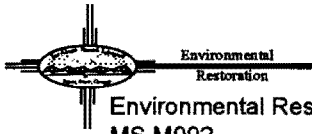


FILE LANL HSWIA Fu-4 00 1129 TA-35-003 (d, l, q)

JK

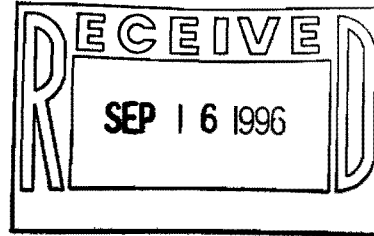
Los Alamos National Laboratory

UNIVERSITY OF CALIFORNIA



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

Date: September 10, 1996
Refer to: EM/ER:96-481



Mr. Ted Taylor
Los Alamos Area Office
US Department of Energy, MS A316
Los Alamos, NM 87544

**SUBJECT: INTERIM ACTION PLAN FOR ACTIVITIES AT TA-35,
PRSs 35-003(d, l, and q)**

Dear Ted:

Enclosed for your records please find a copy of the Interim Action Plan for activities at Technical Area 35, Potential Release Sites 35-003(d, l, and q). These activities are planned for completion in Fiscal Year 1996. Informational copies of this plan are being distributed to the regulators.

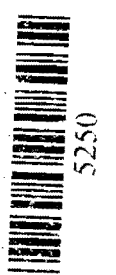
If you have any questions, please call Allyn Pratt at (505) 667-4308 or Bob Simeone at (505) 667-0587. Thank you for your cooperation in this matter.

Sincerely,


Jorg Jansen
Program Manager

JJ/bp

Enclosure: (1) Interim Action Plan for TA-35, PRSs 35-003(d, l, and q)



TU

Cy (w/ enc.):

B. Garcia, NMED-HRMB (2 copies)
D. Griswold, AL-ERD, MS A906
J. Harry, EES-5, MS M992
B. Hoditschek, NMED-HRMB
N. Naraine, DOE-HQ, EM-453
D. Neleigh, EPA, R.6, 6PD-N (2 copies)
A. Pratt, EES-13, MS J521
B. Simeone, LAAO, MS A316
M. Shaner, CIO, MS A117 (2 copies)
N. Weber, NMED-AIP, MS J993
J. White, ESH-19, MS K490
S. Yanicak, NMED-AIP, MS J993
RPF, MS M707

Cy (w/o enc.):

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

Interim Action Completion Report for

Potential Release Sites
35-003(d, l, and q)

Field Unit 4

Environmental
Restoration
Project

September 1996

A Department of Energy
Environmental Cleanup Program

LANL
4 / 1129 / 35

Los Alamos
NATIONAL LABORATORY

LA-UR-96-3297

Missing pgs 2 & 4

1.0 INTRODUCTION

This document describes the interim action (IA) best management practices implemented at Potential Release Site (PRS) Nos. 35-003(d, l, and q), which are located within Los Alamos National Laboratory (hereafter referred to as the Laboratory) Technical Area (TA) 35. Field activities were implemented in accordance with the *Interim Action Plan for Potential Release Sites 35-003(d, l, and q)* (LANL 1996, 54915) (hereafter referred to as the IA plan), except as noted in Section 2.1.

The site addressed by the IA encompasses part of three potentially contaminated PRSs, which are located about 150 ft east of the former Air Filter Building (TA-35-7). The IA corrected past erosion and will prevent further erosion of noncompacted backfill material at the east end of Ten Site Mesa where a pump pit (TA-35-8, PRS No. 35-003[d]); a pipe trench (TA-35-9, PRS No. 35-003[l]); and a liquid waste holding tank (TA-35-10, PRS No. 35-003[q]) were located. The site drains into a small tributary of Ten Site Canyon, which is informally referred to as "Pratt Canyon" in the Resource Conservation and Recovery Act facility investigation (RFI) report for PRSs in this area (LANL 1996, 54422) (hereafter referred to as the RFI report).

