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October 4, 1996

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Major General John Costello
Commander
USAADACENFB
Attn: ATZC-CG
Fort Bliss, Texas 79916-6816

Dear General Costello:

The New Mexico Environment Department (NMED) has reviewed the RCRA Subpart X permit (Open Detonation facility) required RCRA Facility Investigation (RFI) Workplan for Nine Solid Waste Management Units (SWMUs), Fort Bliss (FB), Texas, dated February 1996.

The NMED finds the workplan deficient as described in the attached list of deficiencies. A draft copy of the deficiencies was delivered to FB in June of this year and the appropriate corrections were made to the workplan in a July 10, 1996 submittal to this Department. NMED provides this letter to complete the administrative record for Fort Bliss.

If you have any questions, please contact Mr. Steve Pullen at (505) 827-1558.

Sincerely,

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

Enclosure

cc: Benito Garcia, Chief, HRMB NMED
Barbara Hoditschek, Mgr. HRMB, NMED
Marcy Leavitt, Chief, GWQB NMED
Steve Pullen, NMED
David Neleigh, EPA
Jim Stephanov, FB

Attachment

LIST OF DEFICIENCIES

Response to the Fort Bliss (**FB**) RCRA Facility Investigation (**RFI**) Workplan (**WP**) dated February 1996

General Deficiencies:

1. The New Mexico Environment Department (**NMED**) requires that FB abide by the HSWA permit Data Management Plan, Section V.3.g.2. This section requires a presentation in the RFI WP of the format the RFI report will use to present data and conclusions. Regulatory review and response to the RFI report will be expedited if FB will present all exceedances of the following comparative levels in the order mentioned.

First - regulatory standards, federal maximum contaminant levels (**MCLs**) or New Mexico (**NM**) state groundwater standards
Second - action levels, NMED recognizes the Environmental Protection Agency (**EPA**) Region 3 risk-based concentration (**RBC**) numbers for the yearly quarter previous to the date on the RFI report
Third - background concentrations
Fourth - any detection above the method detection limit (**MDL**)
Fifth - any tentatively identified compounds (**TICs**)

2. New Mexico has more recently effected groundwater regulations than those mentioned in Section 3. The WP must reference the New Mexico Water Quality Control Commission Regulations, effective December 1, 1995. A copy of these regulation will be provided upon request.

3. FB has two options for any sites where action levels (EPA Region 3 RBC numbers) are exceeded. The facility may either remediate to below the those action levels or, the facility may provide to NMED a complete baseline risk analysis that justifies alternative cleanup standards. If during the course of this investigation FB determines that there is an imminent and substantial danger to human health or the environment, NMED must be notified immediately.

4. In identifying receptor populations for risk estimations, FB must evaluate for ecological receptors, particularly endangered or threatened species, as required by Section V.3.e.5 of FB's HSWA permit. Please evaluate the migratory bird populations using the oxidation lagoons in light of the presence of pesticides at

Orogrande.

5. Risk assessments performed at FB must be evaluated using the standard EPA default parameters for a residential exposure scenario until an alternate future land use has been agreed upon by the appropriate stakeholders. NMED recommends that FB initiate stakeholder discussion regarding land use so that the results of the RFI can be appropriately evaluated in a timely manner.

As land owners, the Bureau of Land Management (**BLM**) and White Sands Missile Range (**WSMR**) are principle stakeholders at particular SWMUs and must be involved, at their option, in the future land use determination.

6. For future reference, NMED generally considers current land use a reasonable estimate of future land use. However, NMED recognizes that land transfers may occur in the future that would cause the exposure scenario for the property to be more conservative (e.g. residential) and thus require more conservative exposure assumptions and possibly cleanup standards. In consideration of this possibility and to ensure that the environmental risks associated with a site are not forgotten, Fort Bliss must either provide for a deed restriction or some other equivalent land use restriction to be entered with the appropriate authority or, preferably, show that the facility has a mechanism in place to readdress risk and, if necessary, to clean up the site to more stringent standards in the future.

7. NMED is concerned that SWMU locations will be lost with time. This appears to have almost happened at the McGregor OD Area, SWMU 20. FB must accurately identify SWMU coordinates and place permanent markers at all locations that are apt to return to native vegetation.

8. In general, the quality assurance/quality control (**QA/QC**) of determining soil background concentrations outlined in this WP is inadequate. NMED may consider any detects of potential contaminants in the immediate vicinity of a SWMU to be attributed to a release from that SWMU. FB must provide good rationale for background information.

NMED would consider a proposal from FB to select single, remote background locations at each of the three (3) NM posts. FB should also analyze samples from all distinct soil types at each location. FB may propose to use the background determinations for the McGregor Open Detonation Treatment unit for the other McGregor SWMUs.

9. FB must include a test for explosive materials and residues in all environmental media samples at landfill and OD sites.

