

Citizen Action Comments on Kirtland Air Force Base Five-Year Review Of the Environmental Restoration Program Management Action Plan February 26, 2010

Sent by Email to Victoria Martinez@kirtland.af.mil

1. Citizen Action requests a public meeting and a public hearing for the ERP.
2. The ERP cannot be accessed online on the KAFB website from the information given in the November 29, 2009 Notice. The web address was not readily obtainable in the Environmental Issues section on the KAFB website as stated in the November 29, 2009 Albuquerque Journal Notice. It is necessary to know a number for the report that was not provided in the Notice. Citizen Action was referred by calling KAFB to the following website at KAFB for review of the document for the five year review plan: <https://kirtlandafb.tlisolutions.net/PDFS/26/2659.PDF>
3. The ERP as presented is 5 years out of date. For example, Notices of Deficiency only are provided up to 2003. Why should the public be asked to review an out of date report?

For example, the following statement appears to be incorrect. This reviewer is only aware of semi-annual meetings.

“A forum for public participation in the ERP at Kirtland AFB is currently held in conjunction with the Department of Energy’s (DOE) public meeting for Sandia National Laboratories (SNL) on a quarterly basis.”

For example, TABLE 1-4 HISTORY OF NODS AND NOVVS IMPACTING KIRTLAND AFB is current only through February 2003. KAFB contaminated the regional aquifer with 8,000,000 gallons of jet fuel subsequent to that date. For example, Historical deliverables are not updated past 2003

4. KAFB does not have an adequate groundwater monitoring well network to determine the hydrological characteristics of KAFB as a whole or for the individual hazardous waste disposal units, Solid Waste Management Units, Areas of Concern, and Regulated Units.
5. The ERP has not adequately characterized the geology of KAFB to provide knowledge of facilities that cannot withstand a design basis earthquake at KAFB. Geology Section 1.6.1 -- fails to describe the design basis earthquake that can occur for the KAFB region. Dating of movements along fault lines should be described. Buildings and facilities at KAFB that cannot withstand the design basis earthquake should be described along with potential consequences.
6. Hydrogeology Section 1.6.2 – KAFB is not in compliance with the Resource Conservation and Recovery Act (RCRA) for characterization of the groundwater for KAFB as a whole or for individual RCRA hazardous waste sites.

The statement is made that:

“Hydraulic conductivity values range from 0.25 ft per day (ft/day) to 50.0 ft/day due to large variations in the lithology of the basin-fill deposits.”

The statement is wholly inaccurate to describe the range of hydraulic conductivity at KAFB. The estimated acreage footage of water for the regional aquifer beneath KAFB should be described. A description of the annual water usage at KAFB should be

presented. The location and volume of water that KAFB has contaminated should be described. The nature of the contamination in the regional groundwater should be described.

KAFB cannot determine releases of hazardous waste from SWMUs or take appropriate corrective action for such releases. Soil sampling and groundwater monitoring are inadequate. There are an insufficient number of monitoring wells to meet RCRA requirements under 40 CFR 264.90-100 for detection monitoring and compliance monitoring. Compliance monitoring networks at locations where significant evidence of contamination has been detected are non-existent for most locations.

The groundwater monitoring wells at KAFB are inadequate and too few in number to determine whether any releases of hazardous waste or hazardous constituents from any SWMU have occurred, and to take appropriate corrective action if so. A comprehensive program for installation of additional monitoring wells at KAFB is lacking and public participation in review of such workplans under RCRA is absent.