Collectively the PRSs cover an area approximately 150 ft by 200 ft. The site slopes moderately eastward approximately 125 ft to the mesa edge, which slopes into Pratt Canyon (approximate slope of 1:1). The storm water from this site flows into Pratt Canyon, which is the effluent discharge area for the former wastewater treatment plant. Surface storm water runoff from the southern part of TA-35 discharged from a 12-in.-diameter corrugated metal pipe (CMP) at the southeast corner of the IA site and was the major contributor to the erosion. The storm water flowed across the site creating deep erosion channels.

The IA was performed to prevent storm-water-induced transport of contamination from the PRSs, as discussed in the RFI report (LANL 1996, 54422), into Mortandad Canyon. The IA was also necessary to minimize the possibility that storm water runoff might transport known radioactive contamination from PRS No. 35-003(r) until further characterization and final disposition of that PRS are completed.

A detailed description of the site and the Phase I characterization data can be found in the RFI report (LANL 1996, 54422).

2.0 INTERIM ACTION

The IA consisted of (1) backfilling, compacting, and revegetating the erosion channels; (2) relocating a storm water CMP discharge, which was the major cause of the erosion; and (3) constructing a 2-ft-high, 100-ft-long berm above the slope break at the head of Pratt Canyon, which was designed to divert additional storm water that is not captured by the relocated CMP northeastward to an existing storm water outfall (see Figure 2-1). By relocating the storm water CMP discharge to the southern rim of Ten Site Mesa, storm water has been diverted from known radioactively contaminated sites including PRS Nos. 35-003(d, l, and q) and 35-003(r). Backfilling and compacting the erosion channels will prevent the erosion of potentially contaminated soil at PRS Nos. 35-003(d, l, and q) and will minimize the potential for release until further characterization is performed and a final disposition decision is made.

The IA began on September 3, 1996, and was completed on September 23, 1996. Activities included conducting a health and safety survey; performing a utilities markout survey; backfilling, compacting, and revegetating the erosion channels; constructing a diversion berm near the head of the former erosion channels; plugging the 12-in.-diameter storm water CMP; and installing a new 24-in.-diameter CMP, which has an inlet at the southwest corner of former TA-35-7 and extends southward to Ten Site Canyon. The new CMP extends 240 ft to the south along a 1% slope at a depth of 4 ft near the inlet and surfaces at the point of discharge. A riprap apron was placed at the discharge point.

2.1 Deviations from the Interim Action Plan

The IA was implemented in accordance with the IA plan except for the following deviations.

- The IA was coordinated with the ongoing decommissioning project at TA-35 to minimize impact on the decommissioning progress. Based on an evaluation of the decommissioning final grading and paving plan, decommissioning project engineers and Field Unit 4 engineers agreed that one storm water drop inlet box would be adequate. The storm water drop inlet is planned to be installed in October 1996 after decommissioning project personnel have completed final grading of the area.
- The proposed 2-ft-high berm that was to be located north of the service road at the southern boundary of the site was not constructed because the area is being used by decommissioning project personnel as a staging area for fill material, equipment, and waste storage.
- An alternate berm was constructed along the head of the former drainage channels to divert storm water northward to an existing storm water drainage system. The existing storm water culvert was blocked by sediment and debris, which resulted in overflow of storm water toward the drainage channels and contributed to the channel erosion. The Laboratory Utilities and Infrastructure Group (FSS-8) has been requested to perform maintenance on the storm water drainage system. As a voluntary interim measure, Field Unit 4 personnel cleaned the culvert inlet and cleared the area of debris to allow storm water to flow into the drainage system.

These deviations did not adversely impact the success of the IA.

2.2 Photographs

Photographs of the site (including before, during, and after the IA) are available from the Environmental Restoration Project office.

