

December 12, 1996

Barbara,

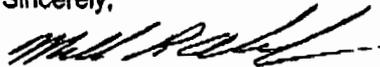
Enclosed are two attachments provided as the 15 Day Corrective Action Report for the TA-15 Connector Road Project.

The first attachment is a summary of the fill material used for the road bed, with a recommendation for no additional sampling. The second attachment, is a copy of the handouts from a training session provided by ESH-18 on December 6, 1996, for the FSS-6 Construction Project Supervisors and AE subcontractors. This training session covered the requirements expected under the NPDES Storm Water General Permit, the NM Water Quality Regulations and Standards, and the Laboratory's Civil Standards in the application of BMPs to control the migration of sediments from construction projects.

At the construction site, silt fence has been installed along the toe of the slope on the downstream side of the fill area and across the smaller drainages below the fill area. A number of silt fences were installed across the main channel for approximately 150 yards downstream. On the upstream side of the fill, silt fences have been installed perpendicular to the fill material and around the inlet of the culvert. In addition, even though this project is less than 5 acres, a Storm Water Pollution Prevention (SWPP) Plan is being developed to provide a description of the BMPs put in place, and inspection and maintenance schedule for these control measures.

If there are any question please contact me at 665-4752.

Sincerely,



Michael R. Alexander



3929

TA/5

**Los Alamos**  
NATIONAL LABORATORY  
**memorandum**  
DYNAMIC EXPERIMENTATION  
DX-DO

To/MS: S. R. Rae, ESH-18, MS K497  
From/MS: S. T. Alexander, MS P915 *STA*  
Phone/FAX: 5-6285/7-0288  
Symbol: DX-FM:96-210  
Date: December 12, 1996

**SUBJECT: TA-15 CONNECTOR ROAD FILL MATERIAL**

**General Information**

Subsequent to the State's site visit on November 18, 1996, LANL immediately initiated an internal review of the RCRA Facility Investigation (RFI) Work Plans for Operable Units (OU) 1086 and 1130. The RFI data is a comprehensive study completed by LANL's Environmental Restoration (ER) Division dated July of 1993, to determine the nature and extent of releases of hazardous waste or hazardous constituents from potential release sites (PRS) and to determine the need for corrective measures studies. The DX assigned Environmental Generalist, a Water Quality & Hydrology (ESH-18) representative, and a Hazardous and Solid Waste (ESH-19) representative participated in the investigation.

Two sites were investigated, in an effort to characterize the soils used as fill material for the project in question. One soil mound was located at TA-15 south of building 285 and the other mound was located at the Ridge RoadY within TA-36. An ER PRS identifier (C-15-002) is associated with the TA-15 mound as an area of concern (AOC). There is no data for the TA-36 Ridge Road mound.

**TA-15 Site Background**

The inquiry into the TA-15 site resulted RFI data entitled "Justification for No Further Action Criterion, Section 2.21.68; PRS C-15-002--Surface Disposal (OU 1086), dated March 1995, states that "Between 1978 and 1980, the area, where building R-285 was later constructed, was excavated in order to lay the foundations for building R-285. The dirt from the excavations was piled (Mason 1993, 10-0040) at the location that became C-15-002. The main mound is about 15 ft. high and 100 ft. long. There are four smaller mounds just to the south, about 5 ft. by 5 ft. There is no reason to expect contamination in these mounds and NFA is recommended. EPA Concurrence: OU 1086 NOD dated July 26, 1994."

On November 26, 1996, a site visit was conducted with a DX site ES&H Officer and the DX Environmental Generalist. Discussions encompassed historical and current operations within the vicinity of the stored surface soil and the smaller mounds. Within 200 ft. are two inactive firing sites, which have both been determined to be PRSs. Each site has PRS identifiers: 15-004(b), Firing Point A, and 15-004(c), Firing Point B.

Initial construction at TA-15 was completed in 1944 (LASL 1944, 10-0044) and the site was then ready for research material to be installed. Among the first firing sites to be used were known as A and B. These two firing sites were located close together (approximately 200 ft. apart) (ENG-C 12817, 1944, 10-0026) on a flat area southwest of present-day building TA-15-183 that had formerly been farm land. The experimental work was carried out largely at Firing Point A, where the sizes of explosions were relatively small. Both sites were used from approximately 1945 to 1952 and both were decommissioned and the land regraded in 1967. Before being

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decommissioned, two of the structures associated with Firing Sites A and B (TA-15-14 and TA-15-74) were surveyed and found to contain no detectable levels of either radioactive matter or High Explosives (HE) (Buckland 1965 10-0032; Courtright 1965, 10-0034). Additionally, both sites are down-gradient from where the surface soil was stored. Hence, they could not have contaminated the mound.

### **Ridge Road Mound (TA-36) Background (a.k.a. IJ Road)**

The Ridge Road mound is located within TA-36 (OU 1130). This mound was made up of road bed fill material, resultant of a road upgrade (compaction) for this active access road. There is no ER data available for the mound of soil. The Ridge Road mound was located within 700 ft. of an active firing site known as the IJ site. The IJ site contains two firing mounds within one area.

