



***Provide World-Class Nuclear Surety,
Expeditionary Forces and Support to Base Operations***



***Open Burn Unit
Open Detonation Unit
Permit Modification
Public Meeting***



U.S. AIR FORCE

16 November 2010

Surety, Readiness, Support



Hazardous Waste Permits

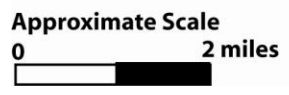
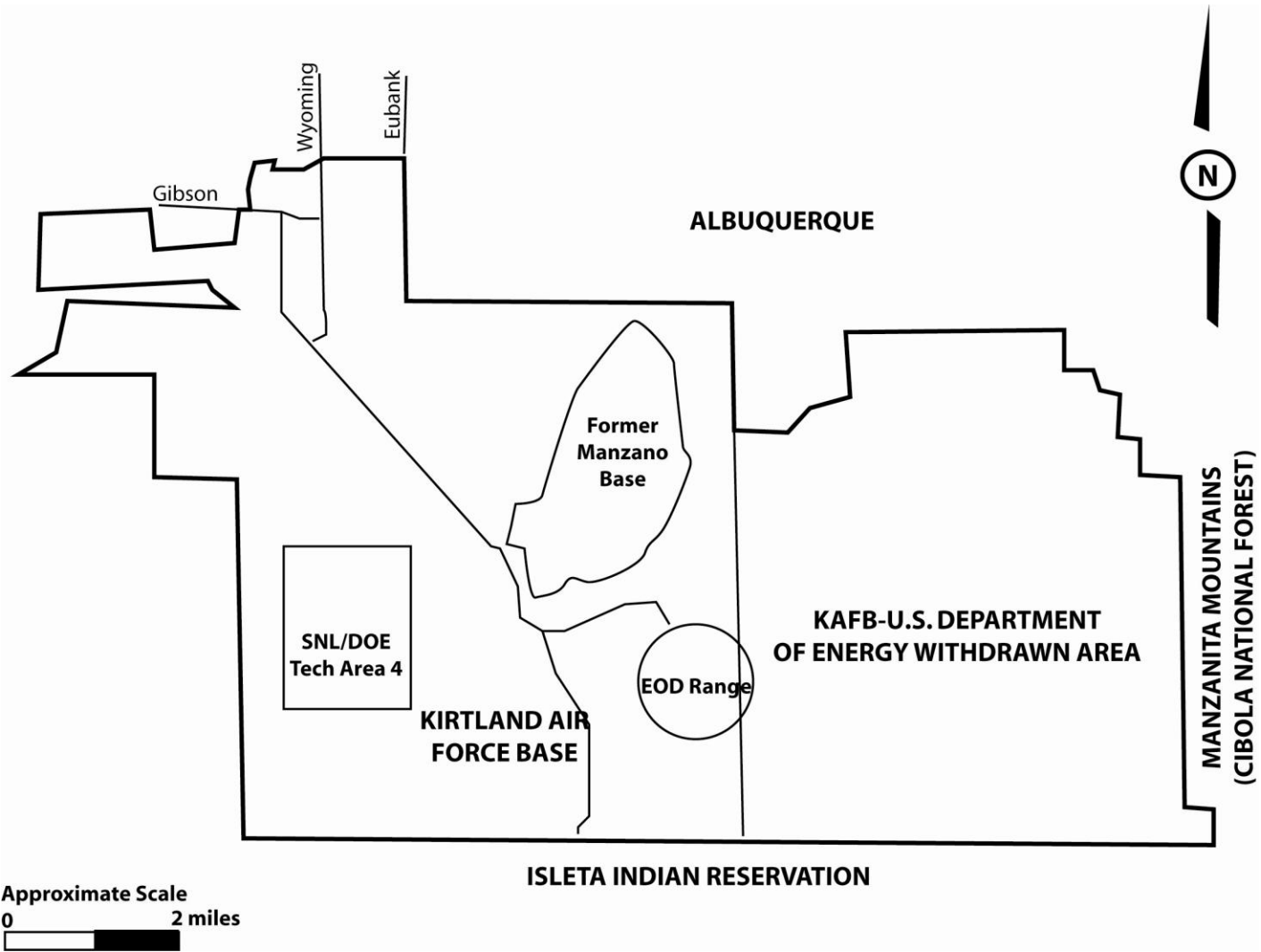


