



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 833D COMBAT SUPPORT GROUP (TAC)
HOLLOMAN AIR FORCE BASE, NM 88330-5000



1 DEC 1990

REPLY TO
ATTN OF: DEV

SUBJECT: Compliance Agreement Quarterly Report

TO: Mr. Courtland Fesmire, Environmental Engineer
US EPA, Region VI, (6H-CS)
First Interstate Bank Tower
1445 Ross Avenue
Dallas, TX 75202-2733

1. Pursuant to the requirements set forth in Section X--REPORTING AND EXTENSIONS section of the Compliance Agreement signed on 20 December 1988, we hereby submit the eighth quarterly progress report (see Atch 1). This report will provide a brief outline of events from 1 Oct to 31 Dec 1990.
2. Documentation for the contents of the attached report is available upon request from the 833 CSG/DEV office at Holloman AFB. If you have any questions or comments, please contact Sharon N. Moore, (505) 479-3931.
3. In addition to the quarterly progress report, we are providing our Ground Water Assessment Monitoring Outline that complies with 40 CFR 265.93. This outline supercedes our draft outline submitted to you on 5 July 1990.


HOWARD E. MOFFITT
Deputy Base Civil Engineer

- 2 Atchs
1. Compliance Agreement Report (2 cys)
 2. Outline (2 cys)

cc: w/Atchs
HQ TAC/DEV
US EPA (Mark Peycke)
NMEID (Boyd Hamilton)
US Army COE, Omaha, NE (B. Stewart)
BLM (Jim Fox)
DOI (Raymond P. Churan)
F & W Service (Tom O'Brien)
833 AD/JA
833 CSG/CC

Readiness is our Profession

COMPLIANCE AGREEMENT QUARTERLY REPORT

HOLLOMAN AIR FORCE BASE

GROUNDWATER MONITORING PLAN
AND
HYDROLOGICAL INVESTIGATION REPORT

EIGHTH QUARTERLY PROGRESS REPORT

1 OCT 1990 to 31 DEC 1990

PREPARED BY

HOLLOMAN AFB, NM
833 CSG/DEV

31 DEC 1990

QUARTERLY PROGRESS REPORT

1 Oct - 31 Dec 1990

On 5 Oct 1990, Holloman AFB submitted the seventh quarterly progress report to USEPA and the NMEID.

On 26 Nov 1990, Holloman AFB received from the U.S. Army Corps of Engineers the Groundwater Assessment Outline for the monitoring conducted at the sewage treatment lagoons.

On 30 Nov 1990, Holloman AFB received the Draft Risk Assessment for the Sewage Lagoon System, Holloman Air Force Base, NM.

On 6 Dec 1990, Holloman AFB received a cost estimate for several scenarios of closing and replacing the existing wastewater treatment system. This estimate was prepared by Radian Corporation.

On 17 Dec 1990, Holloman AFB submitted to the Bureau of Land Management and the U.S. Fish and Wildlife Service a copy of the Draft Risk Assessment for their review and comment.

On 17 Dec 1990, Holloman AFB received a letter from Mr Allyn M. Davis, USEPA Region VI, discussing two options of closure and requesting Holloman AFB to submit a closure plan, within thirty (30) days of receipt of subject letter, that calls for removal of all hazardous waste constituents from the seven lagoons or dewatering and capping of the seven lagoons.

On 21 Dec 1990, Holloman AFB submitted to USEPA Region VI and NMEID the Project Assessment Report prepared by Radian Corporation and requested a meeting with EPA on 4 Jan 1991.



November 15, 1990

Project No. 301251.03.06

Mr. Larry Janis
U.S. Army Corps of Engineers, Omaha District
215 North 17th Street
Omaha, Nebraska 68102-4978

Transmittal of Ground Water Quality Assessment Outline

Dear Larry:

Enclosed, please find the Ground Water Quality Assessment Outline for Holloman Air Force Base, New Mexico. Should it become necessary, a comprehensive ground water assessment program will be prepared according to this outline as required by NMHWMR-5/40, CFR Part 265.93(a).

If you have any questions, please call me at (505) 262-8800.