3.0 MONITORING AND CONFIRMATORY SAMPLING

No monitoring or confirmatory sampling is associated with the IA. However, in the RFI report (LANL 1996, 54422) PRS Nos. 35-003(d, l, and q) have been proposed for further characterization.

4.0 INSPECTION AND MAINTENANCE

The IA will be inspected as specified in Section 5.1 of the site-specific Storm Water Pollution Prevention Plan (SWPP Plan), which is attached as Section 8.1 of this IA report. Maintenance of erosion controls will proceed as described in Section 4.2 of the SWPP Plan.

5.0 WASTE MANAGEMENT

No waste was generated during this IA.

7.0 REFERENCES

LANL (Los Alamos National Laboratory), June 1996. "RFI Report for Potential Release Sites 35-003(d, e, f, g, l, o, q, and r) 35-016(g and h)," Los Alamos National Laboratory Report LA-UR-96-1605, Los Alamos, New Mexico. **(LANL 1996, ER ID Number 54422)**

LANL (Los Alamos National Laboratory), August 1996. "Interim Action Plan for Potential Release Sites 35-003(d, l, and q)," Los Alamos National Laboratory Report LA-UR-96-2826, Los Alamos, New Mexico. **(LANL 1996, ER ID Number 54915)**

Means, 1995. *Means Site Work & Landscape Cost Data*, 14th Edition, R. S. Means Company, Inc., Kingston, Massachusetts. **(Means 1995, ER ID Number 54957)**

8.0 ANNEXES

8.1 Storm Water Pollution Prevention Plan

In accordance with the IA plan, the Storm Water Pollution Prevention Plan, which is attached, details the required inspection and maintenance procedures.

Environmental Restoration Program

STORM WATER POLLUTION PREVENTION PLAN

FIELD UNIT 4

**INTERIM ACTION, AGGREGATE D
PRS Nos. 35-003(d, l, and q)**

**LOS ALAMOS NATIONAL LABORATORY
Los Alamos, New Mexico**

**August 1996
Revision 1**

Worksheet #2A: Description of Exposed Significant Material

Worksheet #3: Pollutant Source Identification

Worksheet #4: List of Significant Spills and Leaks

Worksheet #5: BMP Identification

Worksheet #6: Implementation

Worksheet #7: Employee Training

Worksheet #8: Non-Storm Water Discharge Assessment and Certification

Attachment

1. Figure 1
2. Inspection and Maintenance Report Forms

2. Pollution Prevention Team

The Pollution Prevention Team is responsible for developing the SWPP Plan and assisting in its implementation, inspection, maintenance, and revision. Appendix 1, Worksheet # 1, describes the responsibilities and activities of each team member.

Team Leader:

Allyn Pratt, EES-13, Field Unit 4 Project Leader
667-4308, MS J521

Responsibilities: Overall owner of SWPP Plan, provides budget and resources.

Members:

Deba Daymon, ERM, Field Project Manager
662-1327, MS M327

Responsibilities: Plan oversight, and implementation

Leslie Sontag, SAIC, Field Team Leader
672-3666, MS J521

Responsibilities: Plan implementation

Janet Jacobson, SAIC, Alternate Field Team Manager
672-3666, MS J521

Responsibilities: Plan oversight, implementation and author.

Darril Stafford, SAIC, Site RCT, Field Team Member
672-3666, MS J521

Responsibilities: Plan implementation

Carmella Romero, SAIC, Field Team Member
672-3666, MS J521

Responsibilities: Plan implementation

John Hayes, ERM/ASI, Health and Safety Officer, Field Team Member
662-1348, MS M327

Responsibilities: Plan implementation

Tim Renn, ERM, Field Team Member
662-1359, MS 327

Responsibilities: Plan implementation

the 1985 D&D which was covered by the backfill material (Elder et al. 1986, 3089). Gross-beta/gamma radiation was measured above background levels at the tuff-backfill interface at two sample locations during field screening for Phase I activities (LANL 1996, 54422).

After the IA is completed, storm water run-off from the site should be free of potential contaminants associated with the PRSs.

