

TA-41

John



Risk Reduction & Environmental Stewardship Division
Water Quality & Hydrology Group (RRES-WQH)
PO Box 1663, MS K497
Los Alamos, New Mexico 87545
(505) 665-4752/Fax: (505) 665-9344

Date: September 18, 2003
Refer to: RRES-WQH: 03-235

Ms. Barbara Hoditschek
New Mexico Environment Department
DOE Oversight Bureau
P.O. Box 1663, MS J993
Los Alamos, New Mexico 87545

SUBJECT: TECHNICAL AREA (TA)-41 AND TA-43 LOS ALAMOS CANYON ALLUVIAL GROUNDWATER WELLS (LAO-C AND LAO-0.7) OILY RESIDUE, REQUEST FOR CLOSURE UNDER WQCC REGULATIONS, SUPPLEMENTAL INFORMATION

Dear Ms. Hoditschek:

On January 16, 2003 the Laboratory's Water Quality and Hydrology Group (RRES-WQH) notified NMED of an oily residue on the equipment of two alluvial groundwater monitoring wells, LAO-C and LAO-0.7, in Los Alamos Canyon. This notification was made pursuant to the New Mexico Water Quality Control Commission (NMWQCC) Regulations (20 NMAC 6.2). Enclosed is a copy of the 15-Day Release / Discharge Notification (Attachment 1).

During a meeting on July 23, 2003 with Mark Haagenstad of RRES-WQH, you requested supplemental information for closure on the above incident. A Well Security Survey was conducted as part of the corrective actions. This survey is summarized in Attachment 2. Corrective actions have been completed for regional aquifer and intermediate-depth monitoring wells. Completion of security activities for shallow alluvial wells is dependent on funding availability in FY04.

Please advise if you require any additional information in order to closeout this release report.

Sincerely,

Michael Alexander
Water Quality & Hydrology Group

MA:MH/tml



Attachments: a/s

Cy: Waudelle Strickley, EPA Region 6, Dallas, TX, w/o att.
Jerry Schoepner, NMED/GWQB, Santa Fe, NM, w/att.
Marcy Leavitt, NMED/SWQB, Santa Fe, NM, w/att.
John Young, NMED/SWQB, Santa Fe, NM, w/att.
Steven Yanicak, NMED, w/att., MS J993
Gene Turner, DOE/OLASO, w/att., MS A316
Beverly Ramsey, RRES-DO, w/o att., MS J591
Kenneth Hargis, RRES-DO, w/o att., MS J591
Tori George, RRES-DO, w/o att., MS J591
Doug Stavert, RRES-EP, w/o att., MS J591
Steven Rae, RRES-WQH, w/att., MS K497
Tina Sandoval, RRES-WQH, w/o att., MS K497
Mike Saladen, RRES-WQH, w/o att., MS K497
Mark Haagenstad, RRES-WQH, w/att., MS K497
RRES-WQH File, w/att., MS K497
IM-5, w/att., MS A150



RELEASE / DISCHARGE NOTIFICATION

LOS ALAMOS NATIONAL LABORATORY

Permit Number: .

Calendar Year

[Empty Box]

- NPDES or Operational Spill/Release
- ER Spill/Release
- Other Spill/Release

Indicate with "X" in appropriate box.

Release ID Number:

117

Responsible Facility/User Group: RRES-WQH

Contact Person: M. Alexander

Pager #: 104-1060

Phone #: 665-4752

Cell Phone #: 699-1336

Release/Discharge Location:

TA: 43

Building: Outside

The potential release of oily substance was discovered in two alluvial monitoring wells (LAO-C at TA-43 and LAO-0.7 at TA-41) in Los Alamos Canyon. Observations were made during change-out of pumps in the alluvial groundwater wells.

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: N/A

Indicate with "X" in appropriate box(es).

Relationship of the Discharge to a SWMU or PRS:

No SWMU or PRSs impacted.

Discharge Occurred: Unknown
Date & Time

Discharge Discovered: 1/16/2003 9:00 a.m.
Date & Time

Discharge Stopped: 1/16/2003 9:00 a.m.
Date & Time

Cleanup Started: TBD
Date & Time

Cleanup Completed: TBD
Date & Time

Material(s) Released / Discharged:

The material released to the LAO-C and LAO-0.7 alluvial groundwater monitoring wells has not been confirmed as of 01/16/2003. Contaminant material appears to be an oil based product.

