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Dr. Janet P Kotra
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The Nuclear Regulatory Commission
Washington, D.C. 20555-0001

April 23, 2009

Dear Dr. Kotra:

In replying to your letter dated March 30, 2009 I totally disagree with NRC position stated that the "NRC position that does not have the statutory regulated chemical hazards or combine or the combine health effects from radiation and chemicals hazards." Since, the NRC is responsible to ensure that the public health is safe and to review and comply with all applicable Federal Acts and regulations how can they ignored health effects of mixtures?

A. THE NRC'S ENVIRONMENTAL RESPONSIBILITIES FOR YUCCA MOUNTAIN

The National Environmental Policy Act of 1969 (NEPA) which required all Federal agencies, as part of their decision-making processes, to consider the environmental impacts of major Federal actions. To satisfy these requirements, Federal agencies to perform a **review and assessment of the environmental impacts caused by these actions**. The potential issuance of a license for a geologic repository would be a major Federal action that would normally require NRC to prepare an EIS, to include the following:

Any environmental impact statement prepared in connection with a repository proposed to be constructed...shall, to the extent practicable, be adopted by the Commission in connection with the issuance by the Commission of a construction authorization and license for such repository. To the extent such statement is adopted by the Commission, such adoption shall be deemed to also satisfy the responsibilities of the Commission under the National Environmental Policy Act of 1969 [42 U.S.C. 4321, et seq.] and no further consideration shall be required, except that nothing in this subsection shall affect any independent responsibilities of the **Commission to protect the public health and safety** under the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.)

In accordance with NRC regulations for Yucca Mountain, a DOE license application submitted to NRC is to be accompanied by an EIS. These documents would identify and evaluate the **potential environmental impacts** of the proposed action in the license application. In accordance with Congress's direction, the NRC must evaluate DOE's EIS and determine if it can adopt it, with or without further supplement.

The DOE is required to comply with regulations Section 63.10 (a) and (b) of 10 CFR 63. Which stated the following “require the DOE to **submit a complete and accurate license application (LA)**; and § 63.10 b) report a significant implication for public health and safety... licensee fails to notify the Commission of information that the applicant or licensee has identified as having a significant implication for public.”

B. REPLY to Federal Acts and Regulations Compliance

Both NEPA Act 1969 and regulations and the Nuclear Act 1982 and its regulations: The NEPA Act of 1969 sec. 101 [42 USC § 4331](b) how can the DOE to show and to prove that the YMP high nuclear repository assure for all Americans **safe, healthful, productive, and aesthetically and culturally pleasing surroundings**; without addressing the issue of health risk specifically:

1. Sec 101(b)(2) To “attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, ... other undesirable and unintended consequences.”

How can the DOE-YMP prove that the human environment would not be effected without **addressing and ignoring issues of health risk of chemical hazards or the combine health effects from radiation and chemicals hazards at YMP?** Additionally, can the DOE-EIS show that YMP would not create “**an environment without degradation, risk to health or safety, or other undesirable and unintended consequences?**” And the how can the NRC give a blind OK check for not **assuring that YMP site is “safe?”**

The Nuclear Act of 1982 Sec.111(a)(1) stated that “radioactive waste create a potential risks and require safe and environmentally acceptable methods of disposal.” The DOE should have to **show that there are no potential risks and require safe and environmentally acceptable methods of disposal.** Next, Sec.112(a)(E)(i) Stated the following “the issuance of any environmental assessment under this paragraph shall be considered to be a final agency action subject to judicial review in accordance with the provisions of chapter 7 of title 5, United States Code, and section 119.”

What is NRC the legal inter preparation of these sections? Should the issue of health hazard of complex mixtures to be ignored is this is the NRC contention. This raises the questions whether YMP could become a CRCLA site, that why this issue not been discussed in the DOE-EISs? I would like to know how NRC is going to identify and evaluate the potential environmental impacts of the proposed action in the license application issues which I raised.

40 C.F.R. 1502.22 Stated the following when:

- (a) “If the incomplete information relevant to reasonably foreseeable significant adverse impacts is essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant, the agency shall include the information in the environmental impact statement.”

(b) If the information relevant to reasonably foreseeable significant adverse impacts cannot be obtained scientific evidences scientific evidences the agency shall include within the environmental impact statement:

My contention is that YMP EISs are incomplete since it failed to address “**foreseeable significant adverse impacts**” such as interaction between metals and radionuclide and the health risk posed to the population. Therefore the DOE EIS's is incomplete and LA especially the DOE failure to **reasonably foreseeable significant adverse impacts** such as **synergistic or additive interactions**

Furthermore, **the DOE should provide credible information in EISs comments to show the likelihood that cumulative impacts will not occur which they have failed to do so!** The NRC reviewers should have use the existing data to support an argument for considering weather “**cumulative impacts**” in the EISs documents. **The NRC reviewers should have to determine whether the cumulative impact assessment in a NEPA document adequate.** I have provided the NRC with literature review showing an interaction between radiation and chemicals including additive and synergism interaction. Regardless of NRC position that do not have the authority to evaluate health risk of mixtures. How can the NRCs evaluate the “**cumulative Impact**” and “**significant injuries**” **The DOE must comply with the US Supreme Court (401 U.S. 402, 1971 and 848 E. 2D 256, 261 (D.C. Cir 1988).**

