

TA 21



Risk Reduction & Environmental Stewardship Division  
Water Quality & Hydrology Group (RRES-WQH)  
PO Box 1663, MS K497  
Los Alamos, New Mexico 87545  
(505) 665-1859/Fax: (505) 665-9344

Date: May 29, 2003  
Refer to: RRES-WQH: 03-116

Ms. Vickie Maranville  
Environmental Scientist  
Hazardous Waste Bureau  
New Mexico Environment Department (NMED)  
P.O. Box 26110  
Santa Fe, New Mexico 87502



**SUBJECT: TA-21-57 ABOVEGROUND STORAGE TANK DIESEL RELEASE,  
VOLUMETRIC ANALYSIS REPORT**

Dear Ms. Maranville:

As discussed during our May 5, 2003, meeting on the TA-21-57 Aboveground Storage Tank (AST) diesel release, the Laboratory conducted an initial assessment. As part of the initial assessment, the Laboratory performed a diesel plume volume modeling application to estimate the volume of diesel in the underlying geological matrix dated May, 2002.

During our meeting, the NMED informed the Laboratory that they did not have a copy of the "TA-21-357 Diesel Leak: Plume Volume Estimate" (Plume Volume Estimate) Report. On May 19, 2003, the Laboratory resubmitted the Plume Volume Estimate Report to NMED for review. Please note that our records indicate that on June 11, 2002, the Laboratory submitted a transmittal letter along with the Plume Volume Estimate Report to Mark V. Coffman of the NMED/DOE Oversight Bureau (See Enclosure 1).

Please contact Mark Haagenstad (505) 665-2014 or Mike Saladen at (505) 665-6085 should you have questions or need additional information regarding this matter.

Sincerely,  
  
Mike Saladen  
Water Quality & Hydrology Group

MS:MH/tml



Enclosures: a/s

Cy: John Young, NMED/HWB, Santa Fe, NM, w/enc.  
Steve Yanicak, NMED/DOE/OB, w/enc., MS J993  
Joseph Vozella, DOE/OLASO, w/enc., MS A316  
Gene Turner, DOE/OLASO, w/enc., MS A316  
Randi Allen, DOE/OLASO, w/enc., MS A316  
Tony Stanford, FWO-DO, w/enc., MS K492  
David Padilla, FWO-UI, w/enc., MS K718  
Jerome Gonzales, FWO-UI, w/enc., MS K718  
Beverly Ramsey, RRES-DO, w/enc., MS J591  
Kenneth Hargis, RRES-DO, w/enc., MS J591  
Tori George, RRES-DO, w/enc., MS J591  
Doug Stavert, RRES-EP, w/enc., MS J591  
John Hopkins, RRES-ECR, w/enc., MS M992  
Tony Grieggs, RRES-SWRC, w/enc., MS K490  
Steven Rae, RRES-WQH, w/enc., MS K497  
Mark Haagenstad, RRES-WQH, w/enc., MS K497  
Philip Stauffer, EES-6, w/enc., MS T003  
Phil Wardwell, LC-ESH, w/enc., MS A187  
RRES-WQH File, w/enc., MS K497  
IM-5, w/enc., MS A150



*Risk Reduction & Environmental Stewardship Division*  
*Water Quality & Hydrology Group (RRES-WQH)*  
PO Box 1663, MS K497  
Los Alamos, New Mexico 87545  
(505) 665-6085/Fax: (505) 665-9344

Date: June 11, 2002  
Refer to: RRES-WQH: 02-230

Mr. Mark V. Coffman  
Environmental Scientist  
New Mexico Environment Department  
DOE Oversight Bureau, MS J993  
Los Alamos, New Mexico 87544

**SUBJECT: TA-21-57 DIESEL RELEASE, VOLUMETRIC ANALYSIS REPORT AND WELL MONITORING DATA**

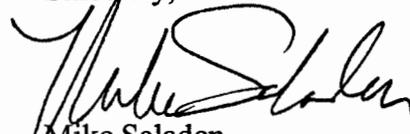
Dear Mr. Coffman:

As you are aware, in February 2002, the Laboratory discovered a discrepancy in the volume of diesel fuel in an above-ground storage tank at TA-21. Since the discrepancy involved a potential discharge of Type-2 diesel fuel to the environment, the U.S. Environmental Protection Agency (EPA), the New Mexico Environment Department (NMED), and the National Response Center (NRC) were notified. Pressure testing and visual inspection of the tank's underground lines indicated that a leak had occurred. Under the Sampling and Analysis Plan (SAP), a total of 10 sample holes were drilled to a maximum depth of 175 feet. Analytical results from the 10 core samples were used to create a three-dimensional model of the contaminant plume. Based upon the modeling results, the volume of the release was estimated to be up to 50,000 gallons. Enclosed for your review is a copy of the Volumetric Analysis Report entitled: "TA-21 Bldg. 357 Diesel Leak: Plume Volume Estimate (LA-UR-02-2938)" (please see Enclosure 1).

Beginning in February 2002, the Laboratory has sampled water supply wells PM-1, PM-3, O-1, and O-4 monthly for Diesel Range Organics (DRO). The enclosed Table 1.0 summarizes all DRO sample results received to date (please see Enclosure 2). With the exception of a single result from PM-1 (200 ppb) on February 23, 2002, all results are non-detect for DRO compounds. Results from follow-up sampling at PM-1 in March and in April were non-detections and, therefore, the February detection could not be confirmed. Monthly sampling will continue at these four water supply wells for DRO compounds.

Planning for remediation of the diesel release and evaluation of options are underway. Please contact me at (505) 665-6085 should you have any questions regarding this matter.

Sincerely,



Mike Saladen

Water Quality & Hydrology Group

MS/am

Enclosures: a/s

Cy: J. Young, NMED/HWB, Santa Fe, New Mexico, w/enc.  
S. Yanicek, DOE/NMED/OB, w/enc., MS J993  
J. Vozella, DOE/OLASO, w/enc., MS A316  
G. Turner, DOE/OLASO, w/enc., MS A316  
J. Holt, ADO, w/enc., MS A104  
B. Stine, ADO, w/enc., MS A104  
A. Stanford, FWO-DO, w/enc., MS K492  
D. Padilla, FWO-UI, w/enc., MS K718  
J. Gonzales, FWO-UI, w/enc., MS K718  
B. Ramsey, RRES-DO, w/enc., MS J591  
K. Hargis, RRES-DO, w/enc., MS J591  
D. Stavert, RRES-EP, w/enc., MS J978  
S. Rae, RRES-WQH, w/enc., MS K497  
R. Reynolds, RRES-WQH, w/enc., MS K497  
J. Hopkins, RRES-R, w/enc., MS M992  
P. Wardwell, LC, w/enc., MS A187  
RRES-WQH File, w/enc., MS K497  
IM-5, w/enc., MS A150