



BRUCE KING
GOVERNOR

State of New Mexico
ENVIRONMENT DEPARTMENT
Harold Runnels Building
1190 St. Francis Drive, P.O. Box 26110
Santa Fe, New Mexico 87502
(505) 827-2850

ENTERED
JUDITH M. ESPINOSA
SECRETARY

RON CURRY
DEPUTY SECRETARY

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

May 10, 1993

Mr. Walter Darr
1606 Air Base Wing
Kirtland Air Force Base
Albuquerque, New Mexico, 87117

RE: NOTICE OF DEFICIENCY
NM9570024423

Dear Mr. Darr,

The New Mexico Environment Department (NMED) has completed an administrative review of the Kirtland Air Force Base (KAFB) Open Burning/Open Detonation (OB/OD) application entitled: Kirtland AFB and DRMO; Revision 3, and dated May, 1988 for an OB/OD operating permit as required under the Resource Conservation and Recovery Act.

Based on this review NMED has found the application to be administratively deficient. Enclosed is a list of the deficiencies that must be addressed in accordance with the New Mexico Hazardous Waste Management Regulations (HWMR-7, as amended 1992), Part V and IX, 40 CFR §264 and §270 respectively. KAFB is asked to comment where necessary in order to rectify any misunderstandings.

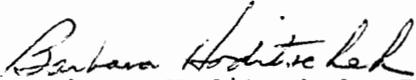
Submit the requested information in one package as a comprehensive permit application within 45 days from the receipt of this letter. You may request a meeting to discuss the deficiencies and the required information. Such a meeting should be held as soon as possible within the 45 day period since the meeting will not suspend the 45 day deadline for compliance with this notice. Failure to provide all requested information within the 45 days could result in permit denial. Upon submission of a complete application, KAFB will be notified of the determination of administrative completeness.



Page 2
Darr, KAFB
May 10, 1993

If there are any questions regarding this issue, you may contact
Cornelius Amindyas of my staff at (505) 827-4308.

Sincerely,



Barbara Hoditschek, Program Manager
RCRA Permitting
Hazardous and Radioactive Materials Bureau

cc: David Neleigh, EPA Region 6H-PN
Benito Garcia, Bureau Chief, HRMB
Harry Davidson, KAFB
File-Red, 93

ATTACHMENT

A LIST OF THE DEFICIENCIES THAT MUST BE ADDRESSED BY KAFB

Note: Items # 2 through # 6 refer to sections from KAFB's Part B Open Detonation permit application text. The remaining listed items are the additional required topics that were not found in the application, but must be discussed.

1. **Contents of Part A of the Permit Application**

HWMR - 7, Part IX, 40 CFR, §270.13

KAFB must present an updated Part A application stating the proposed amount (pounds or kilograms) of munitions to be detonated per year and the frequency with which the munitions will be destroyed. Include the name and address of the facility manager.

2. **KAFB Section B-2: General Facility Description**

HWMR-7, Part IX, 40 CFR, §270.14(b)(19) and §270.23(a)

- a. KAFB must furnish a description of the standard operating procedures, and detailed specifics of the Explosive Ordnance Disposal (EOD) unit stating the dimensions (i.e. length, width and depth) of the pit where the open detonation of the subject munitions will be conducted.
- b. Provide site-specific operating conditions including atmospheric, meteorological and topographic characteristics of the unit and surrounding areas i.e. annual and 24 - hour rainfall data, seasonal temperatures, and relative humidity.
- c. Submit a comprehensive account of the proposed hazardous waste management practice that will be conducted at the facility.
- d. Should KAFB wish to perform Open Burning of the hazardous munition wastes, this portion of the planned project must be addressed in the application text including engineering drawings of the OB unit, the physical characteristics of the OB on the ground surface, the construction materials, and dimensions of the proposed unit.

3. **KAFB Section C-2: General Waste Analysis**

HWMR-7, Part IX, 40 CFR, § 270.14(b)(3); §264.13(b)(1)

- a. KAFB must explain how the physical and chemical characterization and analysis of the generated hazardous wastes and trace organics after treatment will be carried out. The type, volume, concentration and chemistry of the destroyed munition waste constituents after the proposed thermal treatment must be described.
- b. Also, KAFB must provide a more detailed description of the components generated by each munition type listed in Exhibit C-2a. For example: Item # 7 listed as "Bulk Explosives" could be more specifically described as TNT, RDX, HMX...etc. A similar more comprehensive description is required of the other listed waste munitions of interest. Another example is # 10 - "Rocket/Missile Motors". Here, What metals were used in manufacturing the motors, and what propellant was used?
- c. KAFB must explain the following items found in the table entitled "Exhibit C-2b":
 - i) "Quantity", What are the units?
 - ii) "Volume", Explain what the letters " MT" stand for.
 - iii) "Containers", For example Container 3AA 2015. Explain. Are these brass, stainless steel?.. etc.
 - iv) Why are these containers listed, are they part of the thermal treatment?

