ESHID-603960

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Los Alamos National Laboratory
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Los Alamos Field Office
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Symbol: EPC-DO: 26-113
Date: May 28, 2026
LA-UR: 26-24208
Locates Action No.: U2200542

Justin Ball, Chief
Ground Water Quality Bureau
New Mexico Environment Department
Harold Runnels Building, Room N2261
Santa Fe, NM 87502

Subject: DP-1132, Condition Number 2, Notification of Changes, Technical Area 52 Solar Evaporation Tank System Upgrades

Dear Mr. Ball:

On May 5, 2022, the New Mexico Environment Department (NMED) issued Discharge Permit DP-1132 to the U.S. Department of Energy, National Nuclear Security Administration (NNSA) and Triad National Security, LLC (Triad) for discharges of treated effluent from the Technical Area 50 Radioactive Liquid Waste Treatment Facility (RLWTF). Pursuant to Permit Condition Number 2, *Notification of Changes*, a written notification must be submitted to NMED for any changes to the RLWTF's disposal system.

The Solar Evaporation Tank (SET) System is a component regulated under DP-1132 and is authorized to receive treated effluent from the RLWTF. The SET was originally constructed in 2012 but has never been placed into service. Upgrades will be completed prior to the SET being placed into service. Planned SET upgrades include: replacement of the two synthetic liners and leak detection system originally installed at the site, installation of new piping transferring treated effluent into, and out of, the tanks, and piping modifications at the Technical Area 50 RLWTF to facilitate required water tightness testing of the piping conveying treated effluent from the RLWTF to the SET. The planned SET upgrades are described in Attachment 1.

Please contact Robert A. Gallegos at (505) 901-3824 or robert.gallegos@nnsa.doe.gov or contact Brian M. Iacona at (505) 500-6038 or biacona@lanl.gov if you have questions regarding this notification.

Sincerely,

TERRILL LEMKE (Affiliate)

Digitally signed by TERRILL LEMKE (Affiliate)
Date: 2026.05.27 12:03:59 -06'00'

Sarah S. Holcomb
Group Leader
Environmental Compliance Programs
Triad National Security, LLC

Sincerely,

ROBERT GALLEGOS

Digitally signed by ROBERT GALLEGOS
Date: 2026.05.28 10:02:43 -06'00'

Robert A. Gallegos
Permitting and Compliance Program Manager
National Nuclear Security Administration
U.S. Department of Energy

Attachment: Attachment 1 DP-1132 Permit Condition Number 2, Notification of Changes, Technical Area 52 Solar Evaporation Tank System Upgrades
Attachment 2 Solar Evaporation Tank System Site Plan

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Attachment 1

DP-1132 Permit Condition Number 2, Notification of Changes, Technical Area 52 Solar Evaporation Tank System Upgrades

EPC-DO: 26-113

LA-UR-26-24208

Date: May 28, 2026

DP-1132 Permit Condition Number 2, Notification of Changes

Technical Area 52 Solar Evaporation Tank System Upgrades

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a. ***Date process change is planned to be implemented:***
This work is expected to begin on, or after, June 29, 2026.

b. ***Narrative of process change:***
The Technical Area (TA) 52 Solar Evaporation Tank System (SET) is permitted under Discharge Permit 1132 to receive treated effluent from the TA-50 Radioactive Liquid Waste Treatment Facility (RLWTF). The SET is a concrete structure with a double-lined synthetic liner and leak detection system installed between each liner. The SET was constructed in 2012 and has an associated soil moisture monitoring system, consisting of below ground boreholes, installed in 2019, but the SET has never received treated effluent from the RLWTF.

Prior to putting the SET into service and transferring treated effluent from the RLWTF to the SET, the following upgrades will be implemented:

1) The two synthetic liners and leak detection system originally installed when the SET was constructed will be replaced with similar equivalent equipment (primary liner: 60 mil high-density polyethylene, secondary liner: 40 mil high-density polyethylene).

2) New stainless-steel piping will be installed at the SET. Four-inch stainless steel piping will connect the SET pumphouse with each evaporation basin for transfer of treated effluent from the pumphouse into the evaporation basins. Three-inch stainless-steel piping will connect the SET pumphouse with each evaporation basin for transfer of treated effluent from each basin.

3) A new piping spool piece will be installed at the TA-50 RLWTF, enabling isolation and testing of the conveyance line connecting the RLWTF to the SET to facilitate water tightness testing required by Permit Condition Number 8, Water Tightness Testing, to be completed.

Attachment 2 includes the SET Site plan for this project.

c. Justification for making the process change:
These changes are being performed in preparation for discharging treated effluent from the TA-50 RLWTF in accordance with DP-1132 and to facilitate future water tightness testing of the conveyance line connecting the RLWTF to the SET.

d. Units or components being removed from the process:
The existing liners and leak detection system will be removed from the SET.

e. Units or components being incorporated into the process:
New stainless-steel piping, synthetic liners, and leak detection system will be installed.

f. Operational controls implemented for the change in processes:

No treated effluent has ever been transferred from the RLWTF to the SET and no contaminants associated with the RLWTF are present. When the piping spool piece is installed in the existing wastewater lines at the TA-50 RLWTF, residual wastewater within the existing piping will be contained, collected and processed through the RLWTF, and secondary containment will be utilized beneath existing piping being cut to prevent any releases to the environment.