3.1 Drainage Map

See attached Figure 1.

There are no surface water bodies at the site; no material storage areas; or other potential pollutant sources. The storm water flow direction is easterly, into Mortandad Canyon.

3.2 Inventory of Exposed Materials and Risk Identification

Field Activities may include:

- Storage of backfill, large rocks, and rip-rap prior to placement ;
- Placement of backfill material in erosion channels, and compaction of the backfill material,
- Placement of erosion controls such as rip-rap, stabilized vegetative cover, and berms;
- Leveling and grading of the site;
- Abandonment of the current storm drain;
- Placement of a new CMP and inlet drop box for storm water drainage to Ten Site Canyon;

Equipment used during the interim action may include:

- Frontloader or backhoe;
- Dump truck(s);
- Roller; and
- Shovels.

Significant materials that may come into contact with storm water include the materials associated with the heavy equipment expected to be used to perform the IA:

- Hydraulic fluid;
- Diesel fuel; and
- Gasoline.

4 Measures and Controls

4.1 Good Housekeeping

All materials stored on-site will be stored in a neat, orderly manner in appropriate containers, and if necessary, covered with plastic sheeting or tarps after the work day is completed. Very little waste is expected to be generated during this

action. Any waste material stored on site will be managed according to DOE orders and regulations; and LANL policy, Administrative Requirements, Administrative Procedures, and Standard Operating Procedures. Any storm water accumulation in the waste management area will be removed in accordance with the SPCC Plan.

4.2 Preventive Maintenance

Any areas where material is stored on site will be inspected each day to insure that storm water pollution prevention measures are in place and not compromised. If the material pile covers have been ripped or wind-blown out of position, the covers will be replaced, repaired, or repositioned, as appropriate when discovered. All equipment staged on site will be inspected at the beginning of each work day for the presence of leaks. If equipment is found to be leaking some mechanical fluid or fuel, the leak will be remediated as specified in the site specific SPCC plan, and appropriate notifications will be made.

4.3 Sediment and Erosion Control

The primary source of the erosion is a surface storm water discharge pipe located near the southeast corner of former TA-35-7. The main erosion channel ranges in depth from 1 ft to approximately 22 ft and extends for about 200 ft across the site. Another erosion channel originates at the north side of the site, and was formed from storm water runoff associated with the access road that borders the site to the north. This smaller erosion channel extends south-southeast from the north side of the site into Pratt Canyon and ranges in depth from 1 ft to approximately 10 feet at the point of confluence with the other major channel.

The three erosion channels will be backfilled, compacted, and stabilized in order to prevent further erosion across the PRSs. Approximately 700 cy of clean backfill material will be placed in the channels. The material will be wetted, then compacted to 80-85 % maximum density. The channels will be reseeded with approximately 270 square yards of native grasses. Until the vegetation is established, straw bales or other control measures will be placed downstream of the site, in Pratt Canyon, to prevent sediment movement into Mortandad Canyon.

4.7 Other Controls

No solid materials shall be discharged to a watercourse. Off-site vehicle tracking of sediments and the generation of dust shall be minimized. This plan shall ensure and demonstrate compliance with the Laboratory's permits and requirements for waste disposal, sanitary sewer, or septic system regulations.

The placement of backfill, large rocks, rip-rap, and vegetative cover may cause dust generation during activities. In order to mitigate dust generation, water misting and spraying will be available if dust generation becomes excessive, or if weather conditions exacerbate the problem.

4.8 Spill Prevention and Response Procedures

The IA site is assessable by Laboratory unpaved roadways and roadways covered with asphalt. All equipment used at the site will remain on the roadways to the extent possible. Spill Prevention and Response activities will follow the requirements of the *Spill Prevention, Control, and Countermeasures (SPCC) Plan for the TA-35, Aggregate D, Interim Action*, the *LANL SPCC Plan*, and the *Site Specific Health and Safety Plan*.

