



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 49TH WING (ACC)
HOLLOMAN AIR FORCE BASE, NEW MEXICO

ENTERED

JUL 16 2012

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A. David Budak
Deputy Base Civil Engineer
550 Tabosa Avenue
Holloman AFB NM 88330-8458

New Mexico Environment Department
Attn: Mr. John Kieling, Chief
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe NM 87105-6303

Dear New Mexico Environment Department

Holloman Air Force Base (HAFB) has prepared this plan to abandon four monitoring wells located at the Existing Entomology Shop area, also known as Installation Restoration Program (IRP) site OT-16. OT-16 encompasses former Building 21, a former pesticide plastic holding tank (SWMU 118), a former disposal pit (SWMU 132) and a former transformer pad (AOC-A). All of these sites have been approved by the New Mexico Environmental Department (NMED) as Corrective Action Complete.

Well Abandonment

The abandonment of all wells will be conducted in a manner consistent with current NMED technical guidance (NMED, Monitoring Well Guidelines, Revision 1.1, March 2011). Table 1 lists the four wells to be abandoned and pertinent well details that will be used for conducting the abandonment. Figure 1 shows the location of OT-16 at HAFB and Figure 2 shows the locations of the wells at the site. All of the wells to be abandoned are relatively shallow (less than 25 ft depth), intersect only the water table aquifer zone and are non-artesian.

The following steps summarize the actions that will be conducted to abandon the well in accordance with current NMED guidance:

- 1) Abandonment will not proceed until approval has been obtained from NMED.
- 2) The well shroud (i.e., protective casing), surface pad and protective posts (i.e., bollards) will be removed.
- 3) If not known, the total well depth will be measured and recorded prior to abandonment.
- 4) Because the wells are constructed of small diameter PVC casing and screen (e.g., 2-inch diameter) and have been grouted across the casing interval (ground surface to approximately top of screen), experience indicates that attempts to pull the casing will result in broken well pipe and partial removal. This consequence often results in caving and partial filling of the pipe, thus hampering filling with grout from the bottom up. Therefore, it is proposed that all shallow wells that intersect only the water table and which have grouted casing be abandoned by internal filling

from the bottom up to ground surface using an appropriate sealing material (e.g., neat cement grout; bentonite-based plugging material).

- 5) The abandonment procedure will be documented for each well and written notification of all abandoned wells will be submitted to NMED.

The well abandonment will be scheduled as soon as practical following approval of this abandonment plan by NMED.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions, please contact Mr. Brent Hunt of our Asset Management Flight at (575) 572-6655.

Sincerely


A. DAVID BUDAK, GS-14, DAFC

cc:

Mr. David Strasser
Hazardous Waste Bureau
5500 San Antonio Dr. NE
Albuquerque NM 87109

Mr. Will Moats
Hazardous Waste Bureau
5500 San Antonio Dr. NE
Albuquerque NM 87109

Mr. Chuck Hendrickson
USEPA, Region 6 (6PD-F)
1445 Ross Ave., Ste 1200
Dallas TX 75202

Table 1
Monitoring Well Construction Details for OT-16
Holloman AFB, New Mexico

Well ID	Installation Date	Survey Data			Boring Information		Well Construction Information						
		Northing ⁽¹⁾	Easting ⁽¹⁾	Elevation Top of Casing ⁽²⁾ (ft msl)	Borehole Depth (ft bgs)	Borehole diameter (in)	Total Well Depth (ft bgs)	PVC Diameter (in)	Length of Riser Pipe (ft) ⁽³⁾	Screen Slot Size (in)	Length of Screen (ft)	Screened Interval (ft bgs)	
OT-16 - Former Entomology Shop Area													
MW-16-01	8/13/1991	669399.400	553922.90	4079.90	14.0	7.50	14.0	2	7.1	0.01	9.5	4.10	14.00
MW-16-02	8/13/1991	669306.300	553866.70	4077.71	14.5	7.50	14.2	2	7.0	0.01	9.5	4.30	14.20
MW-16-03	8/13/1991	669245.600	553885.30	4076.89	14.5	7.50	14.0	2	6.5	0.01	9.5	4.00	14.00
MW-16-04	8/13/1991	669260.100	553946.90	4077.30	15.5	7.50	13.0	2	6.3	0.01	9.5	3.10	13.00

Notes:

⁽¹⁾ All locations are in North American Datum 1983 State Plane New Mexico C Grid

⁽²⁾ NAVD 88 - North American Vertical Datum 1988

⁽³⁾ Includes stickup

amsl - above mean sea level

bgs - below ground surface

ft - feet

ID - identification

in - inches

PVC - polyvinyl chloride

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WELL MAP FILENAME: Fig23 LTM.mxd
DATE: 4-23-2010
SOURCE: NGA

ALL COORDINATES ARE ON THE NEW MEXICO STATE PLUMB CENTER ZONE IN FEET BASED ON NAD 83 ADJUSTMENT OF 1986. THE VERTICAL CONTROL REFERENCE DATUM IS NAVD83.

LEGEND

- MONITORING WELL
- ▭ EXCAVATION AREA
- HOLLoman AFB BUILDING
- ▨ ROAD AREA
- PAVED PARKING
- ▭ CONCRETE PADWALK
- INDEX CONTOUR (10')
- INTERNAL CONTOUR (2')



WELL ABANDONMENT PLAN, OT-16
HOLLoman AIR FORCE BASE
ALAMOGORDO, BERNILLO



FIGURE 2
OT-16 SITE MAP

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