UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
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JUL 23 2001

Mr. John Greeves, Director
Division of Waste Management [Mail Stop T7J-8]
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Greeves:

The purpose of this letter is to modify and revise the U.S. Environmental Protection Agency's (EPA) opinion concerning the level of protectiveness afforded by the U.S. Nuclear Regulatory Commission's (NRC) 25 mrem/year clean up dose limit for unrestricted release as it applies to the West Valley Demonstration Project (WVDP). Specifically, EPA now believes, based on information received and discussions with the NRC between January 2000 and the present, that portions of the WVDP site cleaned up, for unrestricted use, to Derived Concentration Guideline Limits (DCGLs) that are developed consistent with NRC's guidance for deriving concentration limits to meet the NRC's annual limit of 25 mrem TEDE (total effective dose equivalent) will result in a residual risk within the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) risk range of 10^{-4} to 10^{-6} when calculated in accordance with EPA's Risk Assessment Guidance for Superfund. As such, we believe the 25 mrem/yr cleanup dose limit will be protective at this site. This represents a change in our opinion as expressed in two pieces of correspondence, specifically the May 17, 1999 letter from Robert Hargrove to Mr. Dan Sullivan, and a January 10, 2000 letter from Jeanette Eng to Mr. Jack Parrott. A copy of each of these letters is attached. In both of these pieces of correspondence, EPA expressed concern that the NRC standard might not afford adequate protection of human health and the environment. This letter supercedes the opinion contained in both of those pieces of correspondence.

Background

On May 17, 1999 Robert W. Hargrove, the Chief of the EPA Region 2 Strategic Planning and Multi-Media Programs Branch, in a letter to Dan Sullivan of the U.S. Department of Energy, stated the EPA opinion that we "did not believe that a 25 mrem/yr dose constraint is adequately protective of human health or the environment because the NRC dose limit of 25 mrem/yr is outside of the risk range of 10^{-4} to 10^{-6} as established in the 1990 revisions to the National Contingency Plan (NCP)." That opinion was primarily based on two NRC policy issue papers referenced therein.

Enclosure 1

Additionally, on January 10, 2000 Jeanette Eng of my staff sent a letter to Jack D. Parrott, then of your staff, containing a copy of a statement prepared and read by Ms. Eng at a January 5, 2000 meeting concerning the application of 10 CFR 20 Subpart E to the West Valley Site. That statement contains language from which one could conclude that EPA continued to have concerns whether NRC's 25 mrem/yr dose constraint would achieve the CERCLA risk range. In large part, Ms. Eng's statement was based on information similar to that used in Mr. Hargrove's aforementioned letter.

Subsequent to Ms. Eng's statement, the NRC has provided much more guidance on how the 25 mrem/yr standard would apply and be applied at West Valley. It became clear to EPA that the NRC had designed sufficient conservatism into its guidance such that the 25 mrem/yr standard seemed likely to achieve the CERCLA risk range. In May 2000, while attending the National Conference of Radiation Control Program Directors Meeting in Tampa, Florida you and I conferred briefly and agreed that it would be advisable to pursue an agreement concerning cleanup guidance for the WVDP site. We agreed that New York State should be included in these discussions. I subsequently discussed this proposal with the two New York State agencies with regulatory responsibilities at West Valley, the Department of Health and the Department of Environmental Conservation, and they agreed to participate in a dialogue for the purpose of agreeing on appropriate clean-up levels for the site. These efforts culminated in a conference call amongst the parties on October 13, 2000. A summary of that discussion and the agreement reached were distributed via email, and a copy of that summary is also attached.

One of the key next steps suggested by your agency was that we make the DOE aware of the non-NRC cleanup goals so that DOE could focus on addressing them in the Environmental Impact Statement (EIS) development process. To implement that suggestion we requested time for each of our agencies to present our cleanup guidance at the annual WVDP Regulatory Roundtable which was held on July 17, 2001 at the WVDP site. During that meeting it became clear to you and I that it was necessary for EPA to provide a letter which would provide a written record and reference that EPA had modified and revised its position as stated in the two previously mentioned letters of May 17, 1999 and January 10, 2000. This letter is being written to satisfy that need. It is our intent that this letter be used by the DOE in the development of subsequent EISs as the operative guidance regarding EPA's position on the NRC 25 mrem/yr dose limit for free release at the WVDP and that our position is as stated in the first paragraph of this letter.

Other Issues and Challenges

The issue of protecting drinking water has been mentioned throughout this matter. EPA has enacted a standard for radionuclides in drinking water pursuant to the Safe Drinking Water Act (SDWA) for which the EPA has statutory authority. This standard requires a separate level of protection for radionuclides of 4 mrem/yr. The NRC's 25 mrem/yr standard is for all exposure pathways including the drinking water pathway. Our October 13, 2000 discussion and agreement concluded that depending upon the exposure from pathways other than the drinking water pathway, either the EPA or the NRC standard may be more restrictive. Notwithstanding, we

agreed that each standard applies at the site and, where applicable, must be met. This point was discussed at the WVDP roundtable and this should put to rest any belief that there is conflict between these standards. The actual determination as to compliance with the SDWA radionuclide standards is primarily vested with the State of New York which has received primacy for these standards from EPA.

It seems clear that as future EISs are developed by DOE, options will be developed and considered which will include leaving some radioactive material on a portion of the site. Such options will likely require that a license be obtained and that some institutional controls be maintained for some period of time into the future. As you pointed out at the roundtable meeting, these scenarios provide a challenge since they represent a different set of circumstances from a free release scenario for which we have provided an agreement on cleanup standards. We concur with your assessment and we believe that the best approach for the DOE to address health and environmental protection in future EISs for such scenarios is to use the NRC cleanup requirements in 10 CFR 20, Subpart E which allows for 100 and 500 mrem/yr dose levels for restricted release and for the DOE to show that with restricted release and controls such scenarios can still remain within the CERCLA risk range.

During the roundtable meeting you recommended on several occasions that the DOE needs to use the National Environmental Policy Act (NEPA) process to identify all applicable cleanup guidance from all relevant regulatory agencies. I believe you also emphasized the need for DOE to be inclusive in this process. We fully concur with that recommendation.

I would like to conclude with a personal note. I want to express my thanks and gratitude for your efforts and those of your staff. I believe our cooperative efforts over the past year to reach agreement on these issues has set the tone for the future.

Sincerely,

Paul A. Giardina, Chief
Radiation and Indoor Air Branch

Attachments [3]

cc: Alice Williams, U.S. DOE WVDP
Dan Sullivan, U.S. DOE WVDP
Colleen Gerwitz, NYS ERDA
Paul Merges, NYS DEC
Tim DiGiulio, NYS DEC
Tim Rice, NYS DEC
Karim Rimawi, NYS DOH
Adela Salame-Alfie, NYS DOH
Gary Baker, NYS DOH
Amy Snyder, U.S. NRC