7. The ERP does not describe well monitoring networks at KAFB hazardous waste locations to show compliance with the Resource Conservation and Recovery Act (RCRA).
8. The ERP does not demonstrate that monitoring wells at KAFB provide representative and reliable groundwater sampling.
9. The OB/OD operations at KAFB are illegal operations because the OB/OD unit does not have a groundwater monitoring network that meets RCRA requirements for groundwater monitoring to be in place. (See October 28, 2009 letter below).
10. KAFB is submitting well monitoring data to the New Mexico Environment Department (NMED) that KAFB knows to be highly inaccurate for the OB/OD unit.
11. KAFB has enormous data gaps for knowledge of groundwater at the OB/OD unit. Data usability and provision of data is essentially zero from groundwater monitoring.
12. Section 5 for Technical and Other Issues to be Resolved – has not provided any substantive information that this reviewer identifies as a reliable groundwater monitoring network for obtaining background water quality data. Site conceptual models for risk assessment that are not based on data from reliable and representative water samples are bogus. Computer models from KAFB are another exercise in showing compliance with RCRA requirements that does not in actuality exist.

13. Provisions of 40 CFR 270.42 Appendix I require KAFB to provide public participation through notice, comment and opportunity for public hearings for modifications to groundwater monitoring. KAFB has failed to provide such public participation. The requirements are as follows:

APPENDIX I TO § 270.42—CLASSIFICATION OF PERMIT MODIFICATION

C. Ground-Water Protection

1. Changes to wells:

a. Changes in the number, location, depth, or design of upgradient or downgradient wells of permitted groundwater monitoring system 2

b. Replacement of an existing well that has been damaged or rendered inoperable, without change to location, design, or depth of the well 1

2. Changes in ground-water sampling or analysis procedures or monitoring schedule, with prior approval of the Director 1 1

3. Changes in statistical procedure for determining whether a statistically significant change in ground-water quality between upgradient and downgradient wells has occurred, with prior approval of the Director 1 1

4. Changes in point of compliance 2

5. Changes in indicator parameters, hazardous constituents, or concentration limits (including ACLs):

a. As specified in the groundwater protection standard 3

b. As specified in the detection monitoring program 2

6. Changes to a detection monitoring program as required by § 264.98(h), unless otherwise specified in this appendix 2

Modifications Class

7. Compliance monitoring program:

a. Addition of compliance monitoring program as required by §§ 264.98(g)(4) and 264.99 3

b. Changes to a compliance monitoring program as required by § 264.99(j), unless otherwise specified in this appendix 2

8. Corrective action program:

a. Addition of a corrective action program as required by §§ 264.99(h)(2) and 264.100 3

b. Changes to a corrective action program as required by § 264.100(h), unless otherwise specified in this appendix

KAFB has provided no statement as to how it plans to comply with these regulations for public participation.

14. It is not apparent that any Long Term Monitoring Plan was submitted for public participation for groundwater monitoring as required by RCRA.

15. The ERP is notably deficient in describing how RCRA public participation will be achieved, only that KAFB wants to avoid negative comments. The following October 28, 2009 letter **still remaining unanswered by KAFB** is attached as an example of the issues described above for the ERP and for the lack of KAFB responsiveness to RCRA requirements for public participation:

October 28, 2009

Mr. Ron Curry, Secretary

New Mexico Environment Department

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Santa Fe, New Mexico 87502

800 2196157

FAX 505 827 2836

Department of the Air Force

Col. Michael S. Duvall

Headquarters 377th Air Base Wing (AFMC)

2051 Wyoming Blvd., S.E.

Kirtland Air Force Base
AFB, NM 87117-5607

Mr. James Bearzi, Chief
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303

Re: Reopening of the Kirtland Air Force Base (KAFB) Resource Conservation and Recovery Act (RCRA) Draft Facility Operating Permit for the Open Burning and Open Detonation Treatment Units (EPA ID No. NM9570024423) (“Draft Permit”).

Dear Secretary Curry, Col. Duvall and Mr. Bearzi,

Citizen Action is appreciative of the closing of the Open Burn (OB) unit at Kirtland Air Force Base. The New Mexico Environment Department (NMED) issued a Stipulated Final Order on 9/28/09 that provides as follows for the Kirtland Air Force Base (KAFB) Open Burn Unit:

“V. ENVIRONMENTAL PROJECTS

13. Open Burn Unit Closure. KAFB agrees to cease all operations of the Open Burn Unit upon the effective date of this Agreement.

