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September 12, 1995

Christopher S. Long, Colonel, USAF
Commander, 27th Support Group
100 S DL Ingram Blvd Suite 2000
Cannon AFB NM 88103-5217

Dear Colonel Long:

RE: Rational National Standards Initiative (RNSI), Pathways, Parameters, and Equations (PPE) Report, Cannon Air Force Base (CAFB)

The New Mexico Environment Department (NMED), commends the U.S. Air Force, Air Combat Command (ACC) for proposing ways to make the environmental restoration process more focused and efficient through the Rational National Standards Initiative (RNSI). The NMED recognizes that by applying the risk assessment process early in the environmental restoration process, determining the probable future use of a restoration site, and establishing screening levels for that site, that considerable time and moneys might be saved, and yet the process could remain protective of human health and the environment.

However, the NMED is concerned about a number of aspects of the submitted plan. Among these concerns are the following;

1. Screening action levels are generally for single contaminants in a single medium, under standard default exposure assumptions. The submitted plan does not address this fact. NMED is concerned about sites where no single contaminant might exceed screening action levels, but when contaminants are considered cumulatively they would pose an unacceptable risk. Please address the issue of how the proposed "screening/cleanup levels" will be valid for multiple contaminants in multiple medium.

2. As part of the basis for accepting risk based closures, NMED agrees to sanction remediation of Solid Waste Management Units (SWMUs) to less than the most conservative exposure scenario (i.e. residential), as long as the two following conditions are met. First, there must be a complete delineation of contamination as

outlined in item #3 below. Second, there must be mechanisms in place to re-evaluate risk should land use for the particular site change. NMED's preferred mechanism to ensure this re-evaluation is to require deed restrictions on properties where contamination left in place exceeds the most conservative exposure scenarios. This mechanism is not possible when an investigation does not fully identify the extent of contamination, as is proposed in the RNSI process. Perhaps CAFB can convince NMED that there are other mechanisms besides deed restrictions that would ensure a re-evaluation of risk should land use change. Please elaborate.

3. The RNSI process proposes to delineate soil contamination in all directions, horizontal and vertical, to screening/cleanup levels. NMED believes these levels may be acceptable in the horizontal directions, but that delineation levels in the vertical direction should be more stringent to ensure that potential threats to groundwater, generally the exposure medium of greatest concern, have been fully evaluated. Therefore, NMED requires vertical delineation to practical quantitation limits (PQLs) or background concentrations to definitively establish the threat to groundwater.

4. CAFB is disregarding the possibility of groundwater impacts and associated exposures when formulating screening/cleanup standards in this report. Tables 1-8 through 1-44 all claim that "Groundwater is not considered an exposure pathway due to its depth and the small chance of contamination from soils." NMED believes this is a poor assumption that might cause the formulation of an inappropriate risk calculation. The potential for groundwater impacts at the facility is implied by the unconfirmed detection of Dieldrin in the Base supply well #6 and TCE and Dicamba in Base supply well #3, and the confirmed presence of a diesel impact to the groundwater below the city of Clovis at depths similar to that at CAFB. CAFB must either demonstrate no threat to groundwater or include a groundwater exposure scenario for all SWMUs, both at the main base and at Melrose Air Force Range (MAFR), when calculating screening/cleanup levels.

5. NMED requires that future land use be considered as a residential exposure scenario until there can be an agreement to the contrary between all stakeholders, including the facility, community representatives and the regulators. For your information, NMED considers that current land use is an appropriate estimation of future land use as long as there are mechanisms in place to re-evaluate risk should land use change at the particular SWMUs. Perhaps this issue can be resolved through the newly formed Restoration Advisory Board (RAB) at CAFB.

6. NMED believes that if a site has only one contaminant and its concentration exceeds screening action levels, or if there are multiple contaminants near the screening action level, that site

must undergo at a minimum a complete baseline risk assessment as outlined in the EPA's Risk Assessment Guidance for Superfund (RAGS). The plan does not specifically state what criteria would trigger the need for a Corrective Measure Study (CMS), which would also trigger a complete baseline risk assessment of the site. Please include this information.

7. The NMED is concerned about the possible confusion of having different screening levels for the different contaminants at different SWMUs. Currently accepted procedure dictates that site data be compared to a single set of screening criteria. Perhaps screening levels can be presented together with the analytical data for comparison purposes, and any exceedences flagged. Please propose methods to reduce this possible confusion.

What commitment does CAFB make to keeping screening action levels current with the most up to date and accepted toxicological/epidemiological parameters used to calculate reference doses or carcinogenic slope factors? It seems conceivable that the parameters might change between the time the screening/cleanup levels are calculated and the time that the investigation/remediation occurs. For your information, NMED recognizes the EPA region III "Risk Based Concentration (RBC) Table" as listing the most appropriate and current screening action levels.

Furthermore, the PPE General Report quotes outdated NMED guidance regarding acceptable screening criteria in Table 5-1 and on page 5-10. The NMED/Hazardous and Radioactive Materials Bureau (HRMB) currently adopts EPA Region III policy.

8. NMED requests that CAFB perform an adequate ecological risk assessment for SWMU 103, the wastewater playa lake. This SWMU has considerable wildlife activity associated with it that cannot be ignored.

9. Because CAFB has identified construction workers who might be excavating at a site as having the highest potential for exposure to contaminated soil and air, CAFB must identify in this report how it proposes to protect those workers.

10. The report contains very little specific information regarding Melrose Air Force Range. Please, at a minimum, provide a map of this installation.

11. Table 1-2 in the CAFB PPE report implies that the facility has performed a "relative risk evaluation". NMED understands that this is an Air Force initiative but did not believe that CAFB had gone through the process. Please elaborate on this.

12. Land use described on Table 1-7 (Future Land Use for IRP Sites

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at CAFB) does not coincide with the land use shown on Figure 1-4 (Future land Use Map) for SWMUs; 101, 102, 108. Please correct this discrepancy.

13. In closing, let me state that it is not NMED's intent to hinder or impede CAFB's environmental restoration program, and as always, CAFB is encouraged to proceed with its cleanup efforts, including those outlined in RNSI. But, should CAFB proceed without NMED's approval and NMED decides that CAFB's efforts insufficiently protect human health or the environment, CAFB may be asked to perform additional work.

If you have any questions regarding these comments or concerns, please contact Mr. Steve Pullen of the HRMB at (505) 827-1558.

Sincerely,



Ed Kelley, PhD, Division Director
Water and Waste Management Division, NMED

cc: Benito Garcia, HRMB, NMED
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