

HAFB 97



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DEPUTY SECRETARY

June 4, 1997

Brigadier General Bruce Carlson
United States Air Force, Commander
550 Tablosa Avenue
Holloman Air Force Base
New Mexico 88330-8458



RE: Approval: Closure Plan for Holloman Air Force Base Sewage Lagoons

Dear General Carlson:

The New Mexico Environment Department (the Department) hereby approves, with conditions, the closure plan for a risk-based closure of Holloman Air Force Base (HAFB) Sewage Lagoons A through G. The conditions are included in, and are an integral part of, the closure plan.

The closure plan approval is effective as of this date.

The Department received comments on the closure plan from HAFB, the Department's Ground Water Quality Bureau, the US Fish and Wildlife Service, and the Mesilla Valley Audubon Society. These comments and the Department's responses are enclosed for your information.

Changes were made on page ii of the closure conditions in response to the comments received. The changes are identified in the Department's responses as follows: deleted wording is ~~struck out~~ and added wording is highlighted.

Page ii of the closure conditions, as finalized, is also included. This page should be used to replace the page ii of the closure conditions in the proposed closure plan transmitted to you on March 27, 1997.

Please contact Stephanie Kruse of the Hazardous and Radioactive Materials Bureau at 505/827-1561 if you have any questions or comments.

Sincerely,

A handwritten signature in cursive script, appearing to read "Ed Kelley".

Ed Kelley, Ph. D., Director
Water and Waste Management Division

Brigadier General Bruce Carlson

June 4, 1997

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Enclosures

xc:: Benito Garcia, NMED/HRMB
Stu Dinwiddie, NMED/HRMB
Warren Neff, HAFB
David Neleigh, EPA
FILE: Red, HAFB, 1997
TRACK: HAFB, 6/4/97, HAFB, HRMB/SK, RE, FILE



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RESPONSE TO COMMENTS

CLOSURE PLAN FOR SEWAGE LAGOONS A THROUGH G US AIR FORCE/HOLLOMAN AIR FORCE BASE

A legal notice publicizing this closure plan was published in the **Albuquerque Journal** and in the **Alamogordo Daily News** on April 7, 1997. The closure plan and an accompanying fact sheet were made available for public review both at the New Mexico Environment Department (the Department), Hazardous and Radioactive Materials Bureau in Santa Fe and at the Alamogordo Public Library. The fact sheet was also mailed to nearly 200 individuals, organizations, and agencies.

The Department received comments from four interested parties. The Department thanks these parties for participating in its permitting process.

The comments received are presented below in full, followed by the Department's responses. To help the reader's understanding of changes made in the closure plan in response to comments, changes are shown as follows:

**New or changed wording is shaded; and
Deleted wording is struck through.**

1. Comment from the US Air Force, Holloman Air Force Base

In response to your 27 Mar 97 letter, Holloman AFB submits one recommendation to Condition 5, as set forth in your "Conditions for Approval of Closure Plan for Sewage Lagoons A Through G, USAF/Holloman Air Force Base". Since a soil cover will be placed over the soil and sludge at Ponds A through F, the exposure pathway for the current worker will be eliminated. Therefore, the limitation of 12 days a year for the current worker would not be necessary. Appropriate language for Condition Number 5 might be as follows: "The New Mexico Environment Department approves this site-specific, risk-based Closure Plan for restricted open space land use. Subsequent to the placement of a soil cover over the soil and sludge at Ponds A through F, the exposure pathways will no longer be complete for any scenario (current worker, open space, etc.). However, the site will remain restricted open space in order to ensure the integrity of the soil cover."