Post installation pipe testing will be completed on all newly installed piping to ensure the system is functioning properly prior to being put into service.

g. Intended duration of process change:

The newly installed synthetic liners, leak detection system, stainless steel piping, and water tightness testing connections will remain in place at the SET and RLWTF for future use.

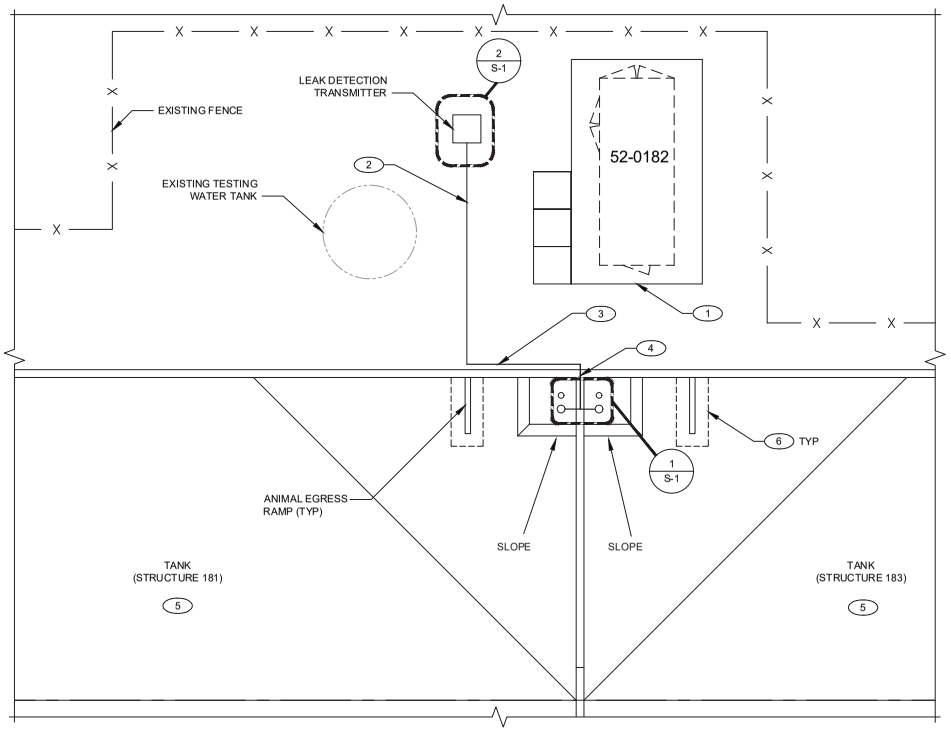
Attachment 2

Solar Evaporation Tank System Site Plan

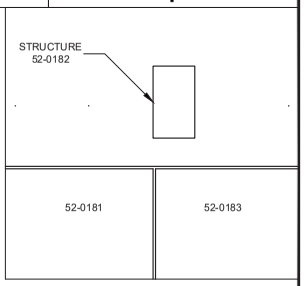
EPC-DO: 26-113

LA-UR-26-24208

Date: May 28, 2026



SET SITE PLAN
SCALE: NONE



KEY PLAN
SCALE: NONE

GENERAL NOTES:

1. "OR APPROVED EQUAL" IS ALWAYS IMPLIED AFTER A BRAND NAME, PATENTED PROCESS OR CATALOG NUMBER. THE CONTRACTOR MAY SUBSTITUTE ANY BRAND OR PROCESS APPROVED EQUAL BY SPECIFYING ARCHITECT / ENGINEER. THE ONLY EXCEPTION IS WHERE "NO SUBSTITUTION" IS SPECIFIED.
2. REFER TO BILL OF MATERIALS (BOM) IN REFERENCED DCF FOR MATERIAL CALLOUTS AND INSPECTION REQUIREMENTS.
3. RLWL/ANL TO PROVIDE TAGGING ON ALL NEW LEAK DETECTION EQUIPMENT.
4. REPLACEMENT LINER ASSEMBLY IS TO BE PLASTIC WELDED ALONG SEAMS.

KEYED NOTES:

(1) DEMO CONDUIT AND WIRE FROM EXISTING LEAK DETECTOR SYSTEM BACK TO CONTROLLER LOCATED INSIDE OF THE PUMP ROOM 52-0182

(2) 3/4" SCH 80 PVC CONDUIT AND WIRE BURIED MINIMUM 2' BELOW GRADE FOR NORTH/SOUTH RUN UNTIL REACHING TANK WALL.

(3) RESURFACE 3/4" SCH 80 PVC CONDUIT AND WIRE MINIMUM 1" ABOVE GROUND AND SECURE TO OUTER TANK WALL FOR EAST/WEST RUN.

(4) SINGLE 3/4" CONDUIT FROM LEAK DETECTOR ENCLOSURE WITH SPLIT VIA J-BