



Operated for the U.S. Department of Energy's  
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**Michael W. Hazen**  
Vice President  
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Mr. James W. Todd  
Assistant Manager for Engineering  
U. S. Department of Energy  
National Nuclear Security Administration  
Sandia Field Office, MS-0184  
P. O. Box 5400  
Albuquerque, NM 87185-0184

Dear Mr. Todd:

Subject: ***Certification and Submittal of Assessment Report on the Newly-Identified or Suspected Release of Hazardous Waste at Building 897, Sandia National Laboratories/New Mexico (SNL/NM)***

Sandia Corporation (Sandia) is requesting that your office submit the enclosed Assessment Report on the newly-identified or suspected release of hazardous waste at Building 897 at SNL/NM to the New Mexico Environment Department (NMED) on or before February 4, 2014. This information is provided in accordance with the requirements of Part V of the Compliance Order on Consent (COOC) for SNL/NM.

On November 21, 2013, a full one-gallon glass bottle containing hazardous waste solvents broke in Laboratory 3005 in Building 897 at SNL/NM. The contents were released to the table and the adjacent sink. The initial notification indicated the contents were also released to the floor but upon further investigation, this was determined to not to be accurate. Sandia personnel estimate approximately 0.75 gallons were in the sink and were subsequently discharged to the sewer and the Albuquerque wastewater treatment plant. Timely notification was given to the City. In addition, on December 2, 2013, DOE and Sandia initiated communications with the New Mexico Environment Department (NMED) towards determining a path forward, and sent in a notification on December 5, 2013 in accordance with Part V of the COOC.

Waste management activities are provided in the Assessment Report enclosed with this letter. Sandia believes no additional action is necessary. The Assessment Report is due to NMED no later than 60 days after the notification; thus the February 4 submittal date. The Assessment Report was not

completed until recently in order to provide the most complete and comprehensive information available.

I have signed the certification to be sent to the NMED as the Operator of SNL/NM. If you agree, please sign it as the Owner.

If you have any questions regarding the proposed report, please contact Fran Nimick, Senior Manager, at (505) 284-2577/[fbnimic@sandia.gov](mailto:fbnimic@sandia.gov) or Meaghan Carpenter, Manager, at (505) 284-8268/[mscarpe@sandia.gov](mailto:mscarpe@sandia.gov).

Sincerely,

Michael W. Hazen  
Vice President

Enclosures:

1. Assessment Report on the Newly-Identified or Suspected Release of Hazardous Waste at Building 897, Sandia National Laboratories/New Mexico, Certification Statement
2. Enclosure A: Assessment Report for Building 897 Hazardous Waste Release

Copy to (w/enclosures):

MS-0184 David Rast, NNSA/SFO

MS-0184 Cynthia Wimberly, NNSA/SFO

MS-0184 SFO Waste Management File, NNSA/SFO

Blind copy to (w/enclosures):

MS-0651 Customer Funded Records Center, 09532

Blind copy to (w/o enclosures):

MS-0141 Amy J. Blumberg, 11100

MS-0725 Sidney M. Gutierrez, 04100

MS-0729 Francis B. Nimick, 04140

MS-0729 Pamela M. Puissant, 04142

MS-0729 Joseph M. Mauser, 04143

MS-0729 Anita S. Reiser, 04135

MS-0729 Stephanie Salinas, 04143

MS-1076 Barbara A. McGuire, 01741

MS-1082 Michael R. Descour, 01725

MS-1151 Jeffrey F. Jarry, 04144

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## ASSESSMENT REPORT FOR BUILDING 897 HAZARDOUS WASTE RELEASE

### **Introduction**

This document is the report for the newly-identified or suspected release of hazardous waste at Building 897, Sandia National Laboratories/New Mexico (SNL/NM) on November 21, 2013. The U. S. Department of Energy (DOE) and Sandia Corporation (Sandia) formally notified the New Mexico Environment Department (NMED) of this newly-identified or suspected release by letter dated December 5, 2013. This report presents all available information, including the location, a description of the wastes, the extent of any release, and the response actions.

### **Location and Site Description**

The location was Laboratory 3005 in Building 897 at SNL/NM. The building is located in Technical Area 1 as shown in the attached Figure 1. Laboratory 3005 is equipped with research equipment, a fume hood, storage cabinets, a cabinet for flammable materials, and work areas with a sink. Wastewater from the sink drains to the sewer and is discharged to the Albuquerque sanitary sewer system.

