realized that the error occurred on September 27, 2004, when the patient underwent the scan. A viable follow-up scan was performed even though the error occurred. The referring physician notified the patient of the error on September 27, 2004. The nuclear medicine physician indicated there would be no negative health effects from this administration.

Cause or Causes—The licensee stated that human error led to procedural checks not being performed prior to the administration.

Actions Taken To Prevent Recurrence

Licensee—Corrective actions included re-emphasis on the importance of adhering to established procedures and protocols prior to the administration of radiopharmaceuticals and the completion of staff refresher training.

State Agency—The State reviewed and approved the corrective actions taken by the licensee and will follow-up at the next inspection.

This event is considered closed for the purpose of this report.

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AS 04–12 Therapeutic Medical Event at University of California at Los Angeles Harbor Medical Center in Torrance, California

Date and Place—June 7, 2002; Los Angeles County Harbor University of California at Los Angeles (UCLA) Medical Center; Torrance, California. This event was not identified as an AO until the preparation of the FY 2004 report.

Nature and Probable Consequences—A patient receiving treatment for thyroid ablation was administered a dose of 4.74 GBq (128 mCi) of I–131 instead of the prescribed dose of 1.18 GBq (32 mCi) of I–131.

On June 7, 2002, five patients were scheduled to be treated with I–131. Five vials containing I–131 arrived from the radiopharmacy and were properly labeled with the patients' names. The nuclear medicine technologist incorrectly thought that the name on the 4.74 GBq (128mCi) vial did not match any of the patient's names scheduled for treatment that day. Assuming that this vial was incorrectly labeled, the 4.74 GBq (128 mCi) dosage was administered to the patient for whom the technologist thought the dose was intended. However, the technologist failed to verify whether any of the remaining four dosages were labeled for that patient. In fact, a vial was correctly labeled as prepared for that patient.

The authorized user was present during the administration to supervise the administration of the radiopharmaceutical, and to verify that the correct radiopharmaceutical and dosage were administered. The authorized user did not perform an independent verification, but instead assumed that the nuclear medicine technologist had verified that the dosage was correct. The error was discovered about 5 hours later, when the patient scheduled to receive the 4.74 GBq (128 mCi) dosage arrived at the medical center for treatment. The patient and the referring physician were notified. The authorized user went to the home of the patient who received the inadvertent administration and verified that appropriate radiation safety precautions were in place. The patient's treatment plans were modified to accommodate the larger dosage. The authorized user stated that the dosage was intended to ablate the thyroid and render the patient hypothyroid, and that was accomplished with the larger dose. He further stated the patient is doing well, with no complications.

Cause(s)—This medical event was caused by human error which resulted in the licensee's failure to follow proper policies and procedures and verify the prescribed dosage for a specific patient.

Actions Taken To Prevent Recurrence

Licensee—The licensee re-instructed all nuclear medicine personnel on the importance of following the division's policies and procedures and the use of a third party to check the prescription dose and patient identification before administration. Additionally, the RSO will review all I–131 therapy documents and administrations.

State Agency—The State cited the licensee for failure to provide written notification to the referring physician and the patient within 15 days after the occurrence of the medical event. The State has reviewed and approved the licensee's corrective actions.

* * * * *

AS 04–13 Diagnostic Medical Event at University Hospital in Cincinnati, Ohio

Date and Place—March 10, 2004; University Hospital; Cincinnati, Ohio.

Nature and Probable Consequences—The licensee reported that a patient was given 74 MBq (2,000–Ci) of I–131 for a thyroid cancer work-up instead of the prescribed dose of 7.4 MBq (200–Ci) of I–123 for a thyroid uptake scan. The patient scheduled to receive the I–123 dose responded affirmatively to being the patient that was to receive the I–131 dose. The technologist did not follow procedures regarding proper identification of the patient, which requires two separate methods for verifying patient identification. A follow-up scan revealed the patient does have hypothyroidism, and as a result, the 74 MBq (2,000–Ci) of I–131 would have been prescribed based on the scan results. The referring physician and patient were notified. No adverse health effects are expected.

Cause or Causes—The technologist failed to follow established procedures.

Actions Taken to Prevent Recurrence

Licensee—The licensee disciplined the technologist in accordance with hospital policy and reiterated to all technologists the need to thoroughly check patient identification using two approved methods. Additionally, the Radiation Safety Committee modified the Quality Management Program to require a photo as one method of verifying patient identification.

State Agency—The Ohio Department of Health conducted an investigation of the event on May 11, 2004, and reviewed the licensee's corrective actions. The State found the licensee's corrective actions adequate to prevent a recurrence of the event.

This event is closed for the purpose of this report.

Dated at Rockville, Maryland this 18th day of April 2005.

For the Nuclear Regulatory Commission

Annette L. Vietti-Cook,

Secretary of the Commission.

[FR Doc. 05–8173 Filed 4–29–05; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

Draft Report for Comment: ''Consideration of Geochemical Issues in Groundwater Restoration at Uranium In-Situ Leach Mining Facilities,'' NUREG/CR–6870

AGENCY: Nuclear Regulatory Commission.

ACTION: Notice of availability and request for comments.

Background: Some mining processes use fluids to dissolve (or leach) a mineral without the need to remove physically the ore containing the mineral from an ore deposit in the ground. In general, these ''in-situ'' leach mining operations at uranium mines are considerably more environmentally benign than traditional mining and milling of uranium ore. Nonetheless, the use of leaching fluids to mine uranium may contaminate the groundwater aquifer in and around the region from which the uranium is extracted. The U.S. Nuclear Regulatory Commission (NRC) requires licensees to restore the

aquifer to established water-quality standards following the cessation of in-situ leach mining operations.