- a. By the deadline stated in Section VII (Completion Deadlines) of this Agreement, KAFB agrees to submit a **Revised Closure Plan for the Open Burn Unit** to the Department for its review and approval. The Revised Closure Plan shall include provisions for removal of the Open Burn Unit's steel container, concrete base, and concrete walls.
- b. By the deadline stated in Section VII (Completion Deadlines) of this Agreement, KAFB shall submit a letter to the Department withdrawing its request for continued operation of the Open Burn Unit, and that the draft permit currently pending before the Department be revised to reflect this request. This agreement does not affect KAFB's open detonation permit.
- c. KAFB agrees that it will not operate or request a permit for an open burn unit at the Facility.” (Emphasis supplied).

The Closure of the Open Burn Unit is a significant modification to the Draft Permit. (40 CFR 264.112). The Draft Permit has not been approved by NMED, and is a matter of broad and significant public interest that requires reopening of the public comment period and opportunity for a public hearing. (See, NMAC 74-4-4.2 H – “No ruling shall be made on ... [a] major modification without an opportunity for a public hearing...” Also See, NMAC 74-4-4.2 I- “The secretary shall hold a public hearing on a minor permit modification if the secretary determines that there is significant public interest in the minor modification.”).

Significant public interest in the Draft Permit modification exists. The NMED received numerous letters and petitions from non-governmental organizations and individuals within the public to reopen the OB/OD Draft Permit for public comment.

- Concerned Citizens for Nuclear Safety submitted a comment regarding untimely notification of the Draft Permit coming 40 minutes before the close of the comment period. http://www.nmenv.state.nm.us/hwb/kafb/comments_7-24-07/7-19-2007_E-mail_Joni_Arends.pdf
- Citizen Action filed petitions beginning in 2007 to reopen the KAFB Draft Permit for comment and a public hearing and a petition to reconsider the decision not to reopen the public comment period. (See Citizen Action July 28, 2009 letter to NMED Secretary Curry).
- Protect Air and Water (PAW) filed a petition for a reopened comment period and a public hearing for the KAFB Draft Permit. PAW arranged public meeting on November 25, 2008 with the NMED. The meeting was attended by numerous individuals and representatives of non-governmental organizations. PAW presented a 3-page letter of questions and concerns for the OB/OD Draft Permit. Citizen Action presented a 2- page list of concerns. The written concerns were not addressed by the NMED subsequent to the meeting.

The closure of the Open Burn unit constitutes a Class 3 modification of the Draft Permit. The Resource Conservation and Recovery Act requires that because the OB/OD Draft Permit is being modified, the public should now be able to review and comment on the provisions for Closure Plan and Post Closure Care Permit information. (40 CFR 270.42 Appendix I).

Modification of the Closure Plan (Permit Attachment 10) requires modification of other parts of the KAFB Draft Permit Section.

1. **Closure Plan at 10.0** implicates potential changes to the post-closure care plan at Part 2, Section 2.9 of the KAFB Draft Permit.
2. **Closure Plan at 10.6. Groundwater Monitoring.** The modification Parts 4 and 5 are implicated by Section 10.6 that provides:
“If groundwater contamination has occurred, monitoring wells shall be maintained for the purpose of implementing corrective action. If corrective action is required by the Department, the Permittee shall immediately implement corrective action pursuant to Parts 4 and 5 of this permit.

The Explosive Ordinance Depot (“EOD”) Range is required to currently have ground water monitoring in place because it is a RCRA “regulated unit.” Monitoring requirements are also applicable for the EOD Range as a Subpart X unit. (40 CFR 264.601). The failure to presently have a detection well monitoring network in place at the EOD Range is a violation of RCRA. 40 CFR § 264.90.(a)(2) provides as follows:

“A surface impoundment, waste pile, and land treatment unit or landfill that receives hazardous waste after July 26, 1982 (hereinafter referred to as a “regulated unit”) must comply with the requirements of §§264.91 through

264.100 in lieu of §264.101 for purposes of detecting, characterizing and responding to releases to the uppermost aquifer.” [Emphasis supplied].

