



## **EPA Proposed Rule on Repository for High-Level Radioactive Waste Would Seriously Undermine Public Health**

### **Rule Seems Designed to Fit Yucca Mountain**

### **Proposed Standard Would Allow Largest Radiation to Future Generations in the Western World**

#### **PRESS RELEASE**

*Takoma Park, Maryland, 9 August 2005:* The U.S. Environmental Protection Agency's (EPA) proposed rule for radiation doses to future generations would overturn all established principles of public health protection, according to the Institute for Energy and Environmental Research (IEER). The [dose limit](#) of 350 millirem per year beyond 10,000 years is three-and-a-half times the maximum limit allowed to the public from any human activity (other than medical radiation) according to current limits established in the United States and all western countries.

The new rule is being proposed in response to a federal court decision that required the EPA to limit radiation doses to future generations at the time of maximum [radioactivity](#) releases from the deep geologic repository being proposed for Yucca Mountain, Nevada. The most highly radioactive and dangerous waste from nuclear power plants and nuclear weapons production is proposed to be buried there.

"The EPA now has the dubious distinction of proposing a standard that would be the worst in the Western world, by far," said Dr. Arjun Makhijani, president of IEER. "No Western programs, explicitly allows as large as 350 millirem per year at the time of peak dose."

The goal of the French repository program, for instance, is to limit maximum doses, estimated to occur hundreds of thousands of years in the future, to 25 millirem per year. This proposed EPA limit beyond 10,000 years is more than ten times the French goal. The Canadian program limits doses to about 10 millirem per year for 10,000 years but does not allow a sudden increase after that. The EPA proposal would allow a sudden jump from 15 millirem per year to 350 millirem per year at 10,000 years.

IEER charged that the rule seems tailored to fit Yucca Mountain so that it could be licensed. According to estimates made by the U.S. Department of Energy, which DOE presented to the Congressionally-mandated Nuclear Waste Technical Review Board in 1999, the maximum dose from Yucca Mountain would be expected to be 200 to 300 millirem per year several hundred thousand years from the present. This is just under the proposed limit. The DOE charts can be seen at [/sdafiles/vol\\_7/7-3/yucca.html](/sdafiles/vol_7/7-3/yucca.html)

"The [dose limit](#) seems designed to protect the industry's interest in a bad site, rather than public health," said Dr. Makhijani. "This is one more example of what I have called the 'double-standard standard.' When Yucca Mountain cannot meet the rules, the federal agencies change the rules to fit Yucca Mountain."



Congress asked the National Academy of Sciences to advise the EPA on setting standards especially for Yucca Mountain in the early 1990s, when it appeared that the site could not meet one of the limits set for nuclear waste repositories set by the EPA in 1989. The Nuclear Regulatory Commission has also changed its rules for licensing since Yucca Mountain became the only site under investigation in 1987.

The 350 millirem limit proposed by the EPA is, according to its press release, supposed to be “based on natural background radiation levels that people currently live with in the United States.” IEER noted that besides natural radiation from cosmic rays and other sources that people get when they are outdoors, the 350 millirem per year number includes exposure to radon inside houses, which constitutes about two-thirds of the total.

“It is wrong to consider indoor radon, which is an artifact of construction, as part of ‘natural background’” said Dr. Makhijani. “Only doses that are truly natural, that cannot be controlled, should be regarded as natural.”

“The EPA is misleading the public when it says that this rule is based on natural background radiation levels,” said Lisa Ledwidge, IEER’s Outreach Director. “The dose limit that EPA is proposing is in addition to, not in place of, the amount of radiation exposure people will already be getting. If the EPA had a number to present they should have presented it without trying to deceptively downplay the risks.”

It is especially regrettable that the EPA has proposed such a lax rule just on the heels of a National Academy of Sciences report that showed that children are far more susceptible to radiation than adults, and that women and considerably more at risk than men. If a person is exposed to 350 millirem per year every year for 70 years, the lifetime risk of getting cancer due to the exposure would be about 1 in 40. For women it would be about 1 in 30. The risk of dying from that cancer would be about half the risk of contracting it.

“A lifetime risk of getting cancer of 1 in 30 violates every risk-based health standard the EPA has ever set for the public even if it far into the future — it opens the door to a wholesale relaxation on other fronts, such as cleanup of contaminated sites, said Dr. Makhijani. “I consider this the worst single action that the EPA has taken on radiation issues ever since I began analyzing them almost 25 years ago.”