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

February 21, 1997

The Honorable Carol M. Browner
Administrator
Environmental Protection Agency
Washington, D.C. 20460

Dear Administrator Browner:

I am writing in response to your letter of February 7, 1997 in which you expressed concern over positions that NRC may be taking regarding groundwater remediation and cleanup levels in its final rule on radiological criteria for decommissioning. In particular, you indicated concern over the possibility that NRC would increase the 15 mrem/yr dose criterion for license termination as contained in NRC's proposed rule to up to 30 mrem/yr, and that NRC might delete the separate groundwater requirements of the proposed rule.

To begin, the Commission believes that the nation deserves a uniform approach to radiation regulation which protects people from significant hazard regardless of the source, whether it is Atomic Energy Act materials, naturally occurring materials, or other materials, and which focuses regulatory resources on the most significant hazards. Further, below an upper safety limit, cost-benefit considerations must apply in site specific implementation of the radiation protection standards.

The NRC staff is currently engaged in preparing a final rule for Commission consideration. The Commission wants to assure you that it will give careful consideration to EPA's views in reviewing the NRC staff's recommendations for finalizing the rule, particularly in the matters cited in your February 7 letter. Nonetheless, as you are aware, the NRC staff has previously briefed the OMB, and I have previously written to Sally Katzen of OMB, providing the Commission's preliminary view that the separate groundwater protection requirement may be deleted, and that the appropriate dose criterion is in the range between 15 and 30 mrem/yr. Consequently, there is a possibility that in the final rule, when promulgated, the NRC approach may differ from what EPA is recommending. However, the Commission believes that its position on these matters will be consistent with the above principles, as well as with the proposed Federal Radiation Protection guidance.

In your letter you refer to certain problems with consistency posed by two existing NRC guidance documents, the Branch Technical Position "Disposal of On-Site Storage of Thorium and Uranium, from Past Operations," 46 FR 52061, October 1981, and Policy and Guidance Directive FC 83-23, "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of License for Byproduct, Source, or Special Nuclear Material License," August 1987. The Commission recognizes the importance of

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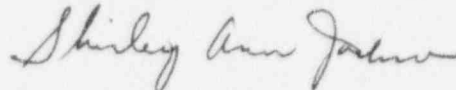
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consistency, and its views and concerns on this matter are discussed further in the enclosure to this letter. We will prepare updated regulatory guidance which reflects the final rule and delete, as appropriate, reference to guidance that is no longer applicable.

We appreciate being made aware of the possibility that if the EPA recommendations are not incorporated into our final rule, EPA would reconsider its policy on exempting NRC sites from the National Priorities List (NPL). The Commission will certainly take this into consideration in its deliberation on the final rule.

I also appreciate the offer of continued exchange between the EPA and NRC staffs. As you know the two staffs have been engaged in continuous dialogue on the difficult issues related to this rulemaking for some time, and the Commission believes that a thorough exchange of views at the staff level has already occurred without progress on reaching a mutually agreeable approach to risk harmonization. However, if you would find it useful, I would be pleased to meet with you to discuss general EPA-NRC interface issues. In the event that we agree that legislation is needed to achieve risk harmonization, as contemplated in our 1992 MOU, I am prepared to discuss that option.

Sincerely,

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

Shirley Ann Jackson

Enclosure: As stated

Enclosure
Additional Discussion of the Need for Regulatory Consistency

NRC and EPA agree that regulatory consistency is important. The issue of consistency arises in three different ways (1) internal consistency of NRC programs; (2) internal consistency of EPA programs; and (3) consistency between NRC and EPA programs. Over the past several years, both of our agencies have attempted to make our respective programs more internally consistent, and to work together to achieve consistency between the Agencies.

The joint NRC-EPA efforts in this area have been both generic (e.g., under the 1992 NRC-EPA Memorandum of Understanding on Risk Harmonization; and through the Interagency Steering Committee on Radiation Standards [ISCORS]) and specific (e.g., uranium mill tailings, air emissions standards, groundwater standards). In all of these areas, we have found that there is a tension between achieving internal and external consistency. This is because NRC and EPA, while generally achieving the same level of actual public health protection, take fundamentally different regulatory approaches. EPA and NRC have fundamental differences (1) as to what constitutes acceptable risk, and (2) whether to take a holistic (i.e., all-pathways approach) as opposed to a single pathway-by-pathway approach to environmental protection.

Background

In the 1992 MOU, both agencies committed to actively explore ways to harmonize risk goals and to cooperate in developing a mutually agreeable approach to risk assessment methodologies. The MOU says that if differences cannot be resolved, the matter is to be presented to the heads of both agencies for resolution. It also says:

If both agencies agree...that duplicative regulation in a particular area is undesirable, but nevertheless is required by law, then the agencies will cooperate in considering and, if appropriate, supporting legislative changes.