As Citizen Action provided to you in our letter of October 6, 2009, there is no reliable and representative groundwater monitoring being conducted at the Explosive Ordnance Depot range that meets the requirements of 40 CFR 264.91-.100. The School House Mesa Well (SHMW) was constructed in the early 1900s as a supply well and does not meet the requirements for reliable monitoring although the well monitoring data is currently being accepted by NMED:

- The SHMW is claimed by KAFB to be an upgradient monitoring well. The topography for the regional landscape predicts that the groundwater flow is to the west. The SHMW is thus at a northern location that is cross gradient to the flow of the groundwater and is in the wrong location to serve as an upgradient well. Maps for the School House Mesa Well do not give the indication for groundwater flow direction.
- The SHMW does not meet requirements as a contaminant detection monitoring well for the EOD, although NMED has accepted the water quality data for that purpose.
- The School House Mesa Well (SHMW) is nearly 3/4 of a mile to the north of the EOD range is cross-gradient to the westward direction of groundwater travel, and is not at the Point of Compliance for the EOD. (40 CFR 264.95).
- The NMED has made a mistake to accept the SHMW as a monitoring well and any data from it for the EOD Range.
- A minimum of one upgradient background monitoring well and three downgradient contaminant detection monitoring wells should be immediately installed by DOD and KAFB for the EOD range to bring the facility into compliance with RCRA.
- The SHMW does show perchlorate contamination and this requires the immediate installation of a reliable monitoring well at the location of the SHMW. The SHMW is required to be plugged and abandoned.
- The June 2007 written sampling report for the SHMW cites turbidity as 5 (five) times higher than the EPA Drinking Water Standard. The high turbidity ranges presented in many other sampling events prevent reliable and representative sampling by the SHMW well. The quality control program requires accurate sampling be collected which cannot be accomplished given the age, location and turbidity levels of the SHMW.
- The June 2007 sampling reports that iron was nearly 8 (eight) times above the EPA Drinking Water Standard. High iron values possibly indicate corrosion of the well screen, a plume of contaminants or, a compromised well chemistry within the sampling zone of the well. Turbidity may be adding to the high iron values.
- Perchlorate would be an expected contaminant at the EOD where explosives and tens of thousands of rocket motors from Sandia National Laboratories have been openly burned or detonated. Perchlorate is a known contaminant from munitions and rocket motors. The finding of statistically significant evidence of perchlorate contamination in the SHMW as the monitoring well for the EOD requires detection monitoring and compliance monitoring for groundwater at the EOD.

Modification of the Closure Plan implicates Section 3.6, 3.6.1 and 3.6.2 of the Draft Permit. No groundwater monitoring network is currently in place at the EOD as is required for current operations under the Closure section of the Draft Permit. The Draft Permit requires that a detection monitoring groundwater well network be conducted for the entire period of operations, closure and post-closure. Section 3.6 states:

“3.6. GROUNDWATER MONITORING

The Open Burn Unit and Open Detonation Unit are subject to 40 C.F.R. § 264.90(d) and the environmental performance standards of 40 C.F.R. § 264.601, which are incorporated herein. The Permittee shall comply with the requirements of 40 C.F.R. §§ 264.91 through 264.100 in lieu of 40 C.F.R. § 264.101 for purposes of detecting, characterizing, and responding to releases to the uppermost aquifer. Groundwater monitoring shall be conducted during the entire period of operations, including the period for closure, to ensure the protection of groundwater. Groundwater monitoring shall also be conducted during post-closure care, if post-closure care is required.

“Because groundwater contaminants have not been detected at the Open Burn Unit and Open Detonation Unit in the past, the Permittee shall institute a detection monitoring program as required by 40 C.F.R. §§ 264.91(a)(4) and 264.98. The groundwater monitoring system may cover both the OB and OD Units.”