### **Description of the Hazardous Waste, Extent of Any Release, and Response Actions**

Hazardous wastes generated during activities in Laboratory 3005 are accumulated in laboratory containers (up to one gallon in size) in satellite accumulation areas within the laboratory. A full one-gallon glass bottle of mixed solvent hazardous waste was located in the work area on the table next to the sink. The contents of the bottle are listed in Table 1.

**Table 1.** Hazardous Waste Solvent Mixture

Acetone
Isopropyl alcohol
Trichloroethylene
1,2-trans-dichloroethylene
Ethyl nonafluorobutyl ether
Ethyl nonafluoroisobutyl ether
Methyl nonafluorobutyl ether
Methyl nonafluoroisobutyl ether
Deionized water

The two laboratory personnel who were present at the time heard a sound and noted that the glass bottle had cracked. The bottle broke and released the contents on the table and into the sink. The personnel placed disposable towels and absorbent on the spilled solvent, left the room, and contacted Sandia emergency response personnel. The affected area on the table is shown in Figure 2.

Sandia emergency personnel responded to Laboratory 3005 and observed the area. The entire gallon bottle of waste solvent mixture was emptied. The sink, the area surrounding the sink, and the table, including an area under a work platform located on the table, were affected. The broken bottle was placed in another container.

Personnel cleaned up using the disposable towels and absorbent, removed the work platform, and then cleaned the affected area, including the underside of the platform, the table, and the sink, with detergent and water, as shown in Figure 3. The sink and drain were flushed with water.

The disposable towels, absorbent, and the paper towels used to scrub the affected surfaces were managed as hazardous waste.

The personnel who were working in the laboratory were evaluated at Sandia medical facilities as a precaution. They did not require medical attention and returned to work.

### **Follow-up Actions**

Sandia and DOE personnel notified the Albuquerque Bernalillo County Water Utility Authority (ABCWUA). No discharge limits were exceeded; however, the wastewater discharge permit includes a clause prohibiting disposal of hazardous substances into the sanitary sewer. The ABCWUA determined that Sandia violated the wastewater discharge permit and issued a notice of violation.

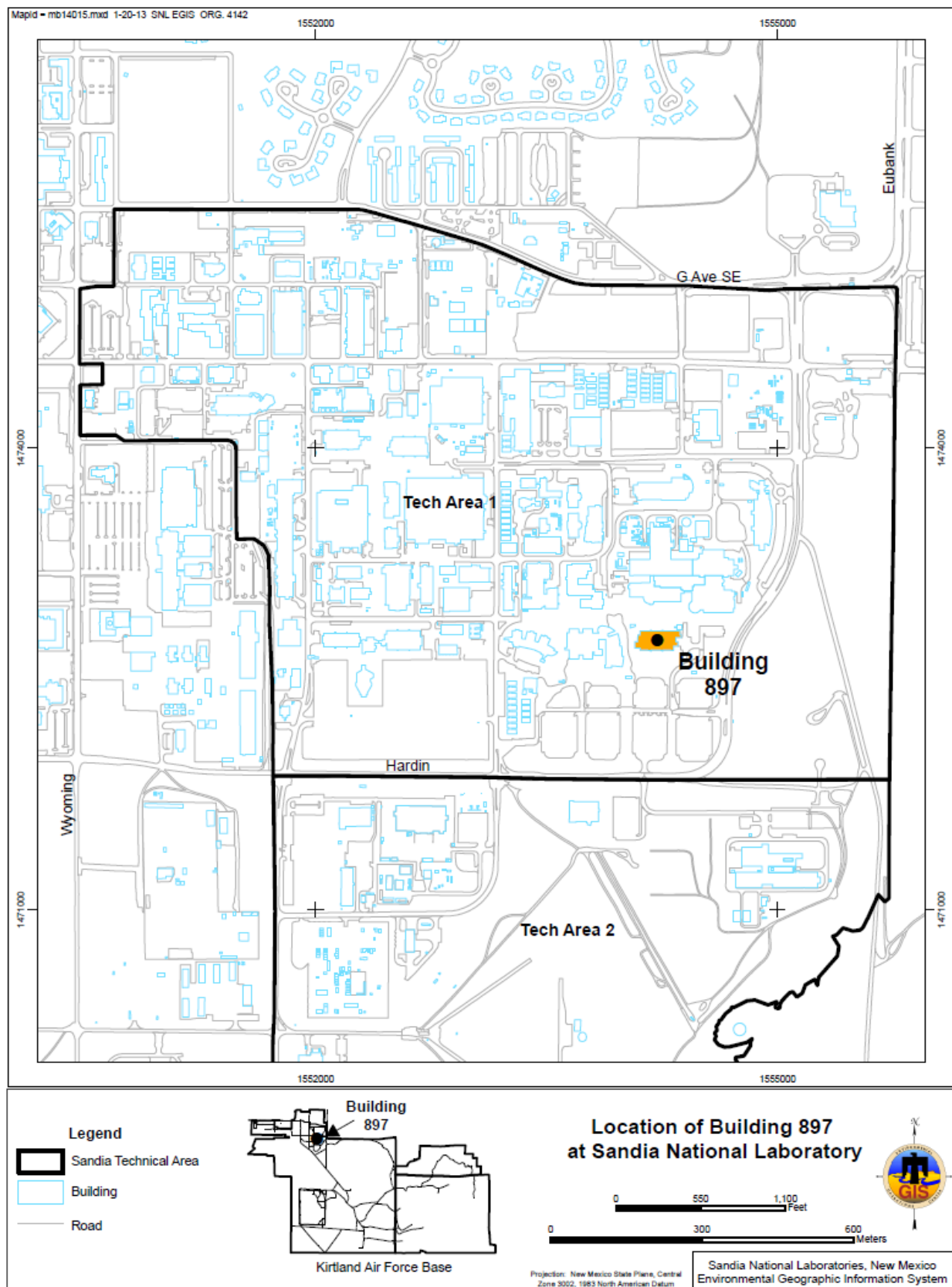
Sandia safety personnel determined the glass container had inadvertently been overfilled and most likely failed due to increased pressure. An evaluation of other containers in this laboratory and within other laboratories at SNL/NM was performed and, when deemed appropriate, the contents were transferred to additional containers to minimize any potential for recurrence.