In addition, the Council of Environment Quality (CEQ) issue regulations for implementation with the Supreme court reading of NEPA in *Kleppe Vs. Serrra Club* U.S. 390, 413-414 (1976)” And the “**Cumulative Impact**” is define in CEQ NEPA regulations as a direct effects, which are caused by the action and occur at the same time and place. Indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems. Effects and impacts used in these regulations are synonymous. Effects includes ecological ... or health, whether **direct, indirect, or cumulative.** Effects may also include those resulting from actions which may have both beneficial and detrimental effects, even if on balance the agency believes that the effect will be beneficial. The NRC should be guided in their evaluation of **CEQ cumulative effects analysis and identified included significant issues to be address in the EIS according to 40 CFR 1501.(b), 1501.7, and 1508(b)(7) .**

The DOE-YMP did not address the issue of **Cumulative Impact** and the issues of chemical hazards or the combine health effects and hazards from radiation and chemicals hazards and other environmental concerns it required such as: “resemble foreseeable” and “significant adverse impacts.” What justification does NRC has the authority to ignore these health hazards to human environment?

Did the DOE-YMP identify a significant implication for public from mixtures of heavy metals and radionuclide? If yes where in the YMP LA? It seems absolutely clear that the DOE has not complied with this section. **This section gives the NRC an authority to regulate and evaluate health hazard associated with mixtures (metals Ni and Cr and radionuclide mixtures) and it is consistence with NRC regulation in 10 CFR 63. Finally, the DOE did not fully comply with NRC regulations Section 63.10 (a) and (b) of 10 CFR 63? Which stated the following “require the DOE must submit a complete and accurate license application; and § 63.10 (b) report a significant implication for public health and safety... licensee fails to notify the Commission of information that the applicant or licensee has identified as having a significant implication for public.** How can the NRC while evaluated DOE LA and/or EISs these regulations it is consistence with 40 CFR regulations CFR 1501.(b), 1501.7; 1508(b)(7) and 40 C.F.R. 1502.22.

DOE-YMP provided me with **40 CFR Part 266 Storage, Treatment, Transportation, and Disposal of Mixed Wastes**; Final Rule 40 CFR Parts 261 and 268 hazardous Waste Identification rules. However, both EPA and NRC have an agreements on low-level mixed under a single Nuclear Regulatory Commission (NRC) or NRC Agreement State license on transportation storage facilities and disposal. Is YMP exempt from these regulations? Next, under Land Disposal Restrictions 40 CFR part 268 disposal of mixed waste is prohibits in seismic active zone. These regulations allow qualified generators of LLMW to claim a conditional exemption from the regulatory RCRA definition of hazardous waste for mixed wastes stored and treated by the generator under a single NRC or NRC Agreement State license. This conditional exemption acknowledges that NRC regulation for low-level waste (LLW) provides protective regulation of storage and treatment of mixed waste in tanks. The question to be asked is dose the NRC regulate high mixed waste? If yes or no please provide me with explanation. Did the NRC exempt YMP from the regulations I 40 CFR part 261 and 268?

C. Cumulative

I welcome, NRC steps taken by NRC staff and direct DOE to provide adequate discussion of the cumulative amounts of radiological and noradiological contaminates that may enters groundwater overtime, and how these contaminates characterize potential releases ... into the environment We have found that this failure to adequately ... of propose action environmental consequences. **I do believe that those deficiencies are significant enough to declare the YMP license application (LA) as incomplete.** I will review the YMP supplement EIS comments and will reply accordingly.

D. Conclusion

In conclusion, it is very clear that DOE-YMP LA is highly defiant additionally, they have the duty to include a discussion on chemical hazards or the combine health effects from radiation and chemicals hazards and the possibility/probability of YMP could become a CERCLA site since the DOE-YMP EISs are:

1. Incomplete and missing information and data within the impact analysis 40 CFR 1502.22 such as reasonably "foreseeable significant adverse impacts!"
2. Next, a noncompliance with sections of Section 63.10 (a) and (b) of 10 CFR 63 especially the failure to address or discuss the issue of "significant implication for public health and safety."
3. Also a failure to include and to address whether mixtures (metals and radiation) that can or cause a "Significant Injuries" in the EISs DOE did not comply with U.S. Supreme Court ruling 487 U.S. 871 (1990).
4. Did DOE-YMP in the EISs perform a complete review and assessments of all environmental impacts? My reply is no!
5. To the contrary, NRC position does not have the statutory power to address risks to environment and population from mixtures! Nevertheless, the NRC must comply with 40 CFR 1508 all applicable sections, and 40 CFR 1502.22; 10 CFR 63 (a)(b); 40 CFR 1501.(b) and 1501.7, 10 CFR 51.109. Compliance with these cited CFR regulations give statutory authority to the NRC to power to inform that the DOE must address, and to discuss the risks to environment and population from complex mixtures in the EISs.
6. Finally, the NRC did not comply with all U.S. Supreme court rulings.
7. How can the NRC given an approval to the construction LA? While, DOE-EISs clearly did not comply with Federal Acts and regulations.

Yours,



Dr. Jacob Paz

Cc//Senator Ried
Congresswoman Shelly Berkley
State of Nevada
Keith Rogers LVRJ