The above statement obfuscates the fact that there never was a groundwater monitoring well network installed at the EOD. The statement that KAFB “shall institute a detection monitoring program” at the EOD is evidence that the EOD Open Burn and Open Detonation units operated in violation of the requirement to have groundwater monitoring in place as RCRA regulated units.

The public is entitled to review and comment on any proposed detection or compliance monitoring well installation plan under the requirements 40 CFR 270.42 Appendix I, Classification of Permit Modification, C. 1-8. Groundwater Monitoring.

The SHMW has never been usable as a contaminant detection well for the EOD. Nevertheless, the SHMW has been used for this purpose in monitoring reports submitted to the NMED. The groundwater samples from the SHMW are contaminated with Perchlorate as described in a letter of concern dated November 26, 2008 from NMED Secretary Ron Curry to the EPA Administrator:

“At Kirtland Air Force Base, data collected in 2006 showed perchlorate levels in monitoring well KAFB-2622 at 8.4 µg/L, and in monitoring well KAFB-2624 at 11.0 µg/L. Data collected in 2008 showed perchlorate in the “School House Mesa Well” at 5.19 µg/L. Yet very little groundwater monitoring data has been obtained for perchlorate at Kirtland.”

The fact that perchlorate is detected in the monitoring well used for the EOD now requires the implementation of a compliance monitoring program at the EOD because the perchlorate is statistically significant evidence of contamination. The implementation of compliance monitoring is a Class 3 permit modification as per 40 CFR 270.42 Appendix

I C.7.a.- Compliance monitoring program. The implementation of Compliance Monitoring under 40 CFR 264.99 is appropriate based on the detection of perchlorate contamination in the assigned monitoring well, the School House Mesa Well. (Citizen Action October 6, 2009 letter to NMED Secretary Curry).

No groundwater detection monitoring network required under 40 CFR 264 Subpart F ever existed for the EOD OB/OD units. 40 CFR 264.601(a)(5) for Subpart X units requires hydrogeologic characterization of the EOD for the quantity, quality and direction of groundwater flow. That characterization requires a groundwater monitoring network that was never implemented at the EOD. Such a detection system will have to be implemented with a minimum of one upgradient background monitoring well and 3 downgradient monitoring wells. The operation of the EOD units without the required groundwater characterization represented an illegal operation.

The public must be included in the work plan proceedings for the monitoring network under RCRA public participation requirements. Changes in the number, location, depth, or design of upgradient or downgradient wells, changes in point of compliance, indicator parameters, hazardous constituents or concentration limits and the addition of a compliance monitoring program or corrective action monitoring program require notice and comment and may require a public hearing. (40 CFR 270.42).

No groundwater sampling and analysis plan have been provided to the public for review as a part of the KAFB Draft Permit as Attachment 11 as per section 3.6.2. This constitutes denial of due process for notice and opportunity to review the full terms of the KAFB Draft Permit before the approval of the permit.

The changes to the Closure Plan in the KAFB Draft Permit implicate changes to the Post-Closure Care section 2.9. The modification to the Closure Plan for the Open Burn Unit will implicate changes to the Post-Closure Plan for the Open Burn and the Open Detonation Units. The KAFB Draft Permit does not provide the public with the full view of what the Post-Closure Care Plan will be for the two units, especially if the Open Detonation unit is to continue operations and the Open Burn unit is to close.

A Post-Closure Care Plan is required to be in place as part of the operating permit. (40 CFR 264.603). It would appear that the EOD OB/OD units have operated without post closure care plans in place.

The public is not provided with what the Post Closure Care Plan will entail for the Open Burn unit and the Open Detonation unit. Under RCRA, a post-closure care permit application must be submitted for public review. The public is entitled to review and comment on the post closure care plan as a part of the KAFB Draft Permit and has not been given the opportunity to do so.

The Public is entitled to review the full proposal for long-term monitoring with the description of the well monitoring network at the EOD and that plan has not been presented, as it must be, as part of the KAFB Draft Permit.

