



HAFB 99

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 REGION 6
 1445 ROSS AVENUE, SUITE 1200
 DALLAS, TX 75202-2733

File

State

information to EPA by March 15 of 1999

to be reviewed by the state

2/9/99

25 26 27 28 29 30 31 - 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

1999

RECEIVED

January 25, 1999

Mr. Benito Garcia, Chief
 New Mexico Environment Department
 Hazardous and Radioactive Materials Bureau
 2044A Galisteo St.
 Santa Fe, New Mexico 87505

**Re: Review Recommendation of the Final Characterization Summary and NFA Documentation for IRP Sites: SS-2/5, SD-47 and SS-60, Holloman AFB, NM
 EPA I.D. No. NM6572124422**



Dear Mr. Garcia:

The Environmental Protection Agency (EPA) has completed a technical review of the Final Characterization Summary and No Further Action (NFA) Documentation for IRP Sites: SS-2/5 POL Yard (AOC-T), SD-47 POL Washrack Area (SWMU 133), and SS-60 Building 828 (SWMU 230), submitted by the Holloman Air Force Base (HAFB) on July 20, 1998. EPA has determined that parts of the Report are deficient and enclosed is the Request for Supplemental Information.

Based on the information provided in the document, EPA recommends that HAFB submit the requested information, and that NMED HRMB delay the decision of No Further Action (NFA) request until NMED/EPA review the requested information. If you have any questions or need additional information, please contact Allen T. Chang of my staff at (214) 665-7541.

Sincerely yours,

David W. Neleigh

David W. Neleigh, Chief
 New Mexico/Federal Facilities
 Section

Enclosure

SUPPLEMENTAL INFORMATION REQUEST
Characterization Summary and NFA Documentation
for IRP Sites SS-2/5, SD-47 and SS-60
Holloman Air Force Base (HAFB)

GENERAL COMMENTS

1. It has been documented, in several reports, after the Soil Vapor Extraction (SVE) system was shut down for several months, the concentration of contaminants rose above standards and the system was reactivated. Such a circumstance occurs because contaminants can diffuse slowly from less permeable soils and interact with soil gas and groundwater.

Without a long term monitoring program, it is difficult to determine whether cleanup levels have been achieved permanently. After the acceptable levels of cleanup have been reached and the system is shut off, HAFB should continue to sample the sites semi-annually for the same contaminants for two years. The monitoring results may be submitted in support of an NFA request.

During the monitoring period, HAFB may be requested to restart the system if there is evidence that the results are above the cleanup levels. **(Best Professional Judgement (BPJ))**

2. Discussion for all three sites makes a general statement that "measurements taken in various groundwater monitoring wells across the site show no evidence of LNAPL on the groundwater table". More information is needed, in particular the location of the groundwater monitoring wells in relation to the site, the time frame in which the measurements were taken, and the actual results. **(BPJ)**

SITE SPECIFIC COMMENTS

Site SS-2/5 (POL Yard)

1. Page 3-1, Table 3-6, "remediate to Base specified TRPH level of 1,000 ppm" should be 1,000 mg/kg. **(BPJ)**
2. Page 3-4, Paragraph 3.3.1, indicates that a long-term groundwater monitoring program is in place and that it has demonstrated that groundwater quality has not been degraded

down gradient of the site. More information is needed, in particular the location of the groundwater monitoring wells in relation to the site, the time frame in which the measurements were taken, and the actual results. **(BPJ)**

3. Page 3-4, 1st paragraph: The first Base-specific remedial goal states that removal of free-phase hydrocarbons from the groundwater surface. Through the section, no discussion was found in this section regarding the topic. HAFB should provide evidences that this goal has been achieved. **(BPJ)**
4. Page 3-4, 1st paragraph: The first Base-specific remedial goal is to reduce benzene contamination levels in the vadose zone soils to less than 25 mg/kg. How was the value developed? **(BPJ)**

Site SD-47 (POL Washrack Area)

5. Page 4-11, The collection of one sample in 1997 is all that is presented to verify that the site is clean. No location for this sample is given. No samples have been collected from the small area to the south of the bio-venting remediation area. Is this area considered impacted? See Figure 4-5 on Page 4-10. **(BPJ)**

Site SS-60 (Building 828)

6. Page 5-5, Section 5.3.1: It states, "...the LNAPL thickness was removed in September 1996 and field observations indicate there is no free-phase LNAPL at Site SS-60."

Has HAFB conducted any confirmatory sampling of LNAPL besides field observations? If not, HAFB should conduct sampling and provide confirmation sample results instead of field observation to show that the LNAPL plume has been removed. **(BPJ)**

7. Page 5-5, Section 5.3.1: It states, "...measurements taken in various groundwater monitoring wells across the site show no evidence of LNAPL on the groundwater table."

The results of groundwater monitoring wells across the site can be used as evidence of the removal of LNAPL. HAFB should submit the analytical results to back up the claim given in Comment No. 7. **(BPJ)**