Sincerely,

Annabelle Rodriguez
for Dann Meyer
Project Manager

Enclosure

EAC90:DM025

Regional Office
5301 Central Avenue, N.E. • Suite 700 • Albuquerque, New Mexico 87108 • (505) 262-8800

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ATCH 2

GROUND WATER QUALITY ASSESSMENT OUTLINE

Upon verification of a statistical increase (or pH decrease) for the indicator parameters, a more comprehensive ground water monitoring program required by NMHWMR-5/40 CFR Part 265.93(a) based on the following outline will be submitted. This plan will be submitted within 15 days after the initial notification of a verified statistical increase. The outline of the assessment program is presented below.

Section 1.0 Discussion of the hydrogeologic conditions at the site; identification of potential contaminant pathways

A comprehensive discussion of the hydrogeologic investigatory program will be presented. This discussion will define the geology beneath the site area and identify ground water flow paths and rates.

Section 2.0 Description of the detection monitoring system

A thorough description of the existing detection monitoring system in place will be outlined. This description will include the physical layout of the monitoring system (e.g., horizontal and vertical orientation of individual wells) and identify assumptions used in designing the detection monitoring system (particularly how hydrogeologic conditions affected the decision making process). A sampling schedule and list of parameters to be sampled for will also be included.

Section 3.0 Description of the approach to make the first determination (false positives rationale)

A short term program will be initiated to substantiate or disprove a false positive claim. The short term program (generally no longer than 30 days) will analyze other related data what will permit investigation of whether the statistical change in 40 CFR Part 265 indicator parameters truly represents migration of leachate into the uppermost aquifer. Short term programs do not allow for the evaluation of seasonal variation. After the short term program, HAFB must submit a written report to the NMEID or Regional EPA Administrator.

Section 4.0 Description of the investigatory approach to characterize the rate and extent of contaminant migration; identification and discussion of investigatory phases.

The investigatory approach may include any of the following: 1) Incorporation of more parameters; identification will depend on parameters changing in detection monitoring; and/or 2) increase of sampling frequency; and/or 3) alteration of sampling and analysis strategy (lower MQL's, if possible). Other approaches may also be available.

Section 5.0 Discussion of number, location, and depth of wells to be installed, as well as strategy for installing more wells in subsequent investigatory phases.

Number, location, and depth of wells should be installed in such a manner to monitor ground water quality upgradient and downgradient relative to the waste water treatment lagoons. Placement and screening of the detection wells should be able to intercept predicted pathways of migration.

Upgradient wells should provide background ground water quality data in the uppermost aquifer. Upgradient wells must be (1) located beyond the upgradient extent of potential contamination from the hazardous waste management unit to provide samples representative of background water quality, (2) screened at the same stratigraphic horizon(s) as the downgradient wells to ensure comparability of data, and (3) of sufficient number to account for heterogeneity in background ground water quality.

Section 6.0 Information on well design and construction

Well construction will meet the requirements of the EPA as described in the Technical Enforcement Guidance Document (TEGD). Well construction materials must be durable enough to resist chemical and physical degradation and must not interfere with the quality of ground water samples

Section 7.0 Description of the sampling and analytical program to obtain and analyze ground-water monitoring data.

The program will be designed to meet the requirements of 40 CFR Part 265, Subpart F, Section 265.92.

A ground water sampling and analysis plan will be written and implemented. The plan must include procedures and techniques for sample collection, sample preservation and shipment, analytical procedures, and chain-of-custody documentation.

Section 8.0 Description of data collection and analysis procedures to employ.

An assessment plan must stipulate and document procedures for the evaluation of assessment monitoring data. The methods used to analyze assessment monitoring data must emphasize organization, data reduction, simplification, and summary.

Section 9.0 Discussion of the procedures to determine the rate of constituent migration in ground water.

A rapid approach will generally be required for determining the rate of migration during interim status assessments. Migration rates can be determined by monitoring the concentration of ground water contaminant constituents (GWCC) over a period of time in monitoring wells aligned in the direction of the flow. This approach requires the collection of a time series of data of sufficient duration and frequency to gauge the movement of contaminants.

Section 10.0 Schedule for the implementation of each phase of the assessment program.

An assessment program will include the amount of work involved in the assessment and other local factors such as weather and availability of equipment and personnel. The schedule should include a sufficient number of milestones, so that the NMEID/EPA can judge whether sufficient progress is being made toward the completion of the assessment. Any continued monitoring undertaken during the maintenance phase of assessment should be scheduled at least on a quarterly basis.