The NRC also requires licensees to ensure that sufficient funds will be available to cover the cost of decommissioning their facilities. For these uranium mines, restoration generally consists of pumping specially treated water into the affected aquifer and removing the displaced water—and thereby the undesirable contaminants—from the system. Because groundwater restoration can represent approximately 40 percent of the cost of decommissioning a uranium leach mining facility, a good estimate of the necessary volume of treatment water is important to estimate the cost of decommissioning accurately.

The subject report, prepared for the NRC by the U.S. Geological Survey, summarizes the application of a geochemical model to the restoration process to estimate the degree to which a licensee has decontaminated a site where a leach mining process has been used. Toward that end, this report analyzes the respective amounts of water and chemical additives pumped into the mined regions to remove and neutralize the residual contamination using 10 different restoration strategies. The analyses show that strategies that used hydrogen sulfide in systems with low natural oxygen content provided the best results. On the basis of those findings, this report also summarizes the conditions under which various restoration strategies will prove successful. This, in turn, will allow more accurate estimates of restoration and decommissioning costs.

The subject report will be useful for licensees and State regulators overseeing uranium leach mining facilities, who need to estimate the volume of treatment water needed to decontaminate those facilities.

Solicitation of Comments: The NRC seeks comments on the report and is especially interested in comments on the utility and feasibility of the modeling techniques described in the report.

Comment Period: The NRC will consider all written comments received before June 17, 2005. Comments received after July 17, 2005, will be considered if time permits. Comments should be addressed to the contact listed below.

Availability: An electronic version of the report is available in Adobe Portable Document Format at *http://www.nrc.gov/reading-rm/doc-collections/nuregs/contract/cr6870/cr6870.pdf* and can be read with Adobe Acrobat Reader software, available at no cost from *http://www.adobe.com*. Hard and electronic copies are available from the contact listed below.

FOR FURTHER INFORMATION CONTACT: Dr. John D. Randall, Mail Stop T9C34, U.S. Nuclear Regulatory Commission, 11545 Rockville Pike, Rockville, MD 20852, telephone (301) 415–6192, e-mail *jdr@nrc.gov*.

Dated at Rockville, Maryland, this 20th day of April 2005.

For the Nuclear Regulatory Commission.

Cheryl A. Trottier,

Chief, Radiation Protection, Environmental Risk & Waste Management Branch, Division of Systems Analysis and Regulatory Effectiveness, Office of Nuclear Regulatory Research.

[FR Doc. E5–2073 Filed 4–29–05; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

Availability of Interagency Steering Committee on Radiation Standards' Reports on Radioactivity in Sewage Sludge and Ash

AGENCIES: U.S. Nuclear Regulatory Commission and U.S. Environmental Protection Agency.

ACTION: Announce the issuance of two final reports concerning radioactivity in sewage sludge and ash.

SUMMARY: This **Federal Register** notice announces the availability of two final reports, prepared by the Sewage Sludge Subcommittee of the Interagency Steering Committee on Radiation Standards (ISCORS), addressing radioactivity in sewage sludge and ash at publicly owned treatment works (POTWs). The first report, ''ISCORS Assessment of Radioactivity in Sewage Sludge: Modeling to Assess Radiation Doses,'' assesses the potential levels of radiation doses to people from radioactivity in sewage sludge, by modeling the transport of radioactivity from sludge into the local environment. The report also provides a complete description and justification of the dose assessment methodology. The second report, ''ISCORS Assessment of Radioactivity in Sewage Sludge: Recommendations on Management of Radioactive Materials in Sewage Sludge and Ash at Publicly Owned Treatment Works,'' is written for POTW operators. This report is intended to (1) alert POTW operators and others to the possibility of radioactive materials concentrating in sewage sludge and incinerator ash, (2) inform operators how to determine if there are elevated levels of radioactivity in their sludge, and (3) assist POTW operators in identifying further actions that may be taken to reduce potential radiation exposures from sludge and ash.

SUPPLEMENTARY INFORMATION:

Background

The purpose of ISCORS is to foster early resolution and coordination of regulatory issues associated with radiation standards. Agencies represented on ISCORS include the U.S. Nuclear Regulatory Commission (NRC), the U.S. Environmental Protection Agency (EPA), the U.S. Department of Energy, the U.S. Department of Defense, the U.S. Department of Transportation, the Occupational Safety and Health Administration of the U.S. Department of Labor, the U.S. Department of Health and Human Services, and the Department of Homeland Security. The Office of Science and Technology Policy, the Office of Management and Budget, and State representatives may be observers at meetings. The objectives of ISCORS are to: (1) Facilitate a consensus on allowable levels of radiation risk to the public and workers; (2) promote consistent and scientifically sound risk assessment and risk management approaches in setting and implementing standards for occupational and public protection from ionizing radiation; (3) promote completeness and coherence of Federal standards for radiation protection; and (4) identify interagency radiation protection issues and coordinate their resolution.

Discussion: There have been a number of well-publicized cases of radionuclides discovered in sewage sludge and ash, and some of these have led to expensive cleanup projects. These incidents made clear the need for a comprehensive determination of the prevalence of radionuclides in sewage sludge and ash at POTWs around the country, and of the level of potential threat posed to human health and the environment by various levels of such materials.

In response to this need, ISCORS formed a Sewage Sludge Subcommittee to coordinate, evaluate, and resolve issues regarding radioactive materials in sewage sludge and ash. To estimate the amounts of radionuclides that actually occur in sewage sludge and ash, the Subcommittee performed a survey of radioactivity in sludge and ash across the United States. The final report of the survey effort, ''ISCORS Assessment of Radioactivity in Sewage Sludge: Radiological Survey Results and Analysis'' (ISCORS Technical Report 2003–02, NUREG–1775, EPA 832–R–03–002, DOE/EH–0669), was issued in