Kirtland Air Force Base Hazardous Waste Permits

- **Kirtland AFB holds two Resource Conservation and Recovery Act (RCRA) hazardous waste permits issued by the New Mexico Environment Department (NMED)**
 - **Open Burn Unit (Permit # NM9570024423-OB)**
 - **Open Detonation Unit (Permit # NM9570024423-OD)**
- **Both Units are located at the Explosive Ordnance Disposal (EOD) Range on Kirtland AFB**



EOD Range



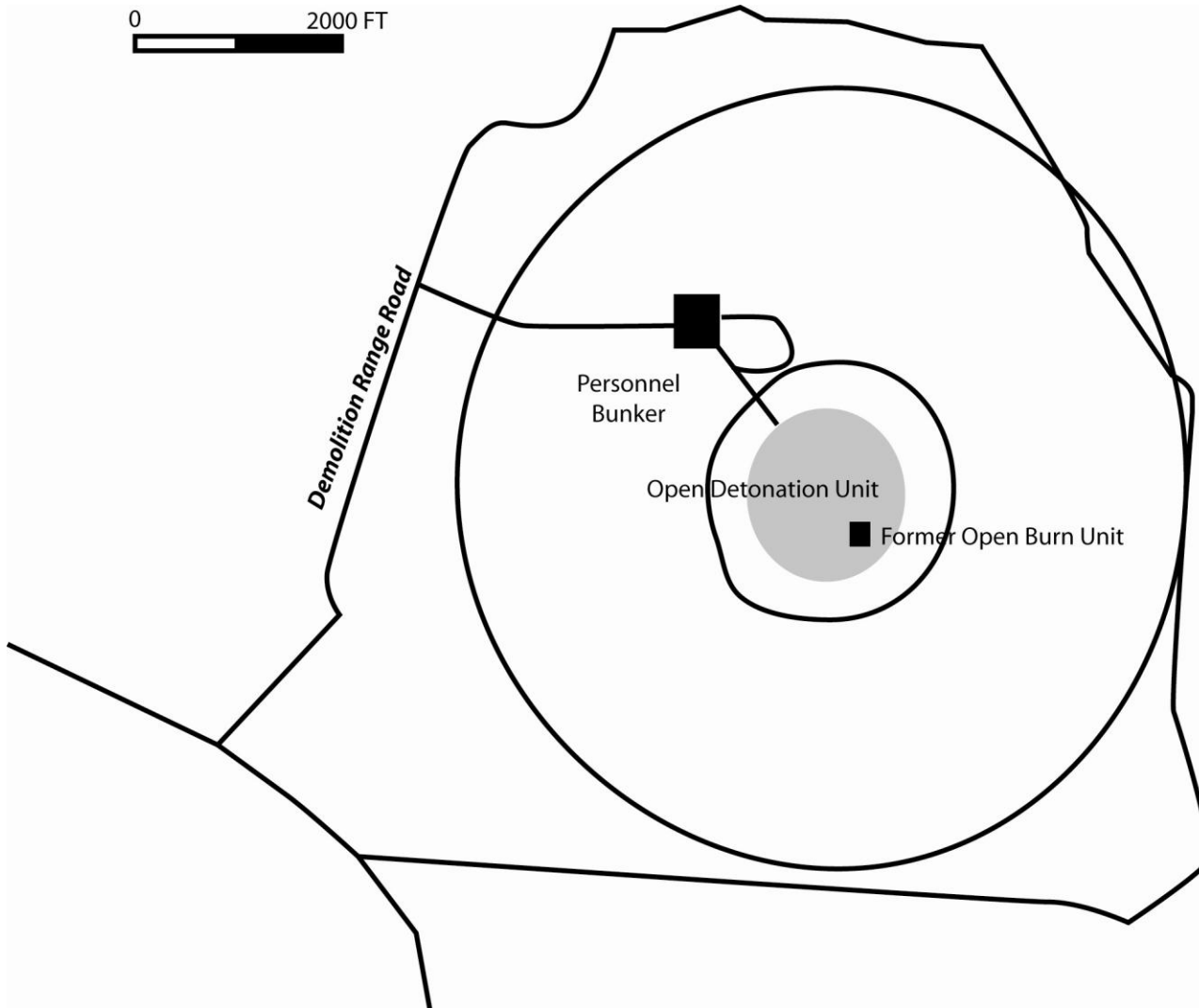
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EOD Range