### **Summary and Conclusions**

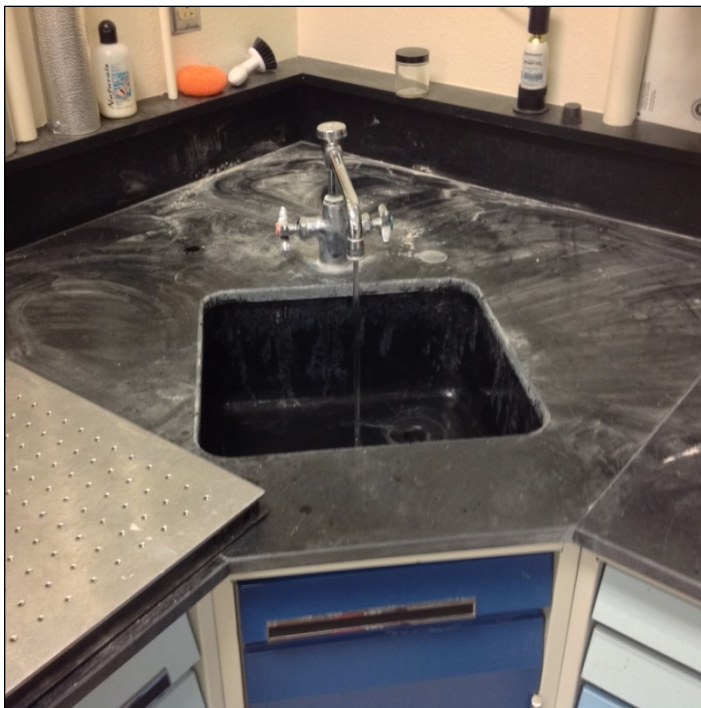
Less than one gallon of hazardous waste solvents were disposed into the sewer and discharged to the wastewater treatment plant. The solvents underwent treatment at the Southside Water Reclamation Plant before any discharge to the environment.

Due to the volatility of the solvents in the container, some evaporation occurred within Laboratory 3005; the quantity is not known but is believed to be minimal.

All the affected surfaces within Laboratory 3005 were decontaminated. The broken container and hazardous waste residues were containerized and managed as hazardous wastes. No contaminants were released to the soil, surface water, or groundwater. Thus, further actions in response to this release are not deemed necessary.

**Figure 1** Location of Building 897 at Sandia National Laboratories/New Mexico

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**Photo Number 1.** Sink and surrounding work area following release. The white residue on the surfaces is the remaining absorbent.



**Photo Number 2.** Sink and work area following decontamination. The surface of the work table has been cleaned but is not yet dry. The platform has been removed and placed against the cabinet for cleaning; the corner of the platform is visible at the bottom of the photograph, to the left of the sink.



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