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ENTERED



NEW MEXICO
ENVIRONMENT DEPARTMENT



SUSANA MARTINEZ
Governor

Ground Water Quality Bureau
1190 South St. Francis Drive (87505)
P.O. Box 5469, Santa Fe, New Mexico 87502-5469
Phone (505) 827-2900 Fax (505) 827-2965

BUTCH TONGATE
Cabinet Secretary

JOHN A. SANCHEZ
Lieutenant Governor

www.env.nm.gov

J.C. BORREGO
Deputy Secretary

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

April 25, 2018

Taunia Van Valkenburg, Group Leader
Environmental Protection and Compliance Division (EPC-DO)
Los Alamos National Laboratory
P.O. Box 1663, K490
Los Alamos, NM 87545

RE: Response to Notice of Intent to Discharge; Discharge Permit Not Required for Horizontal Direction Drilling Discharges south of Technical Area 3 Structure 1415, AI:856 (PRD20180002)

Dear Ms. Van Valkenburg:

The New Mexico Environment Department (NMED) Ground Water Quality Bureau (GWQB) received a Notice of Intent on March 29, 2018 for discharges of drilling fluid from horizontal directional drilling during the installation of utilities associated with the construction of a new building south of Technical Area 3 Structure 1415 (TA-3-1415). Drilling cuttings will be managed in accordance with the *Decision Tree for Management of Investigation Derived Waste Solids from Drilling Operations*, dated April 8, 2016. The notice satisfies the requirements of Subsection A of 20.6.2.1201 NMAC of the New Mexico Water Quality Control Commission (WQCC) Regulations (20.6.2 NMAC). The proposed discharge is located south of TA-3-1415 at 35° 52' 42" North, -106° 19' 08" West, approximately one mile southwest of Los Alamos in Section 21, Township 19N, Range 06E, Los Alamos County.

Based on the information and materials provided in the Notice of Intent, NMED GWQB has determined that a Discharge Permit is not required as long as the discharges occur as described. A Discharge Permit is not required at this time because the information provided indicates the discharges are unlikely to move directly or indirectly into groundwater.

Although a Discharge Permit is not being required for this discharge at this time, you are not relieved of liability should this operation result in actual pollution of ground or surface waters. Further, this decision by NMED does not relieve you of your responsibility to comply with any

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Taunia Van Valkenburg, AI:856 (PRD20180002)

April 25, 2018

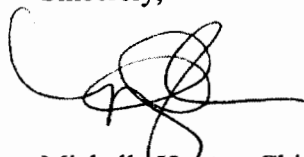
Page 2

other applicable federal, state, and/or local laws, regulations, zoning requirements, plumbing codes, and nuisance ordinances.

If at some time in the future you intend to change the amount, character, or location of your discharge, or if observation or monitoring shows that the discharge is not as described in your Notice of Intent, you must file a revised Notice of Intent with the Ground Water Quality Bureau.

If you have any questions, please contact either Gerald Knutson at (505) 827-2996 or Steve Pullen, Program Manager, at (505) 827-2962.

Sincerely,



Michelle Hunter, Chief
Ground Water Quality Bureau

MH:GK

enc: Notice of Intent received March 29, 2018

cc: Robert Italiano, District Manager, NMED District II
Steve Pullen, NMED GWQB
Melanie Sandoval, NMED GWQB
Gerald Knutson, NMED GWQB
NOI File
County File
Shelly Lemon, NMED SWQB
Sarah Holcomb, NMED SWQB
Erin Trujillo, NMED SWQB
John Kieling, NMED HWB
Steven Yanicak, NMED-DOE-Oversight Bureau
Karen Armijo, NA-LA, Karen.Armijo@nnsa.doe.gov
Brian Iacona, EPC-CP, biacona@lanl.gov
Mike Saladen, EPC-CP, saladen@lanl.gov
Craig S. Leasure, PADOPS, cleasure@lanl.gov
Benjamin B. Roberts, EPC-DO, bbroberts@lanl.gov
Ellena I. Martinez, EPC-CP, martinez@lanl.gov



Environmental Protection and Compliance Division (EPC-DO)

Los Alamos National Laboratory

PO Box 1663, K490
Los Alamos, New Mexico 87545
(505) 667-2211

Date: **MAR 29 2018**
Symbol: EPC-DO: 18-137
LA-UR: 18-22495
Locations Action No.: N/A