4. **KAFB Section D: Appendix C-2: Waste Sampling**

HWMR-7, Part IX, 40 CFR, §264.13(b)(3,4) and Appendix I

KAFB must demonstrate how representative samples of hazardous munition waste will be obtained from potentially contaminated soils in the detonation area. A sampling and analysis plan (SAP) that is site-specific and third-party executable must be provided. The SAP must include at a minimum the following: the SW-846, EPA approved methods used to sample the contaminated soils; the rationale for the choice of the sampling methods; the statistical approach, procedures and bases applied in data acquisition and evaluation (for example-determination of the appropriate number of samples to be taken from the Open Detonation site). The frequency of sampling and the types of samples to be taken and the chain-of-custody must be furnished in detail.

5. **KAFB Section D-2.a: Means to control entry**
HWMR-7, Part IX, 40 CFR, §264.14

- a. Provide a site-specific security plan and show how that plan will interface with KAFB's facility-wide plan.
- b. Explain the lack of a fence around the range perimeter, since this poses a potential danger to both human and wild life.

6. **KAFB Section M-2.b: Closure and Post-Closure Plans**
HWMR-7, Part IX, 40 CFR, §264.112(4); §264.113 and §270.14

- a. KAFB must provide a detailed description of the procedures and steps needed to remove or decontaminate the soils and all hazardous waste residues generated during the Open Detonation of the munitions destroyed. When does clean-up take place?
- b. Submit a comprehensive closure schedule that contains a description of the total time to close, and trackable intervening closure activities.
- c. KAFB shall identify the person responsible for storage and updating of facility copies of the closure plan. The location(s) and number of copies of such documents shall be known.

7. **Quality Assurance/Quality Control (QA/QC)**
HWMR-7, Part IX, 40 CFR, §270.30(e) and §264 Appendix I

KAFB must describe in detail the Quality Assurance and Quality Control (QA/QC) Plan for the entire OB/OD program, since the QA/QC implementation will determine the accuracy, precision, and overall integrity of the project. Provide a comprehensive account of the Standard Operating Procedures (SOP) for sample collection and handling methods, sample locations, documentation requirements, and the depths that will be sampled. Submit a plan on data handling and validation techniques, field data records and forms, and determine EPA approved analytical methods.

8. **Hydrogeological Assessments**
HWMR-7, Part IX, 40 CFR, §264.601

- a. KAFB must specify the solubility and mobility of each hazardous waste constituent in the soil and in ground water. The hydrogeological characteristics of the site, depth to water beneath the unit, estimated net recharge

rate, topography of the unit, and a description of the soil types between the ground surface and the water table, precipitation patterns in the area, land use patterns and hydrological characterization of the Explosive Ordinance Disposal Range must be provided.

- b. In addition, KAFB must address the water quality standards, water quality data and uses, the flora, fauna and physical structures, and the potential impacts on human health.

9. **Air Quality Assessments**

HWMR-7, Part IX, 40 CFR, §§270.23(b) and 264.601(c)

KAFB must provide information on the potential for hazardous waste treated at the subject unit to emit and disperse gases, aerosols and particulates.

10. **Potential impacts to human health**

HWMR-7, Part IX, 40 CFR, §264.601(c)(6)

KAFB must provide an evaluation of the potential to human health when preparing for detonation, during the detonation event, and at the time of removal of the generated residues by screening and/or more detailed assessments.

11. **Land use Map and Scale**

HWMR-7, Part IX, 40 CFR, §§264.601(a)(6) and 270.14(b)(19)(iv)

KAFB must furnish a regional map of the Explosive Ordinance Disposal Range which clearly shows the map scale and date, and patterns of surrounding land uses in the area (i.e. residential, commercial, agricultural, recreational).

12. **Potential pathways of exposure and and the magnitude of the Exposure**

HWMR-7, Part IX, 40 CFR, §270.23(c)

- a. KAFB must address the potential for the public to be exposed to the hazardous wastes, including how long the waste will remain in the unit before it is detonated, and how the waste will be ignited.
- b. Describe the type of protection or shelter for personnel during detonation; specify the meteorological conditions under which detonation will be permitted or restricted, and the length of time after operation of the unit before reentry of personnel to the detonation site is allowed.

13. **Noise considerations**

HWMR-7, Part IX, 40 CFR, §264.601 and §265.382

KAFB must discuss how the detonation of the target waste explosives will be conducted within a legally acceptable safe distance from the property of others, and off-plant inhabited buildings, in a manner that does not threaten human health or the environment.

14. **Effectiveness of the Treatment**

HWMR-7, Part IX, 40 CFR, §270.23(d)

KAFB must report the effectiveness of the thermal treatment of the waste munitions with supportive laboratory or field data.