

WATER QUALITY & HYDROLOGY GROUP (ESH-18)

FAX TRANSMITTAL SHEET

FAX #: (505) 665-9344

VERIFICATION #: (505) 665-0453

DATE: November 21, 2000LOG NO: ESH-18:00-FAX-

| | | | |
|---|------------------------------|--|------------------------------|
| TO: <u>B. Lucas</u> <u>G. Saums</u> | FAX #: <u>(505) 827-0160</u> | PHONE # <u>(505) 827-2933</u> | GRP ORG <u>NMED/SWQB</u> |
| TO: <u>S.Yanicak</u> | FAX #: <u>(505) 672-0466</u> | PHONE # <u>(505) 672-0448</u> | GRP ORG <u>NMED/AIP</u> |
| TO: <u>M. Johansen</u> | FAX #: <u>(505) 665-4872</u> | PHONE # <u>(505) 665-5046</u> | GRP ORG <u>DOE/LAAO</u> |
| TO: <u>Everett Spencer</u> | FAX #: <u>(214) 665-6490</u> | PHONE # <u>(214) 665-6080</u> <u>(214) 665-6475</u> | GRP ORG <u>EPA Region VI</u> |
| TO: <u>Deb Woitte</u> | FAX #: <u>(505) 665-4424</u> | PHONE # <u>(505) 667-3766</u> | GRP ORG <u>LC GEN</u> |
| TO: <u>J. Mullany</u> <u>J. Jacobs</u> | FAX # <u>(505) 827-2965</u> | PHONE # <u>(505) 827-0212</u> | GRP ORG <u>NMED/GWQB</u> |
| TO: <u>John Young</u> | FAX #: <u>(505) 827-1544</u> | PHONE # <u>(505) 827-1557</u> | GRP ORG <u>NMED/HRMB</u> |
| TO: <u>M. Smithour</u> | FAX #: <u>(505) 665-5424</u> | PHONE # <u>667-7711</u> | GRP ORG <u>JCNNM-UWG</u> |
| TO: <u>E. Hoth</u> | FAX #: <u>(505) 665-6636</u> | PHONE # <u>(505) 665-6002</u> | GRP ORG <u>FWO-UI</u> |

FROM: Harvey Decker, ESH-18, MS K497PHONE #: (505) 665-2014LA Canyon debris slide. 15 day CA report

NUMBER OF PAGES TO FOLLOW: 3

Cy: ESH-18 FAX FILE
CRM-4, MS A150
ESH-18, spill file

GROUP LEADER/TEAM LEADER

H.D for M.S

4537

TA 53

LA Canyon

RELEASE / DISCHARGE NOTIFICATION

LOS ALAMOS NATIONAL LABORATORY

Permit Number: NM0028355

Calendar Year

2000

NPDES or Operational Spill/Release

ER Spill/Release

Other Spill/Release

--Indicate with "X" in appropriate box.

Release ID Number:

88

Responsible Facility/User Group: Road&Ground

Contact Person: E. Hoth

Pager #: 996-1279

Phone #: 665-6002

Cell Phone #: NA

Release/Discharge Location:

TA: 53

Building:

The landslide into the LA Canyon streamcourse is located below PRV pit 154. The actual location in lat/lon will be reported on the 15 day corrective action report.

If the release/dischARGE is associated with a NPDES Outfall, Potential Release Site (PRS) or Solid Waste Management Unit (SWMU), indicate the site/unit number and its relationship to the release/dischARGE:

NPDES Outfall: PRS: SWMU: PRS/SWMU Number:

Indicate with "X" in appropriate box(es)

Relationship of the Discharge to a SWMU or PRS:

No SWMU or PRS was impacted

Discharge Occurred: 11/2/2000 3:30 p.m.
Date & Time

Discharge Discovered: 11/2/2000 3:30 p.m.
Date & Time

Discharge Stopped: 11/3/2000 1:00 p.m.
Date & Time

Cleanup Started:
Date & Time

Cleanup Completed:
Date & Time

Material(s) Released / Discharged:

The landslide on the north face of Los Alamos canyon appears to have been exacerbated by the discharge of potable water from the PRV located on the mesa top due to a mechanical malfunction down stream of the potable water supply line (a faulty automatic valve that was unable to close completely and kept cycling). The soil on the canyon slope had become saturated due to recent rain fall. The influx of additional water from the PRV possibly caused the slope to fail.

Release/Discharge Mitigation Method:

The Automatic valve was repaired downstream which stopped the discharge from the PRV.

Weather Conditions:

Cold/snow

Duration of Release/ Discharge, in HOURS:

Est. Volume Released/ Discharged, in GAL.