Ms. Michelle Hunter, Bureau Chief
Ground Water Quality Bureau
New Mexico Environment Department
Harold Runnels Building, N2250
1190 St. Francis Drive
P.O. Box 5469
Santa Fe, New Mexico 87502

Ms. Shelly Lemon, Bureau Chief
Surface Water Quality Bureau
New Mexico Environment Department
Harold Runnels Building, N2050
1190 St. Francis Drive
P.O. Box 5469
Santa Fe, New Mexico 87502

Subject: Notice of Intent to Conduct Horizontal Directional Drilling at Los Alamos National Laboratory Technical Area 3

Dear Ms. Hunter and Ms. Lemon:

Enclosed is a Notice of Intent (NOI) to Discharge that has been prepared by Los Alamos National Security, LLC (LANS) for submittal to the New Mexico Environment Department (NMED) pursuant to 20.6.2.1201 NMAC of the New Mexico Water Quality Control Commission Regulations and the Los Alamos National Laboratory (LANL) Liquid Discharge Reporting Guidance (Decision Tree), dated March 10, 2009.

The use of horizontal directional drilling within Technical Area 3, south of Structure 1415, is being requested for the installation of utilities associated with the construction of a new building. LANS, LLC submitted an NOI to NMED on June 25, 2015, (ENV-DO-15-0172) for discharges associated with horizontal directional drilling at Los Alamos National Laboratory. The NMED Ground Water Quality Bureau responded with a letter on July 24, 2015, and determined that a Discharge Permit was not required. Drill cutting sampling and management will be conducted in accordance with the NOI approved by NMED Ground Water Quality Bureau (ENV-DO-15-0172). This NOI is being submitted to NMED for an upcoming project utilizing horizontal directional drilling adjacent to Potential Release Site 03-049(b)-00.

Please contact Brian Iacona at (505) 664-0185, if additional information is necessary or would be helpful.

Sincerely,

Taunia S. Van Valkenburg
Group Leader

Ms. Michelle Hunter
Ms. Shelly Lemon
EPC-DO: 18-137

- 2 -

TSV: BMI/eim

Enclosures: 1) Notice of Intent to Conduct Horizontal Directional Drilling at Technical Area 3
2) Site Map
3) Consolidated Unit 03-049(b)-00 Description

Copy: Nancy Williams, USEPA/Region 6, Dallas, TX, (E-File)
Steve Pullen, NMED/GWQB, Santa Fe, NM, (E-File)
Gerald L. Knutson, NMED/GWQB, Santa Fe, NM, (E-File)
Sarah Holcomb, NMED-SWQB, (E-File)
Erin Trujillo, NMED-SWQB, (E-File)
Steve M. Yanicak, NMED/DOE Oversight Bureau, w/enc., (E-File)
Karen E. Armijo, NA-LA, (E-File)
Craig S. Leasure, PADOPS, (E-File)
William R. Mairson, ADESH, (E-File)
Benjamine B. Roberts, EPC-DO, (E-File)
Michael T. Saladen, EPC-CP, (E-File)
Brian M. Iacona, EPC-CP, (E-File)
Ellena I. Martinez, EPC-CP, (E-File)
lasomailbox@nnsa.doe.gov, (E-File)
adesh-records@lanl.gov, (E-File)
locatesteam@lanl.gov, (E-File)
epc-correspondence@lanl.gov, (E-File)

ENCLOSURE 1

Notice of Intent to Conduct Horizontal Directional Drilling at Technical Area 3

EPC-DO: 18-137

LA-UR-18-22495

Date: MAR 29 2018

NOTICE OF INTENT

1. Name and address of facility making the discharge.

Los Alamos National Laboratory
P.O. Box 1663
Los Alamos, New Mexico 87545

2. Location of the discharge (In Township, Range and Section, if available).

Los Alamos National Laboratory, Technical Area 03
Approximate coordinates: 35°52' 18" North, 106 °19'08" West
Township-19 North, Range-6 East, Section-21

3. The means of discharge. (To lagoon, Flowing stream, Water course, Arroyo, Septic tank, other).

Horizontal directional drilling (HDD) will be utilized to install natural gas and water utilities on the north and south sides of a new building being constructed at Los Alamos National Laboratory within Technical Area (TA) 3. The new building will be constructed where TA-03 Structure 35 was located prior to being recently demolished. Drill cuttings generated during HDD activities will be collected on site in lined pits or impervious containers and sampled. Drill cuttings meeting the criteria of the New Mexico Environment Department (NMED) approved *Decision Tree for Management of Investigation Derived Waste Solids from Drilling Operations*, dated April 8, 2016, will be land applied in accordance with the conditions specified in the Decision Tree. Drill cuttings will not be applied in a wetland, watercourse, or storm water conveyance. Drill cuttings that do not meet the Decision Tree's land application criteria will be managed in accordance with applicable waste management requirements.