Release/Discharge Mitigation Method:

Well covers were vandalized. Well covers to be replaced. A survey is being conducted to determine if additional wells were vandalized. Additional security measures are under review to prevent re-occurrence.

Weather Conditions:

Sunny, clear.

Duration of Release/ Discharge, in HOURS: TBD

Est. Volume Released/ Discharged, in GAL. TBD

Est. Volume Recovered, in GAL. TBD

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

Site investigation conducted by RRES-WQH personnel. Immediate actions include investigation to determine if additional alluvial wells have been vandalized. Sampling to be conducted to determine contaminant(s). Well covers to be replaced and locked.

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:

NA

Depth to Groundwater, in FT, if known:

Distance to Nearest Drinking Water Well, in FT, if known: Well ID#

24-HOUR RELEASE / DISCHARGE NOTIFICATIONS

	Contact Person	Phone	Fax	Date & Time (or Comment)	
EPA:	<input type="text" value="E. Spencer"/>	<input type="text" value="214-665-6475"/>	<input type="text" value="214-665-2168"/>	<input type="text" value="1/17/2003"/>	<input type="text" value="FAX"/>
NMED/SWQB:	<input type="text" value="Bret Lucas"/>	<input type="text" value="827-2933"/>	<input type="text" value="827-0160"/>	<input type="text" value="1/17/2003"/>	<input type="text" value="FAX"/>
NMED/GWQB:	<input type="text" value="Curt Frischkorn"/>	<input type="text" value="827-2918"/>	<input type="text" value="827-2965"/>	<input type="text" value="1/17/2003"/>	<input type="text" value="FAX"/>
NMED/HRMB:	<input type="text" value="John Young"/>	<input type="text" value="428-2538"/>	<input type="text" value="428-2567"/>	<input type="text" value="1/17/2003"/>	<input type="text" value="FAX"/>
NMED/DOE-OB:	<input type="text" value="Steve Yanicak"/>	<input type="text" value="672-0448"/>	<input type="text" value="672-0466"/>	<input type="text" value="1/17/2003"/>	<input type="text" value="FAX"/>
RRES-WQH:	<input type="text" value="Mike Saladen"/>	<input type="text" value="665-6085"/>	<input type="text" value="665-9344"/>	<input type="text" value="1/17/2003"/>	<input type="text" value="FAX"/>
DOE:	<input type="text" value="Gene Turner"/>	<input type="text" value="667-5794"/>	<input type="text" value="505-665-4872"/>	<input type="text" value="1/17/2003"/>	<input type="text" value="FAX"/>
OTHER:	<input type="text" value="Patricia Vadaro-Charles"/>	<input type="text" value="665-6976"/>	<input type="text" value="665-6977"/>	<input type="text" value="1/17/2003"/>	<input type="text" value="FAX"/>
OTHER:	<input type="text" value="Roger Hustead"/>	<input type="text" value="428-2500"/>	<input type="text" value="428-2567"/>	<input type="text" value="1/17/2003"/>	<input type="text" value="8:07 a.m."/>

Comments: LAO-C alluvial well is ~15000 feet upstream of Otowi Well #4 and 15 feet from surface water. Surface water did not appear to be impacted. LAO-0.7 was 10000 feet upstream of Otowi Well #4 and no surface water flowing in area. San Ildefonso Pueblo was notified on 01/16/2003.

Form Completed By:

7 DAY RELEASE / DISCHARGE ACTIONS

7 Day Notice 7 Day Notice Date: 7 Day Notice By:

Mark "X" when done.

Comments: See Attachment 1 that was FAXed on 01/23/2003 along with the 7 Day Release / Discharge Report.

15 DAY RELEASE / DISCHARGE ACTIONS

15 day Follow-up Due: 15-day Follow-Up By:

Comments: General Engineering Laboratory (GEL) analytical testing from sampling of transducers, tubing, pumps, and groundwater showed no contamination in vandalized LAO-C and LAO-0.7 alluvial groundwater wells. Additional security measures are currently being implemented for other Laboratory wells. See analytical data and cover letter for additional information.

