

United States Nuclear Regulatory Commission
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NRC COMMENTS ON EPA'S PROPOSED RADIATION STANDARDS
FOR YUCCA MOUNTAIN WASTE REPOSITORY

The Nuclear Regulatory Commission (NRC) staff has provided detailed comments on the Environmental Protection Agency's (EPA) proposed radiation protection standards for a possible future high-level waste repository at Yucca Mountain, Nevada.

As the agency responsible for licensing the possible repository, the NRC believes the standards should have a sound scientific and technical basis and that the need for the standards adopted should be fully justified on health and safety grounds.

The NRC objects to the EPA's approach in the proposed rule because:

(1) EPA's groundwater protection criteria could become the de-facto standards instead of the individual protection limit called for by the Energy Policy Act of 1992. EPA proposed a separate groundwater protection limit of 4 millirem per year to an individual. The NRC staff believes the inclusion of a separate groundwater limit would result in non-uniform risk levels for individuals and is in excess of what is needed for protection of public health and safety. Such an approach will cause confusion and diminish rather than enhance public confidence that adequately protective limits have been established.

(2) Portions of the proposed standard address how to determine whether the licensee for the repository is in compliance with the radiation protection standards. Congress assigned NRC the sole licensing responsibility for determining whether an application from the Department of Energy for a license to build and operate a possible repository at Yucca Mountain complies with pertinent regulations and standards.

(3) The EPA proposed rule would impose an individual dose limit of 15 millirem per year. The NRC staff objects to this limit because it is not necessary for protection of public health and safety and would provide little, if any, reduction in health risk. The NRC would prefer and has proposed in 10 CFR Part 63 an individual dose limit of 25 millirem per year using the all-pathways approach that includes analyses of the groundwater pathway. A 25-millirem individual dose

represents a small fraction of the national and international all-pathways public dose limit for an individual of 100 millirem per year, provides a level of protection that is consistent with NRC and EPA regulations for related waste management activities (such as low-level, high-level and transuranic wastes and spent nuclear fuel), and is consistent with the 1995 recommendations of the National Academy of Sciences in a report, "Technical Bases for Yucca Mountain Standards." To put these doses into context, a person would receive a 5-millirem dose from one round-trip cross-country airline flight, while the average individual dose from background radiation in the United States is 300 millirem per year.

Copies of the comments NRC sent to EPA will be available for review and copying for a fee through the NRC Public Document Room at 2120 L Street, N.W., Washington, D.C., 20555; telephone: 202/634-3273. An electronic copy will be available at the NRC's web site at <http://www.nrc.gov/OPA/reports/epa1199.htm>.

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