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MARK E. WEIDLER
SECRETARY

EDGAR T. THORNTON, III
DEPUTY SECRETARY

March 27, 1997

RE: Proposed closure plan for seven sewage lagoons at Holloman Air Force Base

Dear Concerned Citizen:

Enclosed is a fact sheet regarding the intent of the New Mexico Environment Department (NMED) to approve, subject to public input, a closure plan for seven sewage lagoons at Holloman Air Force Base. This proposal to approve closure is discussed in the enclosed fact sheet.

A copy of the proposed closure plan, along with the administrative record for NMED's proposed action, is available for review **April 7 through May 7, 1997**. This material may be reviewed at the NMED Hazardous and Radioactive Materials Bureau office in Santa Fe and at the Alamogordo Public Library. More detailed information is contained in the Fact Sheet.

Procedures for submitting comments or requesting a public hearing regarding this proposed action are also contained in the fact sheet. Comments and requests for hearing will be received through **May 7, 1997**.

If you have any questions regarding this proposal, please contact Stephanie Kruse of my staff at (505) 827-1561 or at the Santa Fe address given above.

Sincerely,

A handwritten signature in black ink, appearing to read "R. Dinwiddie".

Robert S. (Stu) Dinwiddie, Ph. D., Manager
RCRA Permits Management Program

Enclosures

FILE: RCRA, HAFB, 97
TRACK: HAFB, 3/27/97, Citizen, HRMB/SK, RE



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FACT SHEET

April 7, 1997

**PROPOSED CLOSURE
for
SEWAGE LAGOONS A THROUGH G,
HOLLOMAN AIR FORCE BASE, NEW MEXICO**

The State of New Mexico was authorized in 1986 to operate a hazardous waste management program in lieu of the Federal program for those portions of the Resource Conservation and Recovery Act (RCRA) in effect prior to the enactment of the Hazardous and Solid Waste Amendments of 1984 (HSWA). In 1996, the State was authorized to operate a hazardous waste management program for parts of HSWA. HSWA imposes additional Corrective Action requirements on hazardous waste management facilities for releases to the environment.

Under authority of the New Mexico Hazardous Waste Management Act (Section 74-4-1 *et seq.*, NMSA 1978, as amended, 1992) and the New Mexico Hazardous Waste Management Regulations (20 NMAC 4.1, revised 1995), the New Mexico Environment Department (NMED) can approve or deny hazardous waste management permits and closure plans, permit modifications, and amendments. Under this authority, NMED intends to approve, pending public input into this decision, a closure plan submitted by the United State Air Force/Holloman Air Force Base (HAFB).

HAFB is located in Otero County in south-central New Mexico, about seven miles west of Alamogordo. The sewage lagoons are located in the southwestern corner of the Base. Neither the ground water under the Base nor the surface water, represented by Lake Holloman, is potable under natural conditions.

Facility description. HAFB has constructed a new wastewater treatment facility and will no longer utilize the old lagoon system for effluent treatment. Under the old treatment facility, the sewage lagoon system consisted of seven lagoons that received over 1.2 million gallons of wastewater per day. The wastewater entered Ponds A and B, then flowed sequentially to the 40-acre Pond G.

Discharge from Pond G, originally a natural depression, flowed via a constructed open ditch to a playa lake, the 166-acre Lake Holloman, which in turn occasionally overflowed into Lake Stinky. Pond G, the ditch, Lake Holloman, and Lake Stinky were supported primarily by wastewater effluent and stormwater runoff. Lake Holloman contains water year round, while Lake Stinky frequently dries up.

Today's proposed action addresses only closure of the lagoons. The ditch, Lake Holloman, and Lake Stinky are regulated under HAFB's RCRA permit. -

Since the mid-1980s, the effluent consisted of mainly residential wastes and some non-hazardous industrial waste. Some listed wastes were disposed of in the ponds before 1985, making the sludge itself a hazardous waste under the "mixture" rule (20 NMAC 4.1, Subpart II, 40 CFR 261.3(a)(2)(iv)). However, the sludges and soils in the ponds no longer exhibit the characteristics for which the wastes were listed and the concentrations of these hazardous waste constituents are below contaminant-specific health-based criteria, and therefore the media are considered to no longer contain these wastes. The ponds have also received pesticide runoff from the golf course and other areas on the Base. Over 4,000 tons of PCB-contaminated sludge were removed from Ponds A and B in 1990. Remaining PCB concentrations are below the Toxic Substances Control Act (TSCA) criterion for industrial use of 25 mg/kg. Remaining Contaminants of Concern (COCs) have been determined to be organochlorine pesticides and metals.

The old sewage system, including Pond G, the ditch, Lake Holloman, and Lake Stinky, comprise a unique ecosystem in south central New Mexico. A variety of animal species, including threatened, endangered, and sensitive species (water birds in particular) and migratory waterfowl has become dependent on the sewage lagoons and lakes for habitat and food. The area also has important recreational value locally for birders and hunters.

HAFB proposed closure plan activities for Ponds A through F. HAFB proposes a risk-based equivalency demonstration to clean closure that would meet criteria for current workers (12 days a year over 25 years) for Ponds A through F. Ponds A through F were not evaluated for ecological risk since the ponds will be covered and will no longer provide habitat for aquatic species.

The sludge in these ponds would be dewatered and covered with clean soil. The site would be restored to its natural contours and vegetated. These ponds would remain fenced and the site would remain an open space, restricted area due to its location in the Base's runway clear zone. Future worker exposure at the site would consist of semiannual maintenance of the vegetative cover.

