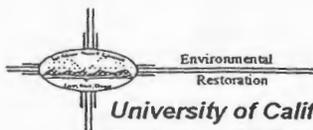


Los Alamos National Laboratory

ENVIRONMENTAL RESTORATION



Environmental
Restoration
University of California
Environmental Restoration, MS M992
Los Alamos, New Mexico 87545
505-667-0808/FAX 505-665-4747



U. S. Department of Energy
Los Alamos Area Office, MS A316
Los Alamos, New Mexico 87544
505-665-7203
FAX 505-665-4504



Date: April 19, 1996
Refer to: EM/ER:96-220

Mr. Benito Garcia
NMED-HRMB
P.O. Box 26110
Santa Fe, NM 87502

SUBJECT: FINAL ACCELERATED CLEANUP REPORTS

00-032

Dear Mr. Garcia:

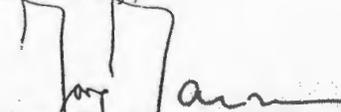
Enclosed are the final reports and Certifications of Completion for the voluntary corrective actions completed in Fiscal Year 1995. The reports with potential release sites (PRSs) listed in the Hazardous and Solid Waste Amendments (HSWA) Module of the Los Alamos National Laboratory's Resource Conservation and Recovery Act operating permit contain our request for no further action (NFA). Upon your approval of these reports, we will submit a permit modification request for NFA of these PRSs.

For PRSs not listed in the HSWA Module, reports are included as informational copies for your records.

If you have any questions, please call David Bradbury at 505-665-6208.

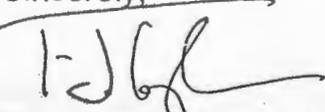
Thank you for your timely attention to this matter.

Sincerely,


Jorg Jansen, Program Manager
Environmental Restoration

JJ/TT/rfr

Sincerely,


Theodore Taylor, Program Manager
Los Alamos Area Office



- Enclosures: (1) Final Reports for HSWA: C-9-001, 6-007(f), 8-005, 16-016(b),
18-001(a), 19-002, 21-013(c), 21-013(d), 21-013(e), 21-024(d),
21-024(e), 21-024(h), 31-001, 33-016, 39-007(a), and 69-001
(2) Final Reports for non-HSWA: C-0-036(a-d), C-0-041, C-10-001,
C-21-027, C-36-001, 0-032, 1-001(f), 3-003(p), 3-022, 3-047(d),
3-051(c), 9-010(a-b), 16-011, 16-016(f), 20-003(c), 21-022(j),
39-002(c), 53-010, and 57-006
(3) Certifications of Completion

Cy (w/enclosures):

B. Driscoll, EPA, R.6, 6PD-N, (2 copies of HSWA)
D. Griswold, ERD, AL, MS A906
/J. Harry, EM/ER, MS M992
B. Hoditschek, NMED-HRMB
/R. Kern, NMED-HRMB
N. Naraine, EM-453, DOE-HQ
M. Shaner, P&PI, MS J591 (5 copies)
N. Weber, Bureau Chief, NMED-AIP, MS J993
J. White, ESH-19, MS K490
S. Yanicak, NMED-AIP, MS J993
RPF, MS M707

Cy (w/o enclosures):

T. Baca, EM, MS J591
D. Bradbury, EM/ER, MS M992
T. Glatzmaier, DDEES/ER, MS M992
D. McInroy, EM/ER, MS M992
G. Rael, ERD, AL, MS A906
W. Spurgeon, EM-453, DOE-HQ
T. Taylor, LAAO, MS A316
J. Vozella, LAAO, MS A316
EM/ER File, MS M992

Voluntary Corrective Action Completion Report for

Potential Release Site

0-032

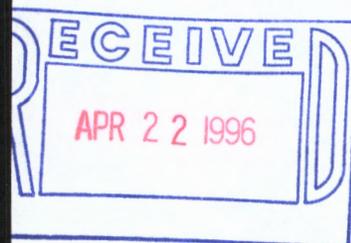
Former Zia Motor Pool
Storm Water Drainline