Est. Volume Recovered, in GAL.

Corrective Actions Taken (ie, type of BMPs, etc):

The soil will be pulled back from the edge of the stream course and BMP's put in place.

Nearest Watercourse (Canyon Name)

Los Alamos Canyon

If the release/discharge reached a watercourse, describe the estimated surface area affected, presence of release/discharge now in the watercourse, and the media the release/discharge was detected in:

Approximately 0.75 ac. Of canyon slope was affected by the landslide. An estimated 2 cu/yds. Of soil entered the LA Canyon streamcourse.

Depth to Groundwater, in FT, if known: 700

Distance to Nearest Drinking Water Well, in FT, if known: 2000 Well ID# OW-4

24 HOUR RELEASE / DISCHARGE NOTIFICATIONS

| | Contact Person | Phone | Fax | Date & Time (or Comment) | |
|--------------|----------------|--------------|--------------|--------------------------|--------------------|
| EPA: | E. Spencer | 214-665-6475 | 214-665-6490 | 11/9/2000 | by fax |
| NMED/SWQB: | Glenn Saums | 827-0596 | 827-0160 | 11/3/2000 | 12:48 p.m. |
| NMED/GWQB: | Jim Mullany | 827-0212 | 8272965 | 11/6/2000 | 7:48 a.m. |
| NMED/HRMB: | John Young | 827-1557 | 827-1544 | 11/6/2000 | 8:03 a.m. |
| NMED/DOE-OB: | S. Yanicak | 672-0448 | 672-0466 | 11/3/2000 | 12:45 p.m. |
| ESH-18: | H. Decker | 665-2014 | 665-9344 | 11/3/2000 | 11:00 a.m. |
| DOE: | Mat Johansen | 665-5046 | 665-4872 | 11/3/2000 | 1:10 p.m. (v-mail) |
| OTHER: | E. Hoth | 665-6002 | 665-6636 | | |
| OTHER: | | | | | |

Comments:

Form Completed By: H. Decker

7 DAY RELEASE / DISCHARGE ACTIONS

7 Day Notice 7 Day Notice Date: 11/9/2000 7 Day Notice By: H. Decker

Mark "X" when done.

Comments: An automatic valve on the downstream TA-53 line protection water storage tank malfunctioned causing the upstream PRV to discharge in a cyclic manner of approximately 50 gallons of potable water every 2 to 3 seconds. This increased water to the already saturated canyon slope is believed to have caused the slope to fail causing a landslide that just barely entered the streamcourse in LA Canyon.

15 DAY RELEASE / DISCHARGE ACTIONS

15 day Follow-up Due: 11/23/2000 15-day Follow-Up By: H. Decker

Comments: Please see attached Corrective action recommendations as submitted by ESH-18 and agreed to by LANL/FWO.

NMED 30 DAY APPROVAL / DISAPPROVAL

NMED 30 Day Response Date:

Comments:

David Gurule, Area Manager
Los Alamos Area Office
Department of Energy
Los Alamos, New Mexico 87544
(505) 667-5105

Dennis J. Erickson, ESH Division Director
University of California
Los Alamos National Laboratory
P.O. Box 1663, MS K491
Los Alamos, New Mexico 87544
(505) 667-4218

Recommendations for corrective actions at the Los Alamos Canyon Landslide.

- 1) ESH-18 recommends relocating and possibly diffusing the flow from the PRV, or at a minimum re-directing the discharge from the PRV AWAY from the canyon edge. Additionally, we are recommending installing an alarm on the PRV to activate when the PRV discharges more than just an intermittent opening or closing (in situations such as this where the PRV was continually discharging).
- 2) The canyon road needs to be cleared by the spring thaw to prevent additional sediment transport to the stream. Doing this will assure the road is passable.
- 3) Installation of a silt fence along the stream edge would be preferable to removal of the sediment that has gone over the road. Pulling this sediment flow back from the edge of the stream would most likely cause more damage than leaving it in place. Also, this material could be spread in the spring and re-seeded if necessary to stabilize it in place.
- 4) In the wasted area itself (the slope) there is probably not a lot that can be done except removing the water source from above (the PRV source and possibly redirecting flow away from this area on the mesa top) if necessary straw wattles could be installed as problem areas are determined in the spring and raking, seeding and mulching can also be performed if necessary.
- 5) The erosion area at the PRV needs to be repaired.
- 6) Waiting until the spring thaw is preferable to proceed with # 4 above unless problem areas are determined before that time.

From consultation with ESH-18 erosion control experts in developing these recommendations it appears that other than addressing the items in # 1,2 and 3 above, not much more can be accomplished with the slope itself until the spring thaw and any problem areas begin to become apparent.