0 2000 FT



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Open Burn Unit



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Open Detonation Unit



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Open Burn/Open Detonation Unit Closure



- **Previously submitted intent to close Open Burn Unit under agreement with the NMED (burn unit has not been utilized since May 2008)**
 - **Closure plan was submitted June 2010**
- **Notified NMED of intent to close Open Detonation Unit on 13 August 2010**
- **Submitted revised Closure Plans for the Open Burn/Open Detonation Unit to NMED, Hazardous Waste Bureau (HWB) as a Class 3 permit modification request (8 October 2010)**
 - **Public notification of permit modification (15 October 2010)**
 - **Written 60-day comment period (ends 14 December 2010)**



Permit Modifications at Open Burn Unit



Summary of Revised Open Burn Unit Closure Plan

- **Removal of the Open Burn structure, secondary containment curbing/concrete base, and equipment used at the former Open Burn Unit**
- **Soil sampling**
- **Removal of any soil or debris which has contaminant concentrations which pose unacceptable risk to human health or the environment**
- **Sifting of the soils to a depth of one foot in a 50 foot radius surrounding the former Open Burn Unit to remove metal debris**
- **Sifting soils in the earthen berm surrounding the former Open Burn Unit to remove metal debris**
- **Grading the area to level**
- **Installation of monitoring wells**



Permit Modifications at Open Detonation Unit



Summary of Open Detonation Unit Closure Plan

- **Hazard survey of open detonation unit to ensure all “kick-out” debris from previous detonations is removed**
- **Soil sampling**
- **Removal of any soil or debris which has contaminant concentrations which pose unacceptable risk to human health or the environment**
- **Any Unexploded Ordinance (UXO) or Munitions and Explosives of Concern (MEC) found during the survey will be handled by EOD personnel on a case by case basis.**
- **Grading entire area to level**
- **Installation of monitoring wells**



Soil Sampling at the Open Burn Unit/Open Detonation Unit



- **Three soil samples on each side within 25 feet of the burn unit**
- **Three soil samples from the soil directly underneath the burn unit**
- **Soil sampling on the open detonation unit on a 25 foot by 25 foot grid spacing, from the surface to 15 feet below the surface at five foot intervals**
 - **The grid will encompass all portions of the OD unit that have hosted or may have hosted a pit used for the treatment of hazardous waste**
- **Results of soil samples will be compared to background levels or NMED residential soil screening levels (SSL)/EPA Regional Screening Levels (RSLs)**
 - **If any constituent analyzed has results above background/SSLs/RSLs, the soil will be removed with subsequent sampling, or a risk assessment may be developed**



Installation of Monitoring Wells



- **Four wells (three down gradient and one up gradient) will be installed within the EOD range for groundwater monitoring at both the Open Burn unit and the Open Detonation unit**
- **Prior to the wells being installed, Kirtland AFB will submit a monitoring well installation plan to NMED for approval, incorporating the following:**
 - **Well locations**
 - **Drilling specifications**
 - **Well construction specifications**
 - **Well development procedures**
 - **A schedule for implementation and completion of the well installations and well completion report**