Field Unit 1

ENVIRONMENTAL
RESTORATION
PROJECT

January 1996

A Department of Energy
Environmental Cleanup Program



Los Alamos

NATIONAL LABORATORY

LA-UR-96-432

**Voluntary Corrective Action Completion Report
Potential Release Site 0-032
Former Zia Motor Pool
Storm Water Drainline**

DESCRIPTION

Potential Release Site (PRS) 0-032 includes a storm water drainline that drained the west side of the former Vehicle Maintenance Shop, Building 1, for Zia Company (Figure 1). The building has been demolished and removed. This site is not listed in the Laboratory's Hazardous and Solid Waste Amendments (HSWA) module to the Los Alamos National Laboratory, Resource Conservation and Recovery Act, EPA I. D. NM0890010515.

The storm water drainline was approximately 360 feet long, 15-inches in diameter, and extended across the property. The pipe was corrugated, galvanized culvert material, and was buried approximately 12 to 15 feet below ground surface. The pipe contained sediment and black tar-like material. The sediment within the drainline exhibited black staining, which may have resulted from contact with the tar-like substance in the drainline. A sample of the sediment was collected prior to excavation of the storm water drainline for preliminary screening and submitted to the mobile laboratory. The samples were analyzed for volatile organic compounds (VOCs) by EPA SW-846 Method 8260, and total petroleum hydrocarbons (TPH) by SW-846 Method 8015. Analytical results indicated that the soil sample contained 2,375 parts per million TPH and no detectable concentrations of VOCs. The origin of the tar is not certain, but may have been the result of disposal of roofing tar into the storm drain, or the pipe itself may have originally been coated with a tar-based corrosion inhibitor that settled to the bottom of the pipe over time.

Several concrete sump structures were located along the storm water drainline and extended from the surface to a depth of approximately 10 feet. The sump boxes were approximately 4 feet square with 8-inch thick walls. The sump boxes observed contained the same stained sediment and tar-like material present within the drainline.

The site is currently under construction and will be developed as a multi-story office building. During excavation of the basement for the new building, portions of the drainline and concrete sumps were inadvertently exposed in the sidewall of the excavation and subsequently removed by the construction contractor to prevent collapse into the excavation. These portions of the drainline were placed in the roll-off bin on-site.

CORRECTIVE ACTION

The cleanup followed the VCA Plan. Activities were started and completed on 25 August, 1995.

In March and April of 1994, soil borings were drilled for site characterization adjacent to each storm water drainage sump feeding the drainline and an RFI Report was issued in May, 1995. Trace concentrations of TPH were detected in soil samples collected from borings drilled adjacent to and beneath the drain sumps. The data are consistent with a relatively tight pipeline system. These site-characterization data were reported in the RFI Report for SWMU 0-032 and will be provided upon request.

The drainline and sumps were removed with a hydraulic excavator. The soil beneath and surrounding the drainline and sump boxes was inspected for staining and discoloration that would indicate a release from the drainline system. No visual evidence of a release from the drainline or sumps was observed. Therefore, no soil verification samples were collected from beneath the drainline.

The soil from within, beneath, and surrounding the drainline and sump boxes was field-screened for VOCs and radiological contamination with direct-reading instruments. The results of field screening did not indicate the presence of VOCs or radiological contamination in the soil. Field screening results will be provided upon request.

Following drainline and sump-box removal, visual inspection, and field screening, the trench was backfilled and compacted, with the exception of the area where the open basement excavation for the new building transected the location of the drainline in the central portion of the site. The off-site portions of the drainline that were previously connected to the removed drainline will be incorporated into the active Los Alamos County stormwater collection system.

The piping, concrete, and contents of the drainline and sumps were placed in a roll-off bin pending appropriate disposal. The total quantity of waste generated was approximately 15 cubic yards. The tar-like material and sediments from within the drainline system were sampled for waste characterization to determine the final disposition of the waste.