NMED 30 DAY APPROVAL / DISAPPROVAL

NMED 30 Day Response Date:

Comments:

Ralph Erickson, Director
Office of Los Alamos Site Operations
Department of Energy
Los Alamos, New Mexico 87544
(505) 667-5105

Beverly Ramsey, RRES Division Director
University of California
Los Alamos National Laboratory
P.O. Box 1663, MS K491
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(505) 667-4218

ATTACHMENT 2
DIRECTOR'S PERFORMANCE IMPROVEMENT PROGRAM
ELEMENT 2.04, ENVIRONMENT

UPDATE, May 19, 2003

2.041 Monitoring Well Security Actions

Owner: Steven Rae, RRES Water Quality & Hydrology Group Leader

Objective: Assess and protect LANL groundwater monitoring wells and surrounding environment against tampering, vandalism, or other malicious actions.

Principal Elements and Scheduled Completion Date:

General actions related to security of monitoring wells

1. Assess wells within public access areas for tampering—**Completed.**
2. Sample wells suspected of tampering for contamination—**Completed**
3. Establish Risk Factors for well inventory—**Completed**
4. Develop listing and location map for all known monitoring wells—**Completed**
5. Develop field assessment form for monitoring wells—**Completed**
6. Security review of monitoring wells—**Completed**
7. Establish key core system for all monitoring wells—**Completed**
8. Develop Standard Design for Well Caps, with concurrence by Group S-5—**Completed**

Actions related to wells that extend to regional aquifer

1. Conduct assessment of regional wells—**Completed**
2. Interface with Los Alamos County on their assessment of the water system—**Completed**
3. Review field assessment findings from regional monitoring wells—**Completed**
4. Implement recommended security measures for regional monitoring wells—**Completed (see table)**

Actions related to intermediate-depth wells

1. Conduct assessment of intermediate wells—**Completed**
2. Review field assessment findings from intermediate wells—**Completed**
3. Implement recommended security measures for intermediate wells— (see table)
Completed

Of the 10 intermediate wells: 9 have been secured, and one (LADP-4) status in question, possibly Plugged and Abandoned for ER clean-up work, cannot locate well.

ATTACHMENT 2
DIRECTOR'S PERFORMANCE IMPROVEMENT PROGRAM
ELEMENT 2.04, ENVIRONMENT

UPDATE, May 19, 2003

Actions related to shallow alluvial wells (FY04 – Dependent on Funding Availability)

1. Conduct assessment of alluvial wells
2. Review field assessment findings from alluvial wells
3. Develop list of wells to plug and abandon
4. Implement recommended security measures for alluvial wells to remain in service