Los Alamos National Security, LLC submitted a Notice of Intent to NMED on June 25, 2015, (ENV-DO-15-0172) for discharges associated with horizontal directional drilling at Los Alamos National Laboratory. The New Mexico Environment Department Ground Water Quality Bureau responded with a letter on July 24, 2015, and determined a Discharge Permit is not required. This Notice of Intent is being submitted to NMED due to the proximity of the utility installation to Consolidated Unit 03-049(b)-00. Enclosure 2 contains a map of the project area. Enclosure 3 contains a description of Consolidated Unit 03-049(b)-00.

4. The estimated concentration of contaminants (if any) in the discharge.

Drilling fluid and any required polymers used during horizontal directional drilling will be consistent with the approved Notice of Intent submitted to the New Mexico Environment Department in June 2015 (ENV-DO-15-0172), National Sanitation Foundation (NSF)/American National Standards Institute (ANSI) Standard 60 certified, and used in accordance with manufacturer's recommendations.

5. The type of operation from which the discharge is derived.

HDD will be utilized to install utilities for a new building being constructed within TA-3 south of TA-3-1415. HDD involves the use of a drill rig and associated drilling fluids and polymers to facilitate the installation of below ground utilities.

6. The estimated flow to be discharged per day.

It is estimated that 1 gallon of drilling fluid per foot may remain in the bore after line installation. Approximately 500 linear feet will require boring to install the utilities for this project. In accordance with the June 2015 NOI (ENV-DO-15-0172), drilling operations will be suspended and evaluated if loss of circulation occurs resulting in the discharge of 100 gallons of drilling fluid.

7. The estimated depth to Ground Water (if available).

Approximately 1,300 feet to the regional aquifer.