Proposed monitoring well locations

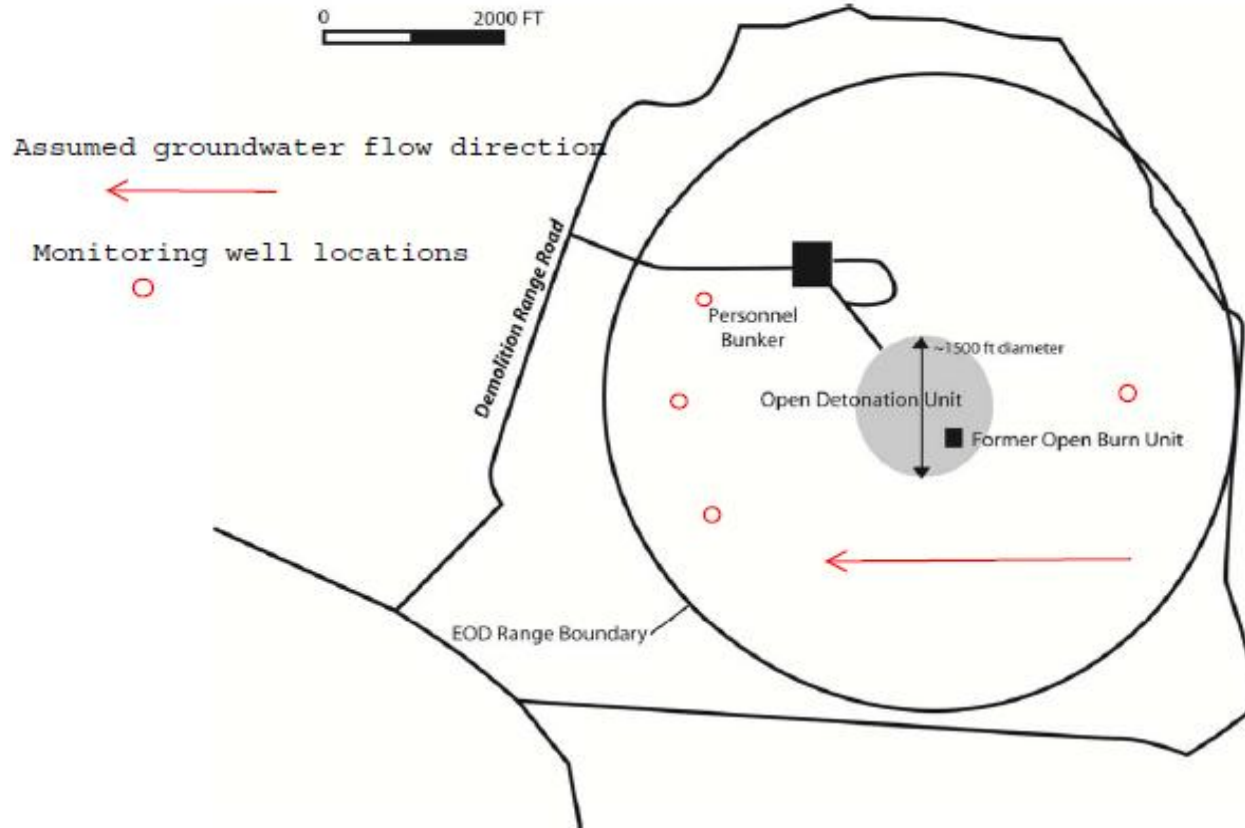


Figure 1-2. Location of Open Burn Unit and Open Detonation Unit at EOD Range



Groundwater Sampling at the Open Burn/Open Detonation Unit



- **Groundwater samples will be collected from the four monitoring wells for eight consecutive quarters, and will be analyzed for various metals, organic and inorganic compounds**
 - **Groundwater analytical results will be compared to the Safe Drinking Water Act (SDWA) Maximum Contaminant Levels (MCL's), and Department of Defense perchlorate action levels (15 ppb)**
- **If any constituent analyzed has results above MCL's, a risk assessment will be developed**
 - **Unacceptable levels of risk would require an additional corrective action plan**



Closure Schedule



Activity	Time Required
Notify the Department of receiving final volume of hazardous waste at the OD Unit	Completed
Removal of all hazardous waste from the OD unit	Completed
NMED approval of final OD Unit closure plan	TBD
Advertise for proposals	Approval of closure plan + 30 days
Receive proposals	Approval of closure plan + 60 days
Select contractor and award contract	Approval of closure plan + 90 days
Submit work plan to NMED for approval, including monitoring well installation plan	Contract award + 60 days
Notify the Department that final closure activities will commence	-45 days prior to closure activities commencing
Begin final closure activities	Day 0
Obtain analysis of soil samples	Day 45
Obtain analysis of groundwater samples from monitoring wells	Monitoring well installation completion + completion of eight consecutive quarters of monitoring
Final closure activities completed	Upon receipt of all soil and groundwater sampling results
Submit final report and closure certification to the NMED	Completion of final closure activities + 60 Days

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Next Steps



- **60-Day Written Comment Period**
 - **Began 15 October 2010 (newspaper publication 15 October, notification letter delivered to NMED October 8th 2010)**
 - **Ends 14 December 2010**
 - **Send written comments to New Mexico Environmental Department (copies of address available)**
- **NMED Considers and Responds to all Significant Written Comments Received**
- **NMED Grants or Denies Modification Request**
 - **NMED notification of decision to mailing list**



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Questions?

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