licensee

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

SUBJECT: THERAPEUTIC RADIOPHARMACEUTICAL MEDICAL EVENT

DESCRIPTION:

On February 20, 2003, the California Radiation Health Branch (the Branch) notified NRC's Operations Center that a patient had received a therapeutic radiation dose 60 percent below the prescribed dose.

University of California Medical Center, a California licensee, reported on February 20, 2003, that a patient, being treated for hepatic carcinoma, had been administered by injection 1.42 gigabequerel (38.5 millicurie) of yttrium-90 microspheres instead of the intended dosage of 3.55 gigabequerel (96.2 millicurie).

The delivery system consisted of an injection system connected to the vial containing the microspheres with one line leading to a receiving vial and another to the patient. The direction of the flow between the receiving vial and the patient was regulated by a valve connecting the two lines. Two detectors were mounted just beyond the vial containing the microspheres which gave a visual indication of when the microspheres were entering the line. The injection system is primed prior to the treatment and involves injecting a saline solution with the valve directed toward the receiving vial until the microspheres begin to enter the injection system. The valve is then turned to direct the flow to the patient.

The licensee reported that during the priming process the physicist did not turn the valve quick enough and accidentally washed about 60 percent of the activity into the receiving vial instead delivering the dose to the patient. The physician authorized user was present during the treatment and is assessing whether further treatment will be necessary. The licensee and the Branch are continuing to investigate this event.

Region IV received notification of this occurrence from NRC's Operations Center at 7:00 p.m. (EST) on February 20, 2003. Region IV has informed OEDO, NMSS, OSTP and the Region's PAO and SLO.

This information has been discussed with the State and is current as of 11:30 a.m. (CST) on February 21, 2003.

CONTACTS: Vivian Campbell 817-860-8143
Elmo Collins 817-860-8291