Response

The Department agrees in part. The Department agrees that "restricted open space" is a more appropriate designation for Ponds A through F. The 1996 risk assessment addendum considered exposure pathways for the sludge in Ponds A through F for a current worker scenario (i.e., without a cover), among other scenarios. Placement of a soil cover over the soil and sludge at Ponds A through F will eliminate this exposure pathway not only for the current worker, but also for individuals using the area under land use scenarios (including a residential land use scenario) which require more rigorous clean-up criteria. While access remains restricted by HAFB, personnel may work inside the area as necessary. These issues were discussed and agreed to at the April 6, 1996 meeting of stakeholders interested in the lagoons closure. Stakeholders included the US Environmental Protection Agency, the US Fish and Wildlife Service, and the Mesilla Valley Audubon Society.

The term "restricted" means that HAFB will continue to maintain the area containing Ponds A through F as a fenced area because it is in a designated runway clear zone and in order to maintain the integrity of the soil cover. This land use cannot be changed unless the potential risks associated with the new land use are reevaluated, and submitted to and found acceptable to the Department.

The Department does not agree that the language change proposed by HAFB for the last sentence of Condition 5 is necessary.

Action

Condition 5 of the closure plan is changed as follows:

5. **Future Land Use.** The New Mexico Environment Department approves this site-specific, risk-based Closure Plan for the following human health risk levels:

Ponds A through F	Current worker (12 days a year for 25 years) Restricted open space
Pond G	Current worker, hunter, trespasser

Consequently, for purposes of human health-based land uses, the US Air Force/Holloman Air Force Base may not use these sites for purposes which would require more restrictive human health risk levels.

2. **Comment received from the Ground Water Quality Bureau, New Mexico Environment Department**

After review of the Fact Sheet, dated April 7, 1997, outlining the proposed closure of lagoon A through G and based upon the Ground Water Pollution Prevention Section's (GWPPS) knowledge of discharge plans, DP-56 and DP-1127, the GWPPS concurs with the proposed closure actions. Under DP-56, Holloman AFB was issued a permit to discharge treated effluent to a land application area on Holloman AFB. This discharge has been discontinued and the discharge plan terminated. Currently, the approval for DP-1127 has been written and will be issued in the near future. This discharge plan covers the discharge of treated effluent to lagoon G and subsequent discharge to the constructed wetlands, Lake Holloman, and Lake Stinky. In addition, Holloman AFB is permitted to discharge sludge to the sludge-drying beds and discharge treated effluent to the golf course to be used as irrigation water.

Response:

No response is necessary.

3. **Comment from the New Mexico Ecological Field Services, Fish and Wildlife Service, US Department of the Interior**

We have reviewed the March 27, 1997, fact sheet pertaining to NMED's proposed closure plan for seven sewage lagoons at Holloman Air Force Base. The Fish and Wildlife Service has participated in discussions and planning related to this matter, and we concur with the plan as presented in the fact sheet.

Response:

No response is necessary.

4. **Comment from Mr. Gordon J. Ewing, representing the Mesilla Valley Audubon Society**

Thank you for sending me a copy of Sewage Lagoon Closure Plan for Holloman AFB. I have been a representative of Mesilla Valley Audubon Society working with Holloman AFB concerning the wildlife habitat in the Holloman Lake area for the last several years. We have been extremely pleased to work with the people in the Environmental Flight at HAFB. Usually we find ourselves in an adversarial relationship with organizations when we try to get them to make changes that are environmentally sound. HAFB is not only willing to listen to suggestions from Mesilla Valley Audubon, they were often ahead of us, having already begun discussing our recommendations before we made them. I can only think of one proposal that I have made that has not been incorporated into their plans as yet. I have suggested that one of the peninsulas extending into Lake Holloman from the west side be cut off to form an island. This island would become an area protected from terrestrial predators for nesting water- and shorebirds, but that is not why I am writing this letter.

The closure plan proposes to dry out Lagoons A through F and cover them with clean soil, restoring the original contours and vegetation and keeping the area fenced. Since 4000 tons of PCB contaminated soil has already been removed from the first 2 lagoons, we support this closure plan.