5 Implementation

5.1 Inspections

The Field Team Leader or her designee shall inspect disturbed areas of the project site that have not been finally stabilized, areas used for storage of materials that are exposed to precipitation, structural control measures, and locations where vehicles enter or exit the site at least once every seven calendar days, and within 24 hours of the end of a storm that is 0.5 inches or greater. Where sites have been finally stabilized, the inspection shall be conducted at least once every month.

Structural storm water management measures and sediment and erosion control measures shall be observed to ensure that they are operating correctly. A visual inspection of equipment used to implement the IA shall be made. Disturbed areas and areas used for storage of materials exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants in the drainage system. The discharge point of the relocated storm water outfall will be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. The locations where vehicles enter or exit the site shall be inspected for evidence of off-site sediment tracking.

5.6 Keeping Plans Current

This plan shall be amended whenever there is a change in design project activity, operation, or maintenance which has a significant effect on the potential for the discharge of pollutants into the waters of the United States, or if the plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified in the potential pollutant sources of the plan, or in otherwise achieving the general objectives of controlling pollutants in storm water discharges. Amendments to the plan shall be reviewed by ESH-18.

6 Certification

I, Allyn Pratt, certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated 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 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 fines and imprisonment for knowing violations.

Allyn Pratt, Field Unit 4 Project Leader

Date: _____

Plan prepared by:

Janet Jacobson, EES-13/SAIC

Date: _____

ESH-18 Review:

Steve Veenis, ESH-18

Date: _____

**POLLUTION PREVENTION TEAM
MEMBER ROSTER**

Worksheet #1
Completed by: Janet Jacobson
Title: Plan Author
Date: 7/26/96

Leader: Allyn Pratt

Title: Field Unit 4 Project leader
Office Phone: 667-4308

Responsibilities: Project leader, General oversight,
Plan Owner

Members:

(1) Deba Daymon

Title: Field Project Manager
Office Phone: 672-3700

Responsibilities: Plan oversight

(2) Janet Jacobson

Title: Field Team Manager
Office Phone: 672 3666

Responsibilities: Plan author, oversight, training,
implementation, revisions,

(3) Leslie Sontag

Title: Field Team Leader
Office Phone: 672 3666

Responsibilities: Plan implementation, reporting
responsibilities

(4) Darril Stafford

Title: Field Team Member, SSO
Office Phone: 672 3666

Responsibilities: Plan implementation

(5) Carmella Romero

Title: Field Team Member
Office Phone: 672 3666

Responsibilities: Plan implementation, Field
Librarian

POLLUTANT SOURCE IDENTIFICATION

Worksheet #3

Completed by: J. Jacobson

Title: author

Date: 7/29/96

Instructions: List all identified storm water pollutant sources and describe existing management practices that address those sources. In the third column, list BMP options that can be incorporated into the plan to address remaining sources of pollutants.

Storm Water Pollutant Sources	Existing Management Practices	Description of New BMP Options
1 current 12 in. storm Drain CMD	IA calls for plugging current drain & relocating discharge	See I A plan. Erosion channels will be backfilled, covered w/ stabilized vegetative mat, & storm drain relocated.
2		
3 sediment from eroded sites	Backfill & compact & stabilize none	Backfill, compaction & stabilization
4		
5		
6		
7		
8		
9		
10		

BMP IDENTIFICATION
(Section 2.3.1)

Worksheet # 5
Completed by: J. Jacobson
Title: author
Date: ~~7/29/96~~ 7/29/96

Instructions: Describe the Best Management Practices that you have selected to include in your plan. For each of the baseline BMPs, describe actions that will be incorporated into facility operations. Also describe any additional BMPs (activity-specific (Chapter 3) and site-specific BMPs (Chapter 4)) that you have selected. Attach additional sheets if necessary.