ENCLOSURE 2

Site Map

EPC-DO: 18- 137

LA-UR-18-22495

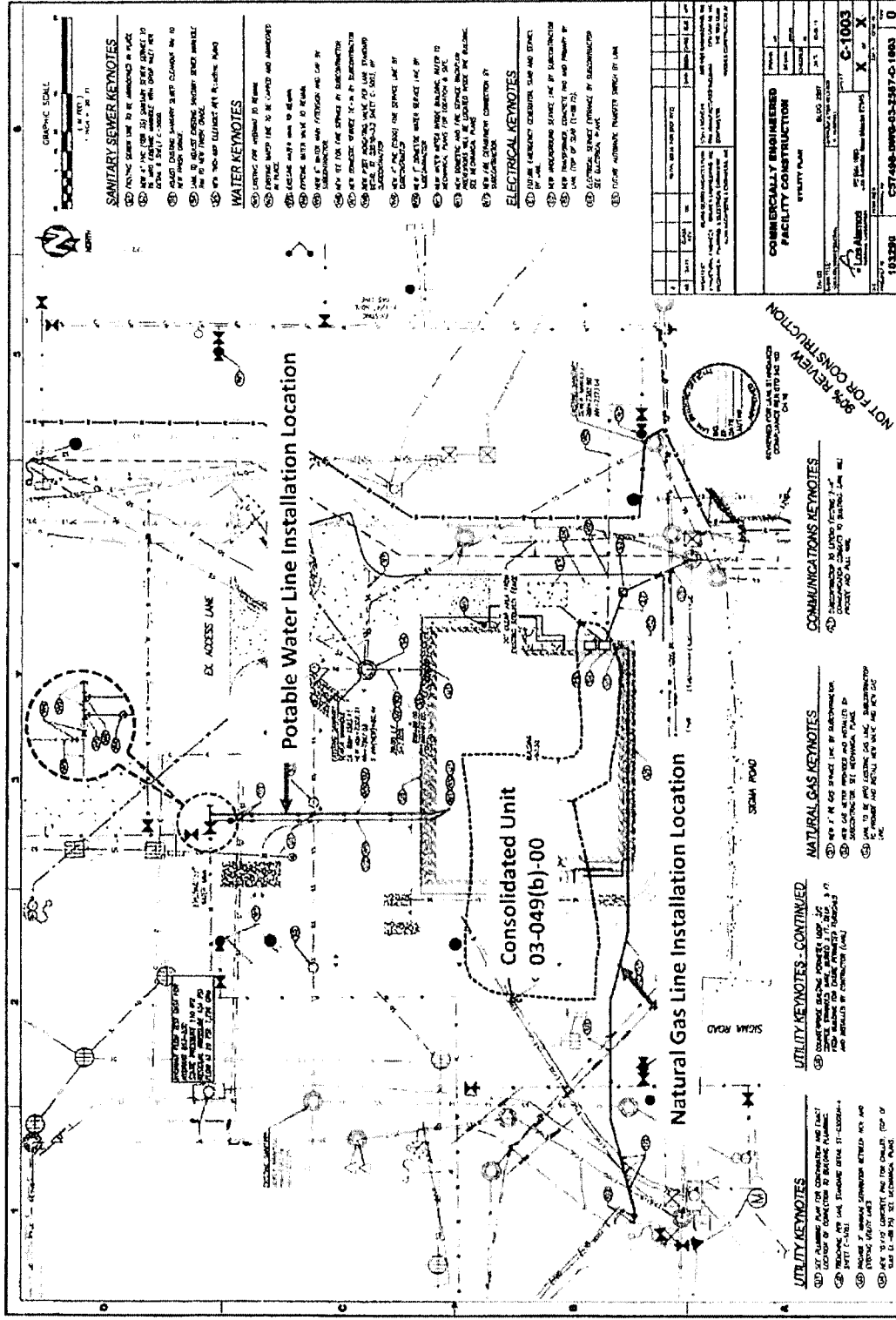
Date: MAR 29 2018

Technical Area 03 Horizontal Directional Drilling Overview Map



Enclosure 2

LA-UR-18-22495



SANITARY SEWER KEYNOTES

- 1. ALL SANITARY SEWER LINES TO BE INSTALLED IN PLACE.
- 2. ALL SANITARY SEWER LINES TO BE INSTALLED IN PLACE.
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WATER KEYNOTES

- 1. ALL WATER LINES TO BE INSTALLED IN PLACE.
- 2. ALL WATER LINES TO BE INSTALLED IN PLACE.
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ELECTRICAL KEYNOTES

- 1. ALL ELECTRICAL LINES TO BE INSTALLED IN PLACE.
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COMMUNICATIONS KEYNOTES

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NATURAL GAS KEYNOTES

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UTILITY KEYNOTES - CONTINUED

- 1. ALL UTILITY LINES TO BE INSTALLED IN PLACE.
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ENCLOSURE 2

GRAPHIC SCALE
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ENCLOSURE 3

Consolidated Unit 03-049(b)-00 Description

EPC-DO: 18- 137

LA-UR-18-22495

Date: **MAR 29 2018**

Consolidated Unit 03-049(b)-00 Description

Two Potential Release Sites are located adjacent to the west and south sides of the former Press Building (building 03-35) footprint, Solid waste Management Unit (SWMU) 03-049(b) and Area of Concern (AOC) C-03-014. These sites were consolidated into Consolidated Unit (CU) 03-049(b)-00 in 2000 because surface water drainage from both sites collects in the same locations and previous regrading of the sites caused contamination associated with both sites to be indistinguishable.

SWMU 03-049(b) was a 50-ft-long x 20-ft-wide discharge area along the south wall of the former Press Building (former building 03-35). It is associated with an inactive vacuum pump that served furnaces in building 03-35. Building 03-35 was built in 1953. The vacuum pump evacuated oil from the furnaces that were used for experiments in the building. Experiments included fabricating enriched uranium-loaded graphite and carbide fuel elements. Also, enriched uranium was processed in the press building. The outlet was located about 8 ft above the ground on the south wall of former building 03-35. The vacuum pump was deactivated in the late 1980s; at about the same time, a 10-ft x 8-ft area under the exhaust pipe outlet was paved with asphalt. Runoff from this area drains southwest toward low-lying areas.

AOC C-03-014 was a 125-ft x 100-ft equipment-storage area located west and southwest of the former Press Building (former building 03-35). The storage area was bounded by security fences to the north, south, and west and by former building 03-35 to the east. Most of the area was paved, except for a 15-ft-wide strip of grass along the southern security fence that widened to 30 ft southwest of former building 03-35. Various equipment and molds used in former building 03-35 were stored at PRC C-03-014 for salvage or because of limited storage space in former building 03-35.