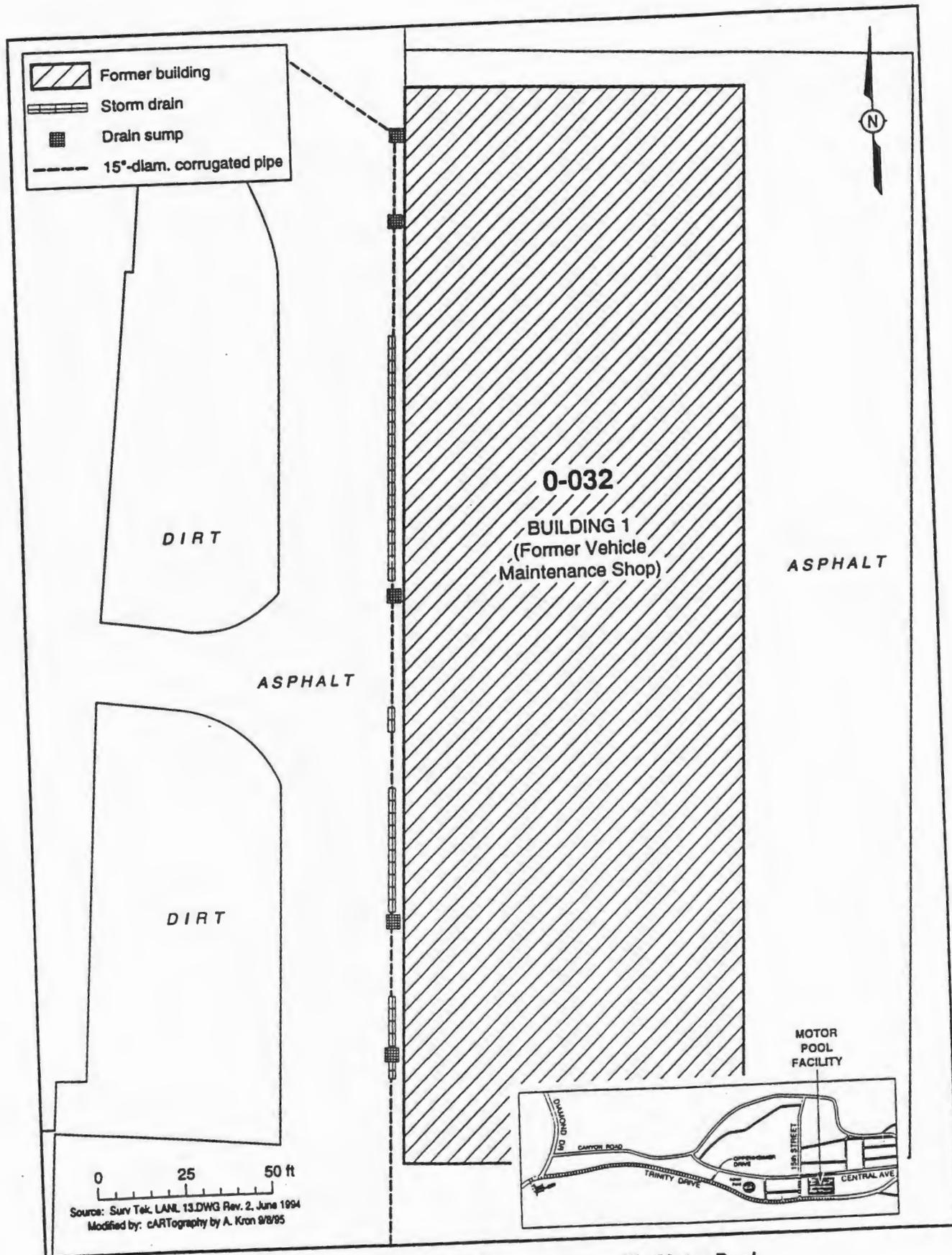


Figure 1. Location of storm drain piping at PRS 0-032, former Zia Motor Pool.