SNL06

National Nuclear Security Administration
Sandia Site Office
P.O. Box 5400
Albuquerque, New Mexico 87185-5400

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

NOV 27 2006

Mr. James Bearzi
Chief
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Road East
Building 1
Santa Fe, NM 87505

Dear Mr. Bearzi:

On behalf of the Department of Energy (DOE) and Sandia Corporation (Sandia), DOE is notifying you of an increase in trichloroethene (TCE) detected at groundwater monitoring well TAV-MW6 in the Technical Area V (TA-V) groundwater study area at Sandia National Laboratories/New Mexico (SNL/NM) (EPA ID No. NM5890110518). Although this is not a new release under Section V of the SNL/NM Compliance Order of Consent (the Order), DOE and Sandia are providing these data for your information.

Under Section IV.C of the Order, DOE and Sandia are required to characterize groundwater within the TA-V groundwater study area. Groundwater samples from the study area are routinely submitted for volatile organic compound analysis using U.S. Environmental Protection Agency (EPA) Method SW846 8260B. Analytical data from historical sampling events have been described in numerous annual groundwater monitoring reports previously submitted to New Mexico Environment Department (NMED)

Groundwater monitoring well TAV-MW6 (Figure 1) has been sampled since November 2001 and has had detections of TCE below the EPA maximum contaminant level (MCL) of 5.0 micrograms per liter (µg/L). TCE concentrations between November 2001 and August 2006 are shown on Figure 2, with a concentration of 6.34 µg/L in a sample collected on August 31, 2006.

Sandia attributes increasing TCE concentrations in TAV-MW6 to groundwater with higher TCE concentrations migrating from upgradient locations. This hypothesis is consistent with contaminant fate and transport modeling performed in support of the Corrective Measures Evaluation process currently underway for the TA-V groundwater study area. The "*Groundwater Flow and TCE Transport Model for Technical Area V and Vicinity*" (in preparation), shows that TCE concentrations at TAV-MW6 are predicted to increase over the next several years, and peak TCE concentrations are predicted to occur in the year 2020 followed by a decrease in TCE concentrations (Figure 3).

As required by Table XI-1 of the Order, Sandia will continue to perform consecutive quarterly sampling at TAV-MW6 to evaluate the TCE concentrations, and will continue to report the results and trends to the NMED.

If you have any questions, please contact me at (505) 845-6036, or John Gould of my staff at (505) 845-6089.

Sincerely,

Kimberly A Davis for

Patty Wagner
Manager

cc:
W. Moats, NMED-HWB
L. King, EPA, Region 6
T. Skibitski, NMED-OB (2 copies)
A. Blumberg, SNL/NM, Org. 11100, MS-0141
D. Miller, SNL/NM, Org. 6765, MS-0718
J.P. Freshour, SNL/NM, Org. 6765, MS-1087
M. Skelly, SNL/NM, Org. 6765, MS-1087
M. Davis, SNL/NM, Org. 6765, MS-1089
F. Lauffer, SNL/NM, Org. 10331, MS-1042
Records Center, SNL/NM, Org. 6765, MS-1087
T. Longo, HQ/GTN, NA-56
J. Estrada, SSO

CERTIFICATION STATEMENT FOR APPROVAL AND FINAL RELEASE OF DOCUMENTS

Document title: **Notification of TCE in TAV-MW6, November 2006**

Document authors: **Mike Skelly, Dept, 6765**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

Signature: _____ 11/9/06

Peter B. Davies
Director
Nuclear Energy & Global Security Technologies
Division 6700
Sandia National Laboratories/New Mexico
Albuquerque, New Mexico 87185
Operator

Date

and

Signature: _____ for 11/21/06

Patty Wagner
Manager
U.S. Department of Energy
National Nuclear Security Administration
Sandia Site Office
Owner and Co-Operator

Date

Figure 1
Location of Technical Area V (TA-V) Groundwater Monitoring Wells.

