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GOVERNOR

State of New Mexico  
**ENVIRONMENT DEPARTMENT**  
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JUDITH M. ESPINOSA  
SECRETARY

RON CURRY  
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**CERTIFIED MAIL  
RETURN RECEIPT REQUESTED**

November 3, 1993

Colonel Thomas A. Norris  
Director, Environmental Management  
377th ABW  
2000 Wyoming Blvd. SE, Suite 5659  
Kirtland AFB, New Mexico 87117-5659

Re: **Review of Groundwater Chromium Concentrations Based on Data  
from the Sewage Lagoons and Golf Course Main Pond, KAFB**

Dear Colonel Norris:

The Hazardous and Radioactive Materials Bureau (HRMB) is responding to the October 15, 1993 letter written by Mr. Christopher DeWitt, IRP Program Geologist, Environmental Management Division. Mr. DeWitt addressed concerns about the accuracy of the data for total chromium in the groundwater at the Sewage Lagoons and Golf Course Main Pond, as tabulated in HRMB's September 22, 1993 clean-closure denial letter for those RCRA units. HRMB has evaluated all the groundwater data provided previously by Kirtland Air Force Base (KAFB) related to these two RCRA units and has retabulated these data on the attached table.

Mr. DeWitt expressed concern that HRMB had originally used the analytical report dates for the tabulation of data. For the purpose of clarification, HRMB has now formatted the data on the attached table by the sampling date.

Additionally, Mr. DeWitt believed that some of the data may have been excluded from those tabulated previously by HRMB. His concern in this case was that environmental sample and duplicate analyses should have been averaged to yield a more significant result. Much of the "duplicate" sample data utilized by Mr. DeWitt in his evaluation, however, are related either to equipment blank or unknown sample type analyses. Neither equipment blank nor unknown sample type analyses can or should be averaged with a known groundwater environmental sample analysis.

Please examine the attached table and compare it with the groundwater chromium data which KAFB has for the Sewage Lagoons and Golf Course Main Pond. It is important that KAFB and HRMB agree on the basic data when discussing clean closure status for these RCRA units.

KAFB1341



KAFB-Sewage Lagoons and Golf Course Main Pond  
Groundwater Chromium Data  
November 3, 1993

If you have any questions related to the data on the attached table, please contact Ron Kern of my staff at (505) 827-4313.

Sincerely,

*Steven M. Alexander*

Steven M. Alexander, Technical Compliance Program Manager  
Hazardous and Radioactive Materials Bureau

enclosure

cc w/ enclosure

Christopher DeWitt, IRP Prog. Geologist, Env. Management Div., KAFB

Ron Kern, HRMB

File

cc w/o enclosure

Barbara Hoditschek, RCRA Permitting Program Manager

KAFB-Sewage Lagoons and Golf Course Main Pond  
 Groundwater Chromium Data  
 November 3, 1993

Groundwater Chromium Concentrations (ppb)  
 Kirtland Air Force Base Monitoring Wells (M.W.)  
 Sewage Lagoons and Golf Course Main Pond  
 Sampling Events - May, 1990 to May, 1992

M.W.	5/90	8/90	11/90	2/91	5/91	11/91	5/92
0501	140	14	2.4	28 3(E)	ND ND(?)	7.5	ND ND(D)
0502	45	17	ND	3.7	ND	ND ND(E)	ND ND(E)
0503	120	120	82	37	24	55	12
0504	29	23	6.1	5.9 ND(E)	3.3	3.3	28 ND(E)
0602	240	50(?) 37(?) 42(?) 24(?) 45(?) 6.2(?)	13	19	11	ND	17
0608	38	14	8.3	75 7.8(E)	11 ND(?)	11	ND ND(E)
0609	31	14	47	28 3.6(E)	7.6	25	28 ND(E)
0610	NA	51	14	53 4(E)	15 ND(?)	12 ND(E)	ND

NOTE: All concentrations are in parts per billion (ppb) total chromium.  
 Dates for the individual columns are sampling dates.  
 M.W. = Monitoring well  
 NA = No analysis available  
 ND = Not detected  
 (D) = Duplicate sample  
 (E) = Equipment blank  
 (?) indicates an unknown sample or blank type.