NMED proposed decision for Ponds A through F. NMED considers that a risk-based clean closure that meets land use criteria for current workers is appropriate and protective of human health, and that these criteria can be attained at each of Ponds A through F. NMED proposes, therefore, to approve the Closure Plan for Ponds A through F, subject to a deed restriction to ensure continued protection of human health.

HAFB proposed closure plan activities for Pond G. HAFB proposes a risk-based equivalency demonstration to clean closure that would meet human health criteria to protect current workers, hunters, and trespassers.

COCs in Pond G are DDT derivatives, DDD and DDE. Examination of body burden for some aquatic species shows that there is a very low potential for adverse effects. The ecological risk assessment performed shows that the aquatic food chains examined were unlikely to be threatened by the COCs and that there has been no decrease in the surviveability or productivity within the aquatic species examined.

HAFB proposes No Action at Pond G in order to maintain the crucial wildlife environments that have been created. The new wastewater treatment facility will maintain Pond G and Lake Holloman through direct discharge. To replace the loss of 60 acres of evaporative surface caused by closing Ponds A through F, HAFB is constructing 120 acres of wetlands between Pond G and Lake Holloman. At a meeting held prior to HAFB's submission of the closure plan, interested parties voiced the opinion that adverse environmental effects would be greater from clean-up efforts at Pond G (drying the pond and removing the sludge) than from the No Action alternative.

NMED proposed action for Pond G. NMED considers that a risk-based closure that meets land use criteria for current workers, hunters, and trespassers is appropriate and protective of human health, and that these criteria can be attained at Pond G. As risk managers for closure of Pond G, NMED has considered both sides of the question regarding ecological risk - a slight potential for risk from DDT derivatives in the sludge remaining in the pond, versus destruction of essential habitat for aquatic species. NMED proposes, therefore, to approve the Closure Plan for Pond G, subject to a deed restriction to ensure continued protection of human health.

This proposed decision is based on the low potential for adverse impacts to wildlife, the importance of Pond G as habitat for aquatic species, the importance of Pond G in maintaining the existing and new wetlands and Lake Holloman, and the fact that the constructed wetlands and the continued use of Lagoon G are part of the new wastewater treatment plant project and are required for a Finding of No Significant Impact (FONSI) under the National Environmental Policy Act (NEPA). In addition, as wetlands, Pond G is under the authority of the US Corps of Engineers, which would require a Dredge-and-Fill permit under Section 404 of the Federal Clean Water Act in order to dredge the site.

Sewage lagoons groundwater monitoring. Long-term groundwater monitoring is presently required downgradient of the lagoons for organochloride pesticides and metals. These COCs occur at lower concentrations than found in the lagoons. Introduction of these contaminants into the lagoons was discontinued in 1983, and contaminant concentrations in ground water are expected to continue to decrease over time. Annual sampling for 1995 (the latest available) show no detection of these constituents at levels above the Alternate Concentration Levels used for the lagoons.

NMED proposes to discontinue the requirement for long-term monitoring down-gradient of the sewage lagoons when the State verifies that closure at all ponds has been accomplished successfully.

Public review. NMED is requesting comments during this public comment period from government wildlife agencies and other interested parties regarding these actions. With respect to Pond G, these comments should provide information to show whether or not an equivalency demonstration of clean closure has been made which shows that the environment at Pond G will be adequately protected if no action is taken to remove remaining hazardous constituents. This information should be based primarily on technical data or Best Professional Judgment. Other comments, based on other considerations, e.g., recreational or aesthetic value, will also be considered.

Fact Sheet
April 7, 1997
Page 4

The administrative record for this action consists of the proposed closure plan, a fact sheet, and a record of the public involvement effort. The administrative record may be reviewed **from April 7 through May 7, 1997**, Monday through Friday between the hours of 8:00 a.m. and 5:00 p.m. at **NMED, Hazardous and Radioactive Materials Bureau, 2044 Galisteo, Santa Fe, New Mexico 87505**. The proposed closure plan and the fact sheet may also be reviewed Mondays through Fridays, 10:00 a.m. through 8:00 p.m.; Saturday, 11:00 a.m. to 5:00 p.m.; and Sundays, 1:00 p.m. to 5:00 p.m., at the **Alamogordo Public Library, 920 Oregon Street, Alamogordo, New Mexico 88310**. To obtain a copy of the administrative record or any part thereof, at 35 cents a page, please contact Stephanie Kruse at the Santa Fe address given above or call 505-827-1561.

Any person who wishes to comment on this proposed closure plan or to request a public hearing should submit written comments/request, along with the commenter/requestor's name and address, to Stephanie Kruse at the Santa Fe address given above. Requests for hearing should include a statement of the nature of the issues proposed to be raised. Only comments/requests received by **May 7, 1997** will be considered. NMED will provide a 30-day notice of the public hearing, if one is scheduled.

All written comments, along with issues raised at a Public Hearing, if held, will become part of the administrative record and will be considered in formulating the final decision. NMED may approve, or modify and approve, the proposed closure plan based on the comments received. NMED will notify the USAF/HAFB and each person who submitted a written comment during the public comment period or testimony at a public hearing of the final decision, including any approved change to the proposed action, and a detailed statement of reasons for any such change. The final decision will require that all closure activities be conducted according to applicable State and Federal laws.