In 1994, the General Accounting Office ("Nuclear Health and Safety: Consensus on Acceptable Radiation Risk to the Public is Lacking," GAO/RCED-94-190) found disparities in the standards established by the different agencies and a lack of consensus on what these standards should be. Also in 1994, Senator John Glenn wrote to NRC, EPA, and the Office of Science and Technology Policy requesting an interagency "path forward" for solving the problems identified by GAO. ISCORS was formed in 1995 to improve coordination of interagency activities and to minimize duplication of efforts in the establishment of cleanup standards for radioactively contaminated sites. While ISCORS has made some progress in risk assessment, and has identified risk management problems, it has been less successful in resolving risk management issues. [ISCORS can only make recommendations to heads of Agencies.]

In 1995, in response to Senator Glenn's letters, NRC and EPA staffs jointly completed a "White Paper on Risk Harmonization" and ISCORS produced "Risk Harmonization Recommendations." Both EPA and NRC have been attempting to implement these recommendations.

Approach to Environmental Pathways

NRC's objection to the pathway-by-pathway approach is not merely that it is inconvenient. NRC recognizes the historical context and legal constraints under which EPA operates. NRC believes that the pathway-by-pathway approach is unwise because it encourages the compartmentalization of issues that should instead be looked at as part of the whole. This is an issue of what the appropriate approach should be to environmental protection.

For example, EPA and NRC have consistently disagreed with respect to the need to include separate groundwater protection criteria in decommissioning and HLW disposal standards. In both cases, NRC believes that individual protection criteria, which take into account all pathways, are sufficiently protective of the groundwater pathway, and represent a more uniform and comprehensive approach to protecting public health and safety. As such, NRC does not agree that there is any need for separate groundwater protection criteria. Additionally, NRC continues to believe that EPA's application of Maximum Contaminant Levels (MCLs) to decommissioning and repository disposal of HLW is fundamentally incompatible with the technical basis EPA employed to derive these levels. The issue is still unresolved in both rulemakings.

Acceptable Risk

NRC and EPA agree that there are risks that are generally unacceptable, risks that are generally acceptable, and risks that may or may not be acceptable depending upon cost-benefit and technical tradeoffs. The problem is that EPA and NRC disagree as to the numerical cut-points for making these decisions.

Groundwater ACLs. The philosophical difference between NRC and EPA regarding "acceptable risk" is illustrated by the following example of groundwater Alternate Concentration Limits (ACLs) for Uranium Mill Tailings Radiation Control Act (UMTRCA) Title II uranium mills. Briefly, EPA considers a targeted lifetime risk of $10E-6$, but will back off (based on technical and/or economic considerations) to a lifetime risk of $10E-4$ or above. NRC considers lifetime risks as high as $10E-4$ to be acceptable for ACL, but applies ALARA to move the standard to a more stringent level. Effectively, there appears to be little difference between the final standards selected by our two agencies, but the difference in our respective approaches to selecting those standards has caused several years of controversy. EPA finally agreed to NRC's wording in the AC guidance document, but required the $10E-6$ lifetime risk approach to ACLs to be applied at DOE's UMTRCA (Title I) sites, which NRC ultimately licenses.

Decommissioning Rule as Attempt by NRC to Achieve Internal Consistency

NRC agrees with EPA that existing NRC guidance recommends cleanup levels for some radionuclides that may result in doses higher than 15 mrem/year. The existing guidance (1981 Branch Technical Position and Policy and Guidance Directive FC 83-23), which was generated years ago, is a mixture of concentration limits, exposure rate limits, and references to EPA regulations; and not uniform dose limits (see attachment from SECY-91-342A). The related guidance documents will be revised following issuance of the proposed

decommissioning rule, which will contribute to achieving consistency. NRC believes that establishing a uniform dose criterion will make our decommissioning decisions both more rational and more consistent in terms of actual public health protection. This is one of our major reasons for going forward with the rulemaking.

CERCLA and the Decommissioning Rule

NRC understands EPA's concern that existing NRC criteria may be inconsistent with EPA's views on CERCLA. However, attempts to achieve consistency with CERCLA policy for non-radiological cleanups may move EPA away from consistency with NRC.

NORM and Indoor Radiation

From a national policy perspective, it makes little sense to require remediation of sites contaminated with source material (which is under NRC's authority) at the expense of hundreds of millions of dollars, when larger volumes of NORM contamination (under EPA's authority) posing comparable or greater hazards go unaddressed, for instance, coal ash. We question whether NRC-regulated materials should be held to a level of stringency not enforced or recommended for these other materials. We would like to achieve harmonization of these inconsistencies (e.g., through the comparative risk initiative with ISCORS).