10. Regarding closure of solid waste landfills, FB must at a minimum abide by the capping requirements of the NM Solid Waste Management Regulations (EIB/SWMR-4). Please evaluate in the RFI report the soil caps currently covering the landfills in light of these regulations. Please also evaluate the erosion potential of the landfills, particularly the Orogrande Sanitary Landfill reported to be near an arroyo.

11. FB must provide a separate letter describing how solid wastes are currently being handled at the NM posts.

12. FB does not commit in the WP to contacting the Administrative Authority (**AA**), NMED, about changes made during the investigation to work prescribed in a regulatorily approved work plan. FB must be aware that, if work proceeds contrary to the approved WP, FB will be at risk of noncompliance with the HSWA permit (see Standard Conditions, Section B.8).

13. Composite sample results will not be accepted by the AA if they are to be analyzed for volatile organic compounds or, if the method detection level (MDL) is too high to compare to the appropriate action level divided by the number of samples composited.

14. Soil vapor surveys are common investigative techniques at landfill sites but have not been proposed by FB for this RFI. Due to the possible presence of volatile constituents in the four (4) landfills, and the fact that these volatiles are generally mobile, NMED will not consider a complete effort has been made to determine whether a release has occurred at the landfill sites without an adequate soil vapor survey.

15. NMED believes that the planned vertical boreholes at the landfills will be insufficient to determine contaminant migration, particularly if the borings will be twenty five (25) feet from trench boundaries. FB must propose a more definitive plan at these sites.

16. Please elaborate in this work plan on what efforts will be made to define the boundaries of the landfills. Based on a conversation with Colonel Lund, FB Range Commander, on October 13, 1994, NMED understands that there are three (3) cells at Dona Ana, not the two (2) mentioned in this work plan.

17. FB must identify the EPA SW-846 analytical methods it proposes to use as required by Section N.1.b.3.

18. FB suggests that groundwater is generally three hundred (300) feet below ground level and has little potential to be impacted by contaminant migration. The RFI report must at a minimum supply conclusive evidence of groundwater depths and quality below each of the three (3) NM posts.

19. NMED acknowledges the receipt of the permit-required worker health and safety documentation. However, it is the facility's responsibility to maintain working conditions that insure worker health and safety pursuant to 29 CFR, Section 1910.120. Therefore, liability for operations relating to worker health and safety remain with your facility.

Site Specific Deficiencies:

SWMU 18, McGregor Rubble Pit/Landfill

Please elaborate on the regulatory requirements for groundwater analytes listed on page 6-16 (TOC, TPH and SVOCs). The regulatory agency at the NMED responsible for approving this work plan, the Hazardous and Radioactive Materials Bureau (**HRMB**), is not aware of this list.

SWMU 19, McGregor Range Oxidation Pond

Please elaborate in Section 6 on the decision criteria that will be used to determine the screened interval of the monitoring wells.

Please clarify the phased approach to contaminant characterization described on page 6-39.

SWMU 20, McGregor Range Open Detonation Area (inactive)

NMED requires that the same constituents analyzed for at the active McGregor Range Open Detonation Area be analyzed for at this SWMU.

FB must elaborate on the possible presence of "kick out" of explosive debris from this unit. Without a thorough understanding of all possible risks at this site, NMED will not consider that nature and extent of contamination have been determined, nor will NMED sanction removal of this SWMU from FB's permit.

FB must justify why it is not proposing to analyze the contents of the drums?

NMED believes that petroleum hydrocarbons were commonly used at detonation areas to initiate the destruction process. Please include this as a possibility in the WP or explain why not.

SWMU 25, Orogrande Range Rubble Pit/Landfill

Please elaborate on the tar material west of the trenches and how the nature of this material is known.

SWMU 25 B, Orogrande Range Oxidation Pond

A complete investigation of this SWMU necessitates a determination of whether contamination exists at the sludge drying beds and, if so, what the nature and extent of that contamination is.

For future reference, based upon preliminary data, NMED will not be able to concur with a recommendation of no-further-action, nor be able to remove this SWMU from FB's HSWA permit without a commitment to further monitor influent and releases to assure that hazardous constituents are not being released. Please refer to the "Specific Waste Ban", Section B.6., of FB's HSWA permit.

The ecological risks are of particular concern at this site due to its being an isolated water source with measured levels of pesticides. Please address this issue.

SWMU 27, Dona Ana Rubble Pit/Landfill

Principally due to the proximity to a potable aquifer and the difficulty of investigating landfills, NMED requires a complete regional groundwater monitoring well network in association with this SWMU.

SWMU 27B, Dona Ana Range Oxidation Pond

Principally due to the proximity to a potable aquifer and the fact that the pond is not lined, NMED requires a complete regional groundwater monitoring well network in association with this SWMU.

SWMU 29, Dona Ana Range Sanitary Landfill

FB must provide statistical justification that four (4) shallow soil borings in a five (5) acre landfill are adequate to determine whether a release has occurred. Otherwise, NMED will not consider the RFI complete based on the work outlined in this plan.

NMED requires a complete regional groundwater monitoring well network in association with this SWMU.

SWMU 76, Meter Range Oxidation Pond

See general comments.