

KAFB 92



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 542D CREW TRAINING WING (MAC)
KIRTLAND AIR FORCE BASE, NEW MEXICO 87117 - 5000

ENTERED

6 APR 1992

Dr Bruce Swanton
Hazardous and Radioactive Materials Bureau
NM Environment Department
PO Box 26110
525 Camino de los Marquez
Santa Fe NM 87502

Dear Dr Swanton

Attached is a copy of a letter written to John Gould of my staff by Mike Silva of H+GCL, our contractor for the preparation and implementation of the closure plans for the sewage lagoon system. This letter was generated as a result of several conversations with Joe Kennedy shortly before he left ED and its purpose is to clarify the results of the risk assessment on the lagoon sludge. Please have a copy of Mr Silva's letter placed in the sewage lagoon closure plan which we submitted to your office.

If you have any questions, contact Mr Gould at 846-2773.

Sincerely

George R Pratt
THOMAS A. NORRIS, Colonel, USAF
Director
Environmental Management Division

1 Atch
H+GCL Letter



KAFB1212





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March 19, 1992

Mr. John Gould
Environmental Management
542 CTW/EM, Mac Building 20604
Kirtland Air Force Base
Kirtland Air Force Base, NM 87117-5000

RE: SEWAGE LAGOONS CLOSURE PLAN

SUBJECT: CLARIFICATION AND ADDENDUM TO APPROVED CLOSURE PLAN

Dear John:

The following statement from the Unit Closure Plan for Sewage Lagoons, Kirtland Air Force Base, dated September 10, 1991, requires clarification:

Language in section 6.1, 7th paragraph (shown on page 53 as 2nd paragraph) indicates that the sludge in the south lagoon was tested in 5 locations and that the sample from one location (duplicate @ 14) indicated the presence of fluoranthene and pyrene at levels slightly above the regulatory limit and only a trace above the detection limit.

The above language is correct; however, the following additional paragraphs should be added for clarification:

This regulatory limit is established by the Contaminant Concentrations in Waste (CCW) limits (40 CFR 268.43) for both wastewater and non-wastewater. This waste is considered a non-wastewater and the limiting value is 8.2 mg/kg for both fluoranthene and pyrene. The sludges contained in the lagoon system have the waste code of F039 (40 CFR 261.31).

The total CCW for non-wastewater has a land disposal restriction (LDR) limit for both fluoranthene and pyrene of 8.2 mg/kg. {This information is shown on table 6.2, 5th column in the fluoranthene and pyrene rows.} The highest value of Analysis Results for Sewage Lagoon Sludge Sampling Locations, Concentration of Compounds Detected in Sludge (mg/kg), shown on Table 4 in appendix A for fluoranthene and pyrene are 8.7 and 9.6 respectively. Therefore the LDR limit of 8.2 was exceeded by 0.5 mg/kg for fluoranthene and 1.4 mg/Kg for pyrene.

Table CCW in 40 CFR 268.43 identifies restricted waste and the concentrations of their associated hazardous constituents that may not be exceeded by the waste itself

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or the treatment residual (not by an extract of such waste or residual) for the allowable land disposal of such waste or residual.

Although the CCW was exceeded only slightly for the raw waste, the fluoranthene and pyrene will most likely be lower than the CCW limit after treatment. Therefore, when treated prior to disposal, these contaminants values should not be exceeded for land disposal. Therefore the sludge containing fluoranthene and pyrene must be treated prior to disposal and tested to show that the 8.2 mg/kg value has not been exceeded and the sludge will be acceptable for land disposal.

It is important to note that these values are three orders of magnitude less than the established risk limit shown on table 6.2 . Therefore the risk of these chemicals in the environment is fairly low when compared to the risk limit calculation that establishes a value of 2,000 mg/l for fluoranthene and 1,500 mg/l for pyrene.

To complete the clarification, the following corrections should be noted on the tables as shown:

Table 6.2, 6th column, Low Limit Value (PPM) for fluoranthene should be changed to reflect the non-wastewater limit value of 8.2, not .068 as shown. Similarly, the Low Limit Value for pyrene should also be changed to 8.2 from .067 as shown.

The above changes should also be made on table 6.3 in column 1 under Regulatory Low Limit Value for both fluoranthene and pyrene

Table 6.3, 5th column under Sludge High Value detected (PPM) {This information is from Table 4 in appendix A} should be changed to 8.7 and 9.6 for fluoranthene and pyrene respectively, where they were previously shown as 5.6 for both.

These changes do not affect the closure of the lagoons.

There remain two limiting factors that may affect the ultimate disposal of the sludge: one is the chromium values that are attributable to high background levels as described in the closure plan, the other is the results of the TCLP sampling and analysis of composite samples that will be done after the sludges are piled.

Prior to removal, the CCW values should be checked against the regulatory limits, which will determine if the sludge must be treated prior to disposal. If treated, the sludge may be disposed of at either an on site location or at a permitted land disposal facility. This, of course, depends on the TCLP limits and the CCW values in the round of testing that is planned to occur during closure. I do not anticipate incineration of the sludges to be required for disposal, since the values are low enough to be effectively treated by solidification, if necessary.

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In summary, the sludge in the lagoons is not a listed or a characteristic hazardous waste. However, disposal methods are governed by CCW concentration limits. Based on the current data, the sludge in the south lagoon must be treated and then tested to demonstrate the CCW levels are not exceeded for land disposal of the sludge. If additional data from composite sampling during closure indicates the CCW levels are not exceeded, the material can be land disposed directly. If this sampling indicates CCW levels have been exceeded the sludge must be treated and retested to show that CCW levels have not been exceeded prior to land disposal of this sludge.

If there are any questions, please contact me directly at 842-0001.

Sincerely,
H+GCL



Mike Silva
Project Manager

MS/11b/0508/GOULDSLCLTR