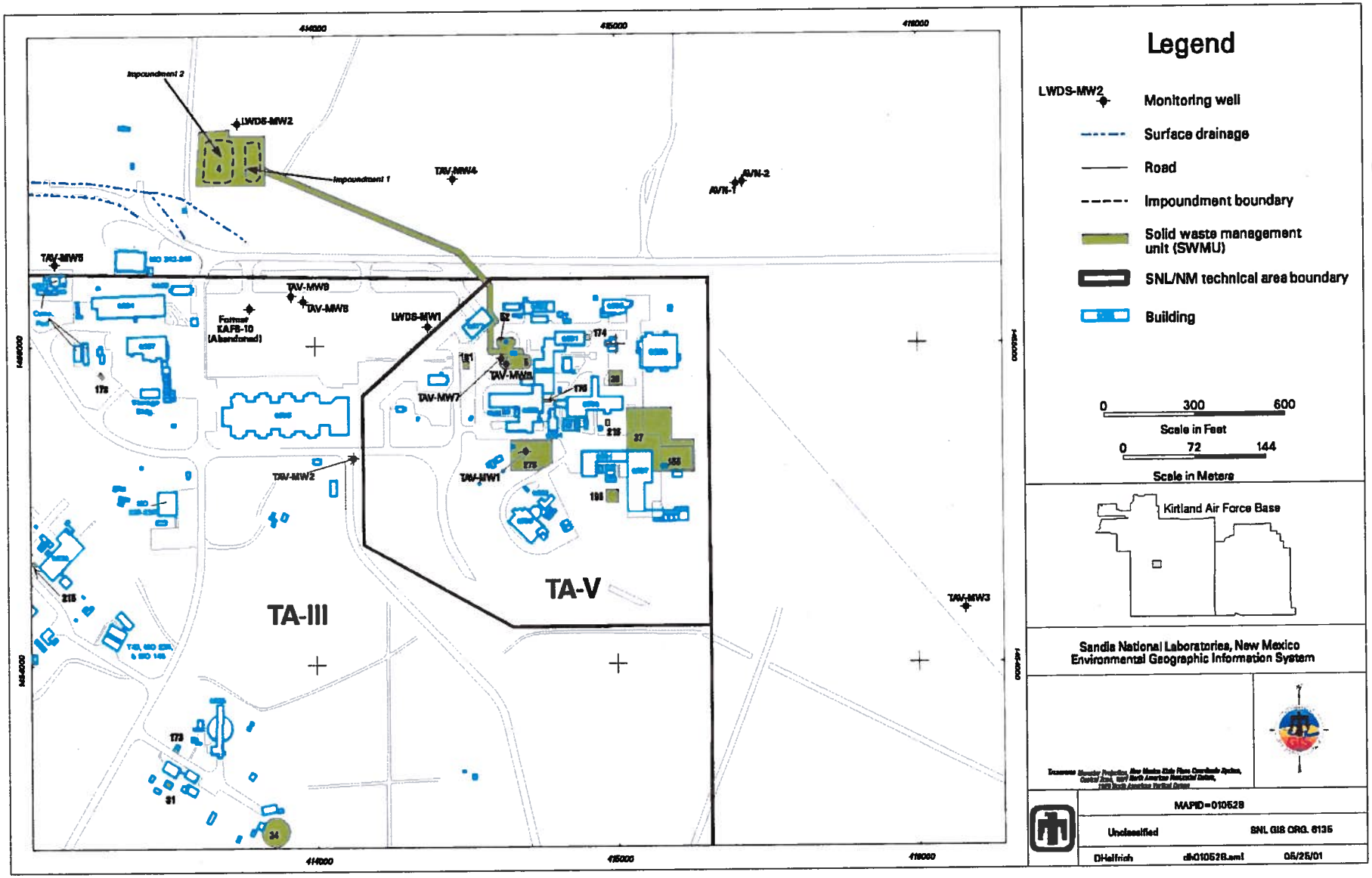

Figure 2
Plot of TCE Concentrations in TAV-MW6.

