

ENVIRONMENTAL AND NUCLEAR REGULATORS VIE FOR CONTROL OF RADIOACTIVE WASTE IN U.S.

The problem of mixed chemical and radioactive waste, and the mixed regulations that control it, could cause the three commercial low-level radioactive waste disposal sites in the United States to shut down on November 8.

US Ecology, Inc., has been requested to file on that date a hazardous waste permit application for its Richland, WA, disposal site with the U.S. Environmental Protection Agency (EPA) to comply with the Resource Conservation and Recovery Act (RCRA). The company plans instead to file a closure plan on part of the site to stop receiving scintillation vials.

Some medical waste, such as radioactive scintillation vials that also contain toluene and xylene, now falls under RCRA jurisdiction. EPA regulations (40 CFR 264), established for compliance with the RCRA law, conflict with the U.S. Nuclear Regulatory Commission's (NRC) rules on waste disposal (10 CFR 61), which govern waste disposal at the commercial sites.

Ruled by two masters

"It's impossible to comply with both the EPA and NRC. We can't be ruled by two masters who have different regulations," said Helen Burnett, assistant director for public affairs at US Ecology. In addition, it's possible that the EPA might decide that a wider spectrum of mixed waste, which may encompass a majority of the waste disposed at the Richland site, is subject to RCRA regulations, forcing the entire site to close, said Ms. Burnett.

"If RCRA regulations are to be implemented across the board, it is

possible that all three commercial low-level disposal sites will be similarly affected," said Captain William H. Briner, chairman of The Society of Nuclear Medicine's Government Relations Committee. The two other sites are located in Barnwell, SC, and Beatty, NV. The Beatty site is operated by US Ecology, and the Barnwell site is operated by Chem-Nuclear Systems.

Opposed requirements

As Jerry J. Scoville, president of US Ecology, explained to the House Subcommittee on Energy and the Environment at its hearing last spring, the dual regulation results in some diametrically opposed requirements. For example, the EPA rules require inspection and, if necessary, analysis of incoming waste, whereas the NRC rules discourage the opening of containers to prevent unnecessary exposure to personnel.

In addition, the EPA requires leachate collection and removal systems, while the NRC discourages these systems and instead prefers disposal sites to rely on locational characteristics and site stability for long-term maintenance.

The EPA also requires removal, treatment, and disposal of contaminated leachate. These actions would violate the ALARA (as low as reasonably achievable) principle of the NRC for occupational radiation exposure.

The EPA requires 30 years of post-closure care, whereas the NRC requires five years of post-closure care and a 100-year institutional control.

"Clearly the above differences in approach to the regulation of a waste disposal site demonstrates the need

for cooperative action between the two agencies," said Mr. Scoville. "Failure to do so will go far to discourage those states and individuals interested in developing new low-level radioactive waste sites," he added.

US Ecology notified the EPA in 1980 and again in 1983 of the conflicting regulations, requesting guidance. In 1983 the EPA stated that it was working on a memorandum of understanding with the NRC, but now both agencies indicate that there will be no such memorandum forthcoming.

In a letter to Senator Strom Thurmond (R-SC) and Representative Morris K. Udall (D-AZ), the NRC suggested that an amendment to the interstate low-level waste compact legislation could resolve the issue.

The Atomic Industrial Forum's Committee on Radionuclides and Radiopharmaceuticals also told Rep. Udall in March that "the regulatory responsibilities within the federal government are still somewhat clouded, and should be clearly fixed within a single agency, the NRC."

McCain amendment

Representative John McCain (R-AZ) has proposed an amendment to Rep. Udall's Low-Level Waste Policy Amendments Act of 1985 (see *Newsline*, May 1985, pp. 453-454) which would give the NRC sole authority over low-level waste sites, covering nonradiologic as well as radiologic waste, and solve the problem of conflicting regulations.

Capt. Briner said that "passage of the McCain amendment would solve one of the more pressing problems that we now face in the disposal of radioactive medical waste." ■