



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

November 15, 1996

PDR: per D. Macchione

Ms. Sally Katzen, Administrator
Office of Information and Regulatory Affairs
Office of Management and Budget
Old Executive Office Building, Room 350
Washington, D.C. 20503

Dear Ms. Katzen:

I am writing on behalf of the Commission to provide information which may be useful in your review of the proposed Environmental Protection Agency (EPA) radiation site cleanup regulation. Specifically, the Commission believes it is important to notify you of the NRC's current views and intentions regarding the inclusion of a separate groundwater protection standard in a site cleanup regulation.

The NRC and EPA have had a close working relationship in the development of both the EPA's proposed cleanup rule and in the issuance for public comment of a proposed rule on radiological criteria for license termination by the NRC in August 1994 (59 FR 43200). As you are aware, EPA has the authority to establish generally applicable environmental standards for the protection of the environment from radioactive material. In recognition of the EPA's statutory authority in this area, the NRC has involved the EPA in the development of the NRC site cleanup criteria rulemaking from its inception. Consistent with the NRC/EPA Memorandum of Understanding of March 16, 1992, the EPA will exempt NRC and Agreement State licensees from the EPA radiation site cleanup requirements if the EPA determines that the regulatory program established by the NRC's site cleanup rulemaking affords a sufficient level of protection to the public health and the environment.

It was within this context that the NRC's proposed rule was modified at the request of EPA to allow for consideration of a separate groundwater protection standard. Specifically, the NRC referenced EPA's regulation at 40 CFR Part 141 issued under the Safe Drinking Water Act and requested public comment on whether a separate groundwater protection standard was appropriate as a supplement to an all-pathways standard.

The NRC received approximately 100 public comment letters on its proposed rule, and, based on its legal obligation to consider fully the suggested alternatives in those comments, the NRC staff is evaluating alternatives to some of the provisions in the proposed rule. These issues include the residual radioactivity standard for release of a facility for unrestricted use, inclusion of a separate groundwater standard, the value of the maximum dose permitted if restrictions on use fail, inclusion of specific alternative criteria for certain facilities, reliance on institutional controls, and the use of an As Low as Reasonably Achievable (ALARA) requirement in site cleanup matters.

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The NRC is continuing its deliberations on selection of an all-pathways dose criterion for decommissioning which will ensure protection of public health and safety and the environment. Compliance with this criterion would provide an ample margin below the 100 mrem/yr radiation protection guide currently contained in proposed federal guidance. We are giving particular consideration to a range of values at or above 15 mrem/yr for which we believe the desired margin can be achieved, given our cost-benefit analysis.

We understand that EPA, in its draft proposed rule, is requesting comments on the appropriate choice for an all-pathways criterion. Given our commitment to protect the public through an appropriate all-pathways dose criterion and our view that implementation of this criterion also will ensure that groundwater contamination is small, we do not believe we can justify the cost associated with the adoption of a separate groundwater standard. We, therefore, plan to delete the requirement from NRC's final rule based on the information currently available to us.

In reaching this conclusion, the NRC has considered the safety impact of a separate groundwater standard and also has conducted analyses of the cost and benefits which reasonably could be expected should a separate groundwater standard be included to supplement a basic all-pathways dose criterion in the range of 15-30 mrem/yr. Our conclusion is that a separate groundwater standard will have minimal additional safety benefit compared to an all-pathways dose criterion and that the costs associated with this benefit can be unreasonably large. In arriving at this conclusion, we have drawn from our experience in cleanup of a number of contaminated sites and have considered various methods for achieving 40 CFR Part 141 levels for groundwater contamination. Those include the pump and treat process for the cleanup of existing groundwater, the removal of soil to preclude prospective contamination (over a 1000 year period of groundwater flow), and the supply of alternate sources of drinking water. We also considered the associated administrative burdens of predicting, monitoring, and controlling the migration of the plume of contaminated groundwater over a 1000-year period.