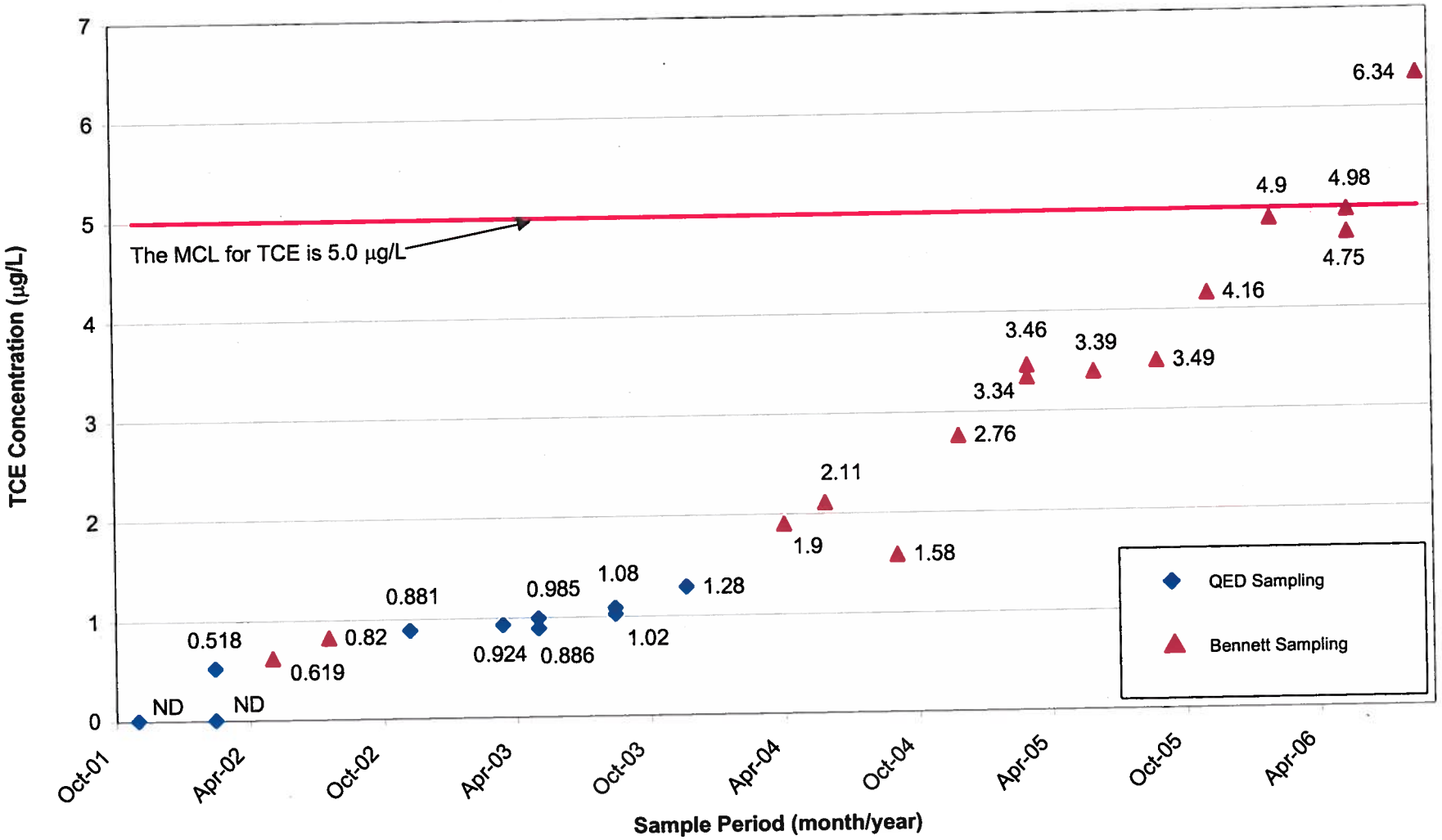

Figure 3
Simulated and Observed Concentrations from Well TAV-MW6

from "*Groundwater Flow and TCE Transport Model for Technical Area V and Vicinity*" (in preparation).