



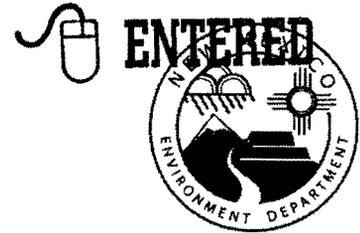
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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

November 8, 2010

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**RE: DENIAL OF USE OF B&K MULTIGAS ANALYZER FOR FIELD SCREENING OF VOLATILE ORGANIC COMPOUNDS AT MATERIAL DISPOSAL AREAS G, H, AND L, AT TECHNICAL AREA 54
LOS ALAMOS NATIONAL LABORATORY, EPA ID No: NM0890010515**

Dear Messrs. Rael and Graham:

The New Mexico Environment Department (NMED) has received the United States Department of Energy and the Los Alamos National Security, LLC (collectively, the Permittees) *Response to the Requirement to Discontinue Use of Brüel & Kaejer Multigas Analyzer for Field Screening of Volatile Organic Compounds at Material Disposal Areas G, H, and L, at Technical Area 54*, dated September 29, 2010 and referenced by EP2010-0435.

On July 30, 2010, the NMED directed the Permittees to discontinue the use of Brüel and Kaejer (B&K) analyzer to field screen for volatile organic compounds (VOCs) in the subsurface at Material Disposal Areas (MDAs) G, H, and L because of lack of correlation between the field-screening results and laboratory results. The Permittees request that NMED reconsider its direction. The Permittees intend to continue the use of B&K analyzer to field-screen for 1,1,1-trichloroethane (TCA) and trichloroethene (TCE) at MDAs L and G.

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The Permittees contend that the B&K instrument provides useful information at MDAs G and L because higher concentrations of TCA and TCE are prevalent at these sites, and assert that correlation between the field screening and analytical data is statistically significant at higher concentrations of TCA ($> 42,300 \mu\text{g}/\text{m}^3$) and TCE ($> 2000 \mu\text{g}/\text{m}^3$). The Permittees chose a value of $42,300 \mu\text{g}/\text{m}^3$ for TCA and $2000 \mu\text{g}/\text{m}^3$ for TCE because these are the calculated concentrations in pore gas that correspond to the concentrations that could result in partitioning to groundwater at concentrations equal to the groundwater cleanup standards.

Review of the data indicates that there is a wide range of variation in detected concentrations of TCA and TCE at MDAs G, H, and L. The Permittees acknowledge that there is limited correlation between the field screening and laboratory analytical data at lower concentrations of TCA and TCE. The use of B&K at sites where both low and high concentrations of contaminants are present may result in inaccurate assessments of the site conditions at each MDA. Moreover, as a cost saving measure at some sample ports, the Permittees have only collected screening data instead of both laboratory and screening data.

The Permittees state that B&K instruments provide useful information without collecting an analytical sample at every port, the results of field screening are not used to guide collection of samples, and the samples are collected from predetermined sampling locations at MDAs G and L. NMED notes that in addition to TCA and TCE, several VOCs are present at the MDAs, in particular MDAs G and L. Reporting field screening for only TCA and TCE may erroneously suggest that those are the only contaminants present in vapor phase in the subsurface. Since risk calculation, for example for vapor intrusion evaluations, considers the cumulative effect of all VOCs present in the subsurface, the use of the B&K could potentially provide misleading information concerning the presence of and hazards related to vapor-phase contamination.

NMED has considered the Permittees arguments, but finds them nonpersuasive. NMED affirms its previous position that the Permittees must discontinue the use of the B&K instruments for monitoring vapor-phase VOCs at the Los Alamos National Laboratory.

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Please contact Neelam Dhawan of my staff at (505) 476-6042 should you have any questions.

Sincerely,



James Bearzi
Chief
Hazardous Waste Bureau

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File: Reading and LANL/TA 54/MDA G, H, L, 2010