The PRS identifiers for the IJ site are 15-006(e), and 15-008(f). These two PRSs were transferred to OU 1130, because they are located within the boundaries of TA-36. The only sampling activities that have occurred at this site was inside the septic tank. The tank was power washed, cleaned out and filled with concrete in the summer of 1996. This is an active site and geographically Ridge Road specifically and the Ridge Road mound may be within the proximity of a "fragment hazard area" as it relates to firing operations.

The TA-15 Connector Road is in an area which is administratively controlled for depleted uranium (D-38) fragments. In accordance with DX standard operating procedures, all personnel, vehicles, and equipment leaving paved surfaces within TA-15 are required to be monitored for the presence of D-38. During the transfer of the fill material piled at the Ridge Road Y to the TA-15 Connector Road project, required that appropriate controls be implemented when exiting the project site, after the fill was dumped. Personnel, vehicles, and heavy equipment were routinely monitored using an ESP-1 radiation monitoring instrument and Geiger-Mueller detector prior to leaving the area. In addition, periodic spot checks were performed on the fill material after it was transferred using an ESP-2 radiation monitoring instrument and a SPA-3 sodium iodide (NaCl) scintillation detector. On one occasion, a small (3mm, 13 kcpm) fragment of D-38 was removed from a muddy tire of a water truck. This water truck was monitored five to ten times a day for nearly two weeks while constantly driving over this material.

On September 9, 1996, Chemrad Tennessee Corporation submitted radiological survey results for Designated DX Firings Sites, which also included the Ridge Road area. Radiological results indicate no significant values above background. The primary purpose of these scanning surveys was to identify the presence of D-38 resulting from activities at the DX firing sites. This effort was conducted to update the most recent surveys of these areas (Schalper 1991). Surveys were conducted with an array of radiation detectors either mounted on a backpack frame for man-carried use (Manual mode) or on a tricycle cart (RadCart mode). The array included radiation detectors for gamma and beta surface near surface contamination as well as dose rate at 1 meter above grade.

### **Summary**

From the above information, these mounds are believed to be clean fill and appropriate for use in the fill area of the TA-15 Connector Road Project. We do not believe that any additional sampling is needed.

STA:lew

Cy: DX-FM File

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**Water Quality and Hydrology Group**

**(ESH-18)**

**Storm Water/SPCC Team**

December 6, 1996

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Water Quality and Hydrology Group, ESH-18  
Environment, Safety and Health Division  
Los Alamos National Laboratory

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**Storm Water/SPCC Team**

**Mike Alexander, Team Leader, 5-4752**

**Robin Reynolds, 7-4689**

**Dave Shaul, 7-4952**

**Chris McLean, 7-4503**

**ESH-18 Group Office, 5-0453**

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Los Alamos National Laboratory



## NPDES Storm Water Program

### Regulated Activities

RCRA Permitted TSD Facilities

Landfills and Land Application Sites

Steam Electric Power Generating Facilities

Other Industrial Activities

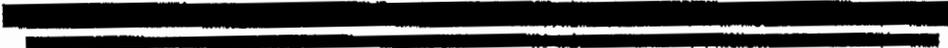
- Motorpool, Tank Farm, Service Stations, Asphalt Plant, Pesticide Storage, and Airport

Construction Project > 5 acres

### Phase II



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## NPDES Storm Water Program

### Construction Projects > 5 Acres

- LAICS Project
- TA-53 Sanitary Wastewater Project
- Small Arms Firing Range Remediation
- DARHT
- TWIS Project
- TA-16 and 9 Steam System Upgrade
- RLW Cross Country Line, Erosion Control Project
- Wild Lands Fire Management Project



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## Storm Water Pollution Prevention (SWPP) Plans Construction Activities

### Requirements Under the General Permit

- Permit Application, Postmarked 2 Days Prior to Start of Work
- SWPP Plan Developed Prior to Submittal of Permit Application
- Compliance with the Terms and Conditions of the SWPP Plan Prior to initiating Construction Activities
- Inspection and Maintenance of SWPP Plan
- Submittal of Notice-of-Termination with Final Stabilization of Construction Site

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## SWPP Plans Construction Activities

### SWPP Plan Requirements

- Site Description
- Controls
- Erosion and Sediment Controls
- Structural Practices
- Storm Water Management (long term)
- Other Controls (waste disposal, vehicle tracking,...)
- Approved State and Local Plans (Dredge and Fill)
- Maintenance and Inspections
- Non-Storm Water Discharges
- Contractor Identification and Certification

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Environment, Safety and Health Division  
Los Alamos National Laboratory

WATER QUALITY & HYDROLOGY GROUP (ESH-18)

FAX TRANSMITTAL SHEET

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VERIFICATION #: (505) 665-0453

Date: December 12, 1996

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FROM: Carla Jacquez, ESH-18, MS K497 PHONE #: (505) 665-~~0450~~ 4752

Nite Alexander

MESSAGE: Release Notification: Please consider this as the 15-day corrective Action Report.

NUMBER OF PAGES TO FOLLOW: 6

Cy: ESH-18 Fax File  
CRM-4, MS A150

GROUP LEADER/TEAM LEADER

[Signature]