The Draft Permit goes far beyond only open burning and open detonation and would involve numerous landfills, solid waste management units (SWMUs), areas of concern (AOCs), the Manzano Sewage Treatment Facility, over 50 septic and sewer systems, storm drains, corrosion control shops, drains, propulsion branch floor drain, the Tijeras Arroyo Groundwater Area solvent contamination, JATO Rocket Motor Disposal Site, and the active Landfill. The Fact Sheet only discussed the OB/OD units and public was not provided the necessary information to meaningful comment on the large number of facilities and issues involved. The Fact Sheet for the LANL Draft Permit, for example, has a 500+ page supplement of Solid Waste Management Units and Areas of Concern with a description of each site.

The OB/OD units may have lost interim status.

The Fact Sheet does not provide the full permitting history for the OB/OD units. According to the Fact Sheet, the EOD was in operation prior to November 19, 1980, but the Fact Sheet has no information as to the actual dates of operation. Accordingly, RCRA required the submission of the Part A Application for obtaining interim status by a date not later than November 15, 1985. The Fact Sheet does not provide definite information that the Part A was submitted by the required date.

There is no indication in the Fact Sheet that any Part A Application was filed other than in May 2004. Filing a Part A Application for the OB/OD units would have been required to obtain interim status to allow operation of the units. (40 CFR 270.70- Qualifying for Interim Status). If the Part A Application was not timely filed, interim status was lost. If loss of interim status occurred, continued operation of the EOD without a permit would have violated the requirement that a RCRA permit be in place for the active life of the units. (40 CFR 270.1(c)).

The Fact Sheet states (p.3):

“Part A Permit Application: In May 2004, U.S. Department of Defense submitted, in a timely manner, to NMED its Part A Permit Renewal Application for the OB/OD Units. The Part A Permit Application listed two hazardous waste treatment units (the Open Burn (OB) Treatment Unit and the Open Detonation (OD) Treatment Unit).

“Part B Permit Application: In May 2004, U.S. Department of Defense submitted, in a timely manner, its Part B Permit Renewal Application (along with its Part A) for operation of the OB and OD Units as treatment units; and for corrective actions for SWMUs and AOCs.”

Since there is no indication that an original Part A application was timely filed prior to 2004, interim status for the OB/OD units would have terminated on November 8, 1985. (See, 40 CFR 270.73). Perhaps the Fact Sheet is merely omitting the information for the original submission of the Part A RCRA Application.

If the Part A Application was not timely submitted for the OB/OD units, then Loss of Interim Status (LOIS) would have occurred on November 8, 1985. The operation of the OB/OD units without a permit would have been an illegal operation under RCRA that continues to the present if LOIS applied as of November 8, 1985. LOIS requires that Closure and Post Closure Care Permit requirements be implemented. In the event that the Part A Application was timely filed, a RCRA Part B Application was required to be filed prior to the November 8, 1985 date. (40 CFR 270.73 (c)(1). Certification also had to be made at the time of the submission of the Part B Application that the ground water monitoring and financial responsibility requirements were met. (40 CFR 270.73 (c)(2).

If interim status expired for the OB/OD units, that is a significant fact that was omitted in the Fact Sheet and the Draft Permit. The failure to submit the accurate permitting history for the OB/OD Part B Application is a ground for termination, revocation, and reissuance or modification of the Permit. (40 CFR 270.43 (a)(2). The requirements for a Closure Plan and a Post-Closure Care Permit Application or clean closure would have been required under 40 CFR 265 and the OB/OD units should not have continued to operate.

There is no information in the Draft Permit or the Fact Sheet with respect to the time period and permitting history of the Units listed in Tables 4-2 and 4-3. That information should be provided along with whether the Landfills are operational at the present time. Reports for many of the facilities are not due until December 2009 or December 2010.

Citizen Action is hereby requesting the reopening of the Draft Permit for public comment and a public hearing. We request a written response within 10 working days to this letter. We would appreciate the opportunity to meet with Secretary Curry and Col. Duval regarding this matter.

Sincerely,

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