BMPs	Brief Description of Activities
Good Housekeeping	See Plan Text
Preventive Maintenance	See Plan Text
Inspections	See Plan Text
Spill Prevention Response	See Plan Text
Sediment and Erosion Control	See Plan Text
Management of Runoff	See Plan Text
Additional BMPs (Activity-specific and Site-specific)	

EMPLOYEE TRAINING

Worksheet #7

Completed by: J. Jacobsen

Title: Author

Date: 7/29/96

Instructions: Describe the employee training program for your facility below. The program should, at a minimum, address spill prevention and response, good housekeeping, and material management practices. Provide a schedule for the training program and list the employees who attend training sessions.

Training Topics	Brief Description of Training Program/Materials (e.g., film, newsletter course)	Schedule for Training (list dates)	Attendees
Spill Prevention and Response	To be performed by read training & tail gate safety meeting upon implementation of T A	Aug 1996	
Good Housekeeping	Same as above	Aug 1996	
Material Management Practices	Same as above	Aug 1996	
Other Topics			

REVISION 1
Aug. 1996

**STORM WATER POLLUTION PREVENTION (SWPP) PLAN
INTERIM ACTION, AGGREGATE D
PRS Nos. 35-003 (d, l, and q)**

ATTACHMENTS

Storm Water Pollution Prevention (SWPP) Plan

Inspection and Maintenance Report Form

TO BE COMPLETED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL EVENT OF 0.5 INCHES OR MORES

PROJECT NAME: _____

INSPECTOR: _____ DATE: _____

INSPECTOR QUALIFICATIONS: _____

DAYS SINCE LAST RAINFALL: _____ AMOUNT OF LAST RAINFALL _____ INCHES

AREA	DATE SINCE LAST DISTURBED	DATE OF NEXT DISTURBANCE	STABILIZED (YES/NO)	STABILIZED WITH	CONDITION

STABILIZATION REQUIRED: _____

TO BE PERFORMED BY: _____ ON OR BEFORE: _____

Storm Water Pollution Prevention (SWPP) Plan

Inspection and Maintenance Report Form

CHANGES REQUIRED TO THE SWPP PLAN: _____

REASONS FOR CHANGES: _____

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated 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 and imprisonment for knowing violations."

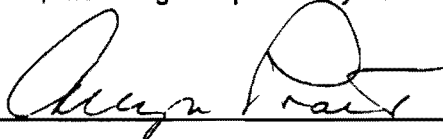
SIGNATURE: _____ DATE: _____

8.2 Certificate of Completion

The signed Certificate of Completion is attached.

Certificate of Completion

I certify that all the work pertaining to the Interim Action (IA) conducted at PRS Nos. 35-003(d, l, and q) has been completed in accordance with the *Interim Action Plan for Potential Release Sites 35-003(d, l, and q) Field Unit 4, Environmental Restoration Project, August 1996* (LANL 1996, 54915), reviewed by the Department of Energy and the Environmental Restoration (ER) Project Office. Based on my personal involvement or inquiry of the person or persons who managed this cleanup, a review of all data gathered, and a visit to the site, to the best of my knowledge and belief, all criteria of the plan have been met or exceeded. I believe that the completion of the IA is protective to both human health and the environment. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.



Allyn Pratt
Field Unit Four Project Leader
Environmental Restoration Project
Los Alamos National Laboratory

9/13/96
Date

8.3 Approval/Disapproval Form

The signed Interim Action Report Approval/Disapproval Form is attached.

**INTERIM ACTION REPORT
APPROVAL/DISAPPROVAL FORM**

PRS(s) 35-003(d, l, and q)

The undersigned have reviewed the Interim Action Report and believe that the intent and goals of the Interim Action Plan have been met.

FPL 

Date 9/13/96

FPC _____

Date _____

.....

I, Theodore J. Taylor, DOE-LAO, **APPROVE** _____, **DISAPPROVE** _____ the accompanying Interim Action Report for PRS(s) 35-003(d, l, and q), TA-35.

The following reasons reflect the decision for disapproval:

Signed: _____

Date: _____