We believe that, for most sites, the concentrations of radionuclides in the groundwater would be either below or only marginally above the Maximum Contaminant Levels codified in 40 CFR Part 141. In the former case, the costs of demonstrating compliance would have zero health benefits, and in the latter case, the benefits would be very small compared to the costs to achieve them. We have been able to identify only a few hypothetical scenarios where the cost-benefit ratios would approach the range normally considered justifiable under NRC's regulatory framework (e.g., \$3 million per cancer averted). These would involve sites with a relatively large population (e.g., over 1000 people obtaining all their drinking water from the plume), where the dominant exposure pathway would be through the drinking of groundwater. However, in the analysis for real sites, the cost-benefit ratios associated with applying the drinking water standards are very unfavorable (\$30 million or greater per cancer averted). Even if the ratio were favorable, we believe that compliance with an appropriate all-pathways standard would satisfy the Atomic Energy Act requirement to protect public health and safety. That standard also would avoid the large unnecessary expenses associated with the majority of cases. Nevertheless, we will consider the need for a provision in our rule which

would allow imposition of additional controls for the drinking water exposure pathway if such an exceptional site were identified. We do not believe, however, that consideration of such remotely possible exceptional sites should dictate the content of the rule for sites in general.

Under the rulemaking policy we have followed consistently for many years, inclusion of a separate groundwater protection standard in an NRC cleanup rule under the Atomic Energy Act would need to be supported by a regulatory analysis which demonstrates that the costs are justified by the benefits. As the above discussion indicates, our analyses do not support this conclusion. If NRC is to include a separate groundwater protection standard in its rule, we would need EPA to provide us additional analyses demonstrating that the benefits justify the costs. The EPA analysis supporting its current draft rule is not helpful in this respect. We recognize, of course, that EPA may propose to include a separate groundwater protection standard in its own Atomic Energy Act cleanup rule on other than cost-benefit grounds. Whatever the grounds may be, we acknowledge our obligation to implement EPA's final rule.

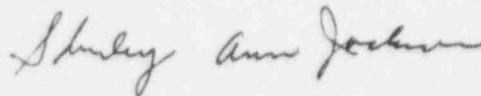
In addition, we would call to your attention a specific requirement in EPA's draft standards that poses an unnecessary and duplicative regulatory burden that has a highly questionable legal basis. Under the draft standards (§ 196.11(h)), the Administrator would have to approve technical impracticability determinations. As clarified in Section V.C of the draft Statement of Considerations (pages 137 and 138), EPA proposes to require such EPA approvals for facilities licensed by NRC and its Agreement States, even though these facilities otherwise would be exempted from the standards. As you are aware, NRC and EPA have coordinated the development of the standards to provide EPA the necessary basis to determine that NRC's regulatory program remains sufficiently protective of the public and environment. We see no value in requiring independent review and confirmation by EPA of decisions by NRC or Agreement States to grant technical impracticability waivers. This appears to be contrary to the aims of the Vice President's National Performance Review by adding unnecessary red tape and duplication of government oversight. Further, such an approach extends beyond the limits of EPA's statutory authority to establish generally applicable environmental standards. Under Reorganization Plan No. 3 of 1970, as later enacted into statute law (Pub. Law 98-614), EPA's authority in this proceeding is expressly limited to that authority, formerly exercised by the Atomic Energy Commission's Division of Radiation Protection Standards, to set "generally applicable environmental standards." A case by case EPA approval would represent the exercise of an adjudicatory function, or perhaps the power to issue a rule of particular applicability, but cannot be characterized as the exercise of power to set "generally applicable" standards. When a similar matter arose in EPA's development of standards for groundwater protection at inactive uranium mill tailings sites in 1987, years of negotiations between the agencies were required to resolve the issue in late 1994 in a way that avoided any EPA case-specific oversight function. It is important not to repeat the same exercise in this rulemaking. For these reasons, EPA should revise the draft standards to delete the requirement for EPA approval of technical impracticability determinations.

The Commission now will proceed to formulate and promulgate its final rule on radiological criteria for license termination. In formulating the final rule, the Commission is giving particular consideration to (1) an all-pathways dose criterion of up to 30 mrem/yr, (2) inclusion of specific alternative criteria for certain facilities, (3) elimination of the separate groundwater standard, (4) elimination of ALARA requirements from the rule, (5) reliance on institutional controls as proposed in EPA's rule, and (6) the appropriate value of the maximum dose permitted if restrictions on use fail.

We, of course, will be consulting with OMB, in accordance with our usual practice, on Paperwork Reduction Act and Small Business Regulatory Enforcement Fairness Act issues for this rule.

I trust these comments are helpful in your consideration of, and action on, the EPA proposed radiation site cleanup regulation. A copy of these comments has been sent to EPA Administrator Browner and Secretary of Energy O'Leary for information.

Sincerely,

A handwritten signature in cursive script, reading "Shirley Ann Jackson".

Shirley Ann Jackson

cc: Carol Browner, Administrator, EPA
Hazel O'Leary, Secretary, DOE