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

November 2003 and is available on the ISCORS Web site at *http://www.iscors.org.*

The Subcommittee also undertook a dose assessment to help assess the potential threat that these materials may pose to human health. The first final report that we are issuing, ''ISCORS Assessment of Radioactivity in Sewage Sludge: Modeling to Assess Radiation Doses'' (ISCORS Technical Report 2004–03, NUREG–1783, EPA 832–R–03–002A, DOE/EH–0670), describes the methodology and results of the dose modeling effort. The radionuclides considered were based on the results of the ISCORS survey, and include manmade and naturally-occurring isotopes. The general approach used in the report is a standard one that consists essentially of two steps. First, seven scenarios were constructed to represent typical situations in which members of the public or POTW workers are likely to be exposed to sludge. Second, assuming a unit specific activity of a radionuclide in dry sludge, environmental transport models were employed to obtain doses. A draft of this report was published for peer review and public comment in November 2003. Changes were made, as appropriate, to address comments in developing the final report.

The other major task of the Subcommittee was to develop recommendations for POTW operators. The second final report being issued, ''ISCORS Assessment of Radioactivity in Sewage Sludge: Recommendations on Management of Radioactive Materials in Sewage Sludge and Ash at Publicly Owned Treatment Works'' (ISCORS Technical Report 2004–04, DOE/EH–0668, EPA 832-R–03–002B), is for use by POTW operators in evaluating whether the presence of radioactive materials in sewage sludge could pose a threat to the health and safety of POTW workers or the general public. A draft of this report was published for public comment in November 2003. Changes were made, as appropriate, to address comments in developing the final report.

Based on the survey and dose modeling, ISCORS concludes that the levels of radioactive materials detected in sewage sludge and ash in the ISCORS survey indicate that, at most POTWs, radiation exposures to workers or to the general public are not likely to be a concern.

ADDRESSES: The two ISCORS reports on radioactivity in sewage sludge and ash being issued are available electronically from the ISCORS Web page at: *http://www.iscors.org.* Hard copies may also be obtained by calling or writing to Duane Schmidt, U.S. Nuclear Regulatory Commission, NMSS/DWMEP/DCD, MS: T–7E18, Washington, DC 20555–0001, (301) 415–6919, or *dws2@nrc.gov;* or to Robert Bastian, U.S. Environmental Protection Agency, Office of Wastewater Management (4204M), Rm. 7220B EPA EAST, 1200 Pennsylvania Ave., NW. Washington, DC 20460, (202) 564–0653, or *bastian.robert@epa.gov.*

FOR FURTHER INFORMATION, CONTACT: Duane Schmidt, U.S. Nuclear Regulatory Commission, NMSS/DWMEP/DCD, MS: T–7E18, Washington, DC 20555, telephone (301) 415–6919, fax (301) 415–5398, e-mail *dws2@nrc.gov;* or Robert Bastian, U.S. Environmental Protection Agency, Office of Wastewater Management (4204M), Rm. 7220B EPA EAST, 1200 Pennsylvania Ave., NW., Washington, DC 20460, telephone (202) 564–0653, fax (202) 501–2397, e-mail *bastian.robert@epa.gov.*

Dated at Rockville, Maryland, this 22nd day of April, 2005.

For The U.S. Nuclear Regulatory Commission.

Scott Flanders,

Deputy Director, Division of Waste Management and Environmental Protection, Office of Nuclear Material Safety and Safeguards.

[FR Doc. E5–2071 Filed 4–29–05; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

Draft Report for Comment: ''Documentation and Applications of the Reactive Geochemical Transport Model RATEQ,'' NUREG/CR–6871

AGENCY: Nuclear Regulatory Commission.

ACTION: Notice of availability and request for comments.

Background: The U.S. Nuclear Regulatory Commission (NRC) uses environmental models to evaluate the potential release of radionuclides from NRC-licensed sites. In doing so, the NRC recognizes that, at many sites, groundwater-related pathways could contribute significantly to the potential dose received by members of the public. Consequently, consistent with its mission to protect the health and safety of the public and the environment, the NRC uses contaminant transport models to predict the locations and concentrations of radionuclides in soil as a function of time. Through this notice, the NRC is seeking comment on documentation of a subsurface transport model developed for the NRC by the U.S. Geological Survey (USGS) for realistic transport modeling at sites with complex chemical environments.

Because many radionuclides temporarily attach, or adsorb, to the surfaces of soil particles, their mobility is reduced compared to that of compounds that move with the groundwater without interacting with solid surfaces. As a result, most subsurface-transport models used by the NRC and its licensees estimate the effects of the anticipated interactions between radionuclides and solids in the ground. Toward that end, these subsurface-transport models use a ''distribution coefficient,'' which is assumed to be constant and reflects the proportion of radionuclide in the groundwater compared to the radionuclide associated with the solids in the ground. These distribution coefficients are widely used, and consequently, the relevant literature documents ranges of their values for various soil types and radionuclides. However, the documented ranges can be very large because the chemical reactions that cause radionuclides to attach to solids are very sensitive to water chemistry and soil mineralogy. As a result, uncertainties in the parameters used to characterize the adsorption of radionuclides in soils have been identified as a major source of uncertainty in decommissioning, uranium recovery, and radioactive waste disposal cases evaluated by the NRC.

Surface-complexation and ion-exchange models offer a more realistic approach to considering soil-radionuclide interactions in performance-assessment models. These models can also account for variable chemical environments that might affect such interactions. The subject report, prepared for the NRC by the USGS, describes the theory, implementation, and examples of use of the RATEQ computer code, which simulates radionuclide transport in soil and allows the use of surface-complexation and ion-exchange models to calculate distribution coefficients based on actual site chemistry.

The RATEQ code will help the NRC staff define realistic site-specific ranges of the distribution coefficient values used to evaluate NRC-licensed sites. In site-remediation cases, such as restoration of the groundwater aquifer in and around uranium in-situ leach mining facilities, the RATEQ code can aid in the estimation of restoration costs by estimating the volume of treatment water needed to restore sites to acceptable environmental conditions.