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JOHN A. SANCHEZ  
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NEW MEXICO  ENTERED  
ENVIRONMENT DEPARTMENT

*Hazardous Waste Bureau*

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DAVE MARTIN  
Secretary

BUTCH TONGATE  
Deputy Secretary

JAMES H. DAVIS, Ph.D.  
Director  
Resource Protection Division

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

November 6, 2012

Colonel John Kubinec  
Base Commander  
377 ABW/CC  
2000 Wyoming Blvd. SE  
Kirtland AFB, NM 87117-5606

John Pike  
Director, Environmental Management Section  
377 MSG/CEANR  
2050 Wyoming Blvd.  
Kirtland AFB

**RE: REPEAT SAMPLING AND GAS BUBBLES IN GROUNDWATER SAMPLES,  
BULK FUELS FACILITY SPILL, SOLID WASTE MANAGEMENT UNITS ST -  
106 AND SS-111  
KIRTLAND AIR FORCE BASE, EPA ID# NM9570024423**

Dear Col. Kubinec and Mr. Pike:

The New Mexico Environment Department (NMED) staff observed and collected split samples from the newly installed Kirtland Air Force Base (KAFB) wells during the week of October 29, 2012. NMED observed bubbles in three of the four wells installed to determine the northern extent of the ethylene dibromide (EDB) plume. The gas bubbles were observed in groundwater samples collected at wells KAFB-106205, KAFB-106206, and KAFB-106209. Pursuant to Parts 1.23.1 and 6.5.18.3.1 of the U. S. Air Force's (Permittee's) Hazardous Waste Operating Permit, the Permittee must collect and analyze representative samples of environmental media, and thus must prevent to the extent possible air from becoming entrained in water samples. Thus, the Permittee is hereby directed to repeat the groundwater sampling of the three wells identified above. This has been discussed with via telephone with the Permittee's and the contractor, Shaw Environmental & Infrastructure, Inc, (Shaw) on November 2 and 5, 2012. Representatives from NMED, the Permittee, and Shaw are to observe the repeat sampling, this week, to determine if additional measures should be taken to address the gas bubble issue in addition to the direction provided below.

KAFB3962



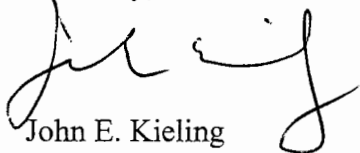
Col. Kubinec and Mr. Pike  
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The Permittee's letter of February 6, 2012 presented four-part method to accomplish an analysis of the gas bubbles in the groundwater. This approach is acceptable to NMED. NMED will discuss with the Permittee the details of the approach in the coming days. The Permittee must be given ample notification of the opportunity to observe in the field the testing to be done.

The enclosed table lists the wells known to the NMED where water samples containing air bubbles have been observed. This list may not be complete. The Permittee must report on the findings of the bubble analysis by **January 31, 2013**. The Permittee must also submit by the same date a listing of all wells that have produced groundwater samples containing gas bubbles and each sampling event (by date) where the bubbles were observed at each well.

If you have any questions regarding this letter, please contact Mr. William Moats of my staff at (505) 222-9551.

Sincerely,



John E. Kieling  
Chief  
Hazardous Waste Bureau

cc: J. Davis, NMED HWB  
W. Moats, NMED HWB  
W. McDonald, NMED HWB  
S. Brandwein, NMED HWB  
J. Schoeppner, NMED GWQB  
S. Reuter, NMED PSTB  
B. Gallegos, AEHD  
R. Shean, ABCWUA  
L. King, EPA-Region 6 (6PD-N)  
File: Reading and KAFB 2012

**Groundwater Monitoring Wells Where Bubbles Have Been Observed in Water Samples**

Monitoring Wells listed in KAFB's 06Feb12 Response to NMED's 28Sept11 Letter	Additional Monitoring Wells observed by NMED during Quarterly Sampling Events
KAFB-003	KAFB-106031
KAFB-016	KAFB-106034
KAFB-106033	KAFB-106036
KAFB-106039	KAFB-106037
KAFB-106040	KAFB-106047
KAFB-106045	KAFB-106066
KAFB-106053	KAFB-106093
KAFB-106054	KAFB-106107
KAFB-106057	KAFB-106205
KAFB-106061	KAFB-106206
KAFB-106068	KAFB-106209
KAFB-106071	
KAFB-106080	
KAFB-106081	
KAFB-106090	
KAFB-106092	
KAFB-106094	
KAFB-106096	
KAFB-106099	
KAFB-106103	
KAFB-106104	