It has been proposed that Lagoon G remain as an open body of water even though low levels of pesticide residues have been detected in the muds underlying the pond, especially near the inflow areas. We at MVAS think that the evaluation of Lagoon G should not be between Lagoon G with NO contamination and Lagoon G with minimal contamination, but more realistically it should be between Lagoon G with minimal contamination and no Lagoon G (dried, and covered with soil as the other 6 Lagoons). Of the latter two alternatives, we strongly favor the preservation of the lagoon. Three reasons for this are given below.

1. For many years, Lagoon G has provided 40 acres of open water for waterfowl and shorebirds. This has occurred with no evidence of harm to those birds. It is probably most important as a refueling stop for migrants, both in spring and fall. 40 acres of open water is a rare commodity in Southern New Mexico.

2. In the Holloman Lake area there are four distinct types of wildlife habitat that depend on HAFB runoff and wastewater for their existence: a) permanent open water, b) shallow water and moist soils with grassy type vegetation, c) mostly nonvegetated beaches and playas that are intermittently covered with water and d) riparian areas. All four of these habitats should be preserved to increase the variety of wildlife in the area. The wetlands (b) have been relatively rare in the area. The newly constructed wetlands has a potential of over 100 acres of this type of habitat.

Lagoon G along with Holloman Lake makes up the open water (a) habitat as mentioned in part 1). It also plays a vital part in the emergent wetlands, (b), by storing water above constructed wetlands which lie between Lagoon G and Holloman Lake. This storage capacity will permit better management of these wetlands.

3. The lagoon is also potentially of value in insuring that the beaches and the Stinky Playa are periodically flooded to keep them biologically active. The storage function of Lagoon G can assist in the flexibility of managing these playa type areas.

The riparian area is a separate problem. Currently it is almost entirely a monoculture of salt cedar. Attempts should be made to establish native trees in the area. Possibly cottonwoods and willows, but that is a separate problem. This can be evaluated after the constructed wetlands become stabilized.

We at Mesilla Valley Audobon Society approve of the closure plan sent to us under a cover letter dated 27 March 1997.

Response:

No response is necessary.

**CONDITIONS FOR APPROVAL OF CLOSURE PLAN
FOR
SEWAGE LAGOONS A THROUGH G
US AIR FORCE/HOLLOMAN AIR FORCE BASE (con.d)**

<u>Number</u>	<u>Condition</u>				
	The location and custodian at Holloman Air Force Base of the laboratory sample analysis sheets and quality assurance/quality control documentation for the laboratory analyses for the 1994 sampling and any other sampling used to evaluate appropriate risk and remedial actions at the lagoons;				
4.	Long-Term Groundwater Monitoring. The Long-Term Groundwater Monitoring Program must continue until the New Mexico Environment Department has verified completion of closure.				
5.	Future Land Use. The New Mexico Environment Department approves this site-specific, risk-based Closure Plan only for the following human health risk levels: <table border="0" style="margin-left: 40px;"> <tr> <td style="padding-right: 20px;">Ponds A through F</td> <td>Restricted open space</td> </tr> <tr> <td>Pond G</td> <td>Current worker, hunter, and trespasser</td> </tr> </table> <p>Consequently, for purposes of human health-based land uses, the US Air Force/Holloman Air Force Base may not use these sites for purposes which would require more restrictive human health risk levels.</p>	Ponds A through F	Restricted open space	Pond G	Current worker, hunter, and trespasser
Ponds A through F	Restricted open space				
Pond G	Current worker, hunter, and trespasser				
6.	Deed restriction. Not later than 60 days after certification of closure of each hazardous waste disposal unit, the US Air Force/Holloman Air Force Base must submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the Secretary of the New Mexico Environment Department, a record of the type, location, and quantity of hazardous wastes disposed of within each sewage lagoon and a survey plat of each lagoon. <p>Within 60 days of certification of closure, the US Air Force/Holloman Air Force Base must:</p> <p style="margin-left: 40px;">Record, in accordance with State law, a notation on the deed to the facility property - or on some other instrument which is normally examined during title search - that will in perpetuity notify any potential purchaser of the property that:</p> <p style="margin-left: 80px;">The land has been used to manage hazardous waste;</p>				