ATTACHMENT 2
DIRECTOR'S PERFORMANCE IMPROVEMENT PROGRAM
ELEMENT 2.04, ENVIRONMENT

UPDATE, May 19, 2003

Current Status Regional Well Security Updates

Well Name	General Location	Date Completed	Total Depth (Ft)	Current Status	Date Inspected	Type Well Head Protection & Install Date
CDV-R-15-3	TA-15	24-Sep-00	1722	Monitor Well	29-Jan-03	Mushroom Cap, 03/03
CDV-R-37-2	Water Canyon	1-Aug-03	1664	Monitor Well	30-Jan-03	Mushroom Cap, 03/03
DT-10	TA-49	1-Mar-60	1409	Monitor Well	29-Jan-03	Greenlee box, 03/03
DT-5	TA-49	15-Nov-59	962	Monitor Well	7-Feb-03	Plugged & Abandoned
DT-5A	TA-49	1-Jan-60	1821	Monitor Well	29-Jan-03	Fence/shed previously in place.
DT-9	TA-49	1-Feb-60	1501	Monitor Well	29-Jan-03	Greenlee box, 03/03
EGH-LA-1	Sigma Mesa	31-Jul-79	2292	P&A List	5-Feb-03	Steel Plate, previously in place
H-19	LA Canyon at Ice Rink	1-Sep-49	2000	Inactive	2/5/2003	Welded steel plate over opening, 03/03
Layne Western	Guaje Canyon	1-Mar-50	157	Unknown	7-Feb-03	Steel plate over opening, 03/03
R-12	Lower Sandia Canyon	8-Jun-98	847	Monitor Well	29-Jan-03	Mushroom Cap, 02/03
R-13	Mortandad Canyon	30-Oct-01	1133	Monitor Well	29-Jan-03	Mushroom Cap, 02/03
R-14	Mortandad Canyon		1330	Monitor Well	29-Jan-03	Mushroom Cap, 02/03
R-15	Lower Mortandad Canyon	21-Sep-99	1107	Monitor Well	29-Jan-03	Concrete Vault/ Mushroom Cap, 03/03
R-16	Cañada del Buey		1287	Monitor Well	30-Jan-03	Mushroom Cap, 02/03
R-19	Mesita del Potrillo	19-Sep-00	1903	Monitor Well	30-Jan-03	Mushroom Cap, 03/03
R-20	Pajarito Canyon	2003	1365	Monitor Well	23-Jan-03	Mushroom Cap, 02/03
R-21	Cañada del Buey	2003		Monitor Well	29-Jan-03	Mushroom Cap, 02/03
R-22	TA-54	10-Dec-00	1489	Monitor Well	30-Jan-03	Mushroom Cap, 03/03
R-23	Pajarito Canyon	2003	935	Monitor Well	29-Jan-03	Mushroom Cap, 02/03
R-25	TA-16	28-Sep-00	1942	Monitor Well	30-Jan-03	Mushroom Cap, 03/03
R-31	North Fork Ancho Canyon	1-Dec-00	1103	Monitor Well	5-Feb-03	Mushroom Cap, 03/03
R-32	Pajarito Canyon	2003	1008	Monitor Well	29-Jan-03	Mushroom Cap, 02/03
R-5	Pueblo Canyon	19-Jun-01	902	Monitor Well	29-Jan-03	Mushroom Cap, 03/03
R-7	Los Alamos Canyon	26-Feb-01	1097	Monitor Well	30-Jan-03	Concrete Vault Mushroom Cap, 03/03
R-8	Los Alamos Canyon			P&A		Plugged & Abandoned
R-8A	Los Alamos Canyon			Monitor Well	30-Jan-03	Mushroom Cap, 02/03
R-9	Los Alamos Canyon	18-Oct-99	771	Monitor Well	30-Jan-03	Concrete Vault Mushroom Cap, 03/03
TW-1	Pueblo Canyon	1-Jan-50	642	Monitor Well	29-Jan-03	Greenlee type box, 03/03
TW-2	Pueblo Canyon	1-Nov-49	834	Monitor Well	29-Jan-03	Greenlee box, 03/03
TW-3	Los Alamos Canyon	1-Nov-49	815	Monitor Well	30-Jan-03	Greenlee box, 03/03
TW-4	Pueblo Canyon	1-Mar-50	1205	Monitor Well	29-Jan-03	Greenlee box, 03/03
TW-8	Middle Mortandad Canyon	1-Dec-60	1065	Monitor Well	29-Jan-03	Greenlee box, 03/03

ATTACHMENT 2
DIRECTOR'S PERFORMANCE IMPROVEMENT PROGRAM
ELEMENT 2.04, ENVIRONMENT

UPDATE, May 19, 2003

Current Status Intermediate Well Security Updates

Well Name	General Location	Date Completed	Total Depth (Ft)	Current Status	Date Inspected	Type Well Head Protection & Install Date
LADP-3	Los Alamos Canyon		349	Monitor Well	2/10/2003	Mushroom Cap, 03/03
LADP-4	DP Canyon		800	Monitor Well	2/10/2003	Status in question, possibly P&A'ed
LAOI(A)-1.1	Los Alamos Canyon		323	Monitor Well	2/10/2003	Mushroom Cap, 04/03
MCOBT-4.4	Mortandad Canyon	1-Jun-03	767	Monitor Well	2/10/2003	Mushroom Cap, 02/03
POI-4	Pueblo Canyon			Monitor Well	2/10/2003	Mushroom Cap, 03/03
R-9i	Los Alamos Canyon	1-Apr-00	322	Monitor Well	2/10/2003	Mushroom Cap, 03/03
SCOI-3	Lower Sandia Canyon	10-May-96	132	P&A		Plugged & Abandoned
SHB-3	TA-16	1-Jan-92	860	3" Tubing w/ water	2/10/2003	Welded cap over opening, 03/03
TW-1A	Pueblo Canyon	1-Jan-50	225	Monitor Well	2/10/2003	Greenlee box, 03/03
TW-2A	Pueblo Canyon	1-Nov-49	133	Monitor Well	2/10/2003	Greenlee box, 03/03