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New Yucca Rule Would Allow Equivalent of 1700 Chest Xrays Over a Lifetime
Would Produce 1 Cancer Per 125 People Exposed
Dramatically Outside of EPA's Longstanding Acceptable Risk Range
Breaks Decades of EPA Protection Requirements

EPA has now finalized the radiation protection standards for Yucca at 15 millirem/year for the first 10,000 years and 100 millirem/year thereafter. The 100 millirem figure is a breathtaking break with decades of EPA strenuous positions that permitting that high an exposure is "nonprotective of health."

100 millirem per year is the equivalent of about 1700 extra chest Xrays over one's lifetime. (1 chest Xray = 6 millirem. Source: EPA's own press release of 6 June 2001 announcing its original 15 millirem Yucca rule; GAO report "Radiation Standards," June 2000, footnote 3, page 7). One doesn't even get one Xray unless there is a medical benefit, because of the incremental cancer risk. This rule would condemn large numbers of people for many generations to receive the equivalent of an unneeded chest Xray every 3 weeks of their life, from conception to death, with no medical benefit, and having had no say whatsoever in the matter.

The National Academy of Sciences's Biological Effects of Ionizing Radiation (BEIR VII) Report, prepared for EPA, estimates 1.14 excess cancers per thousand person-rem. The EPA new rule, thus, would result in 1 cancer caused by that radiation for every 125 people exposed, according to the accepted conversion of dose to risk. [0.1 rem/year x 70 year lifetime x 1.14 cancers/1000 person-rem = 0.008, or 1 in 125.]

Let us repeat that: The Yucca rule just issued by EPA would allow radiation doses, generation after generation, that would produce an extra cancer in roughly every hundredth person exposed, based on the government's own official risk estimates.

That is 100-10,000 times a higher cancer risk than EPA generally permits. EPA's historic acceptable risk range was 1 in a million to 1 in 10,000. A 1 in 100 risk is far outside EPA's accepted risk range.

And EPA has historically attacked any proposals by other agencies to permit radiation doses at 100 millirem per year. For example, then-EPA Administrator Browner on February 7, 1997,

wrote then-NRC Chair Shirley Jackson that a proposal to increase proposed dose limits for license termination from 15 millirem/year to 30 mrem/year was "not protective of human health and the environment." On April 21, 1997, EPA's Ramona Trovato from its Office of Radiation and Indoor Air testified that a proposed 100 mrem NRC rule was not "adequately protective and consistent with the protection afforded the public from other environmental carcinogens." As she stated, "To put it bluntly, radiation should not be treated as a privileged pollutant. You and I should not be exposed to higher risks from radiation sites than we would be from sites which had contained any other environmental pollutant."

The Bush Administration's last gasps, in its last months in office, to undermine radiation protections so as to help gain approval for a dangerous project that can't meet basic standards would condemn generations to come with cancers. It must be reversed. It is a matter of fundamental generational ethics that what we do today should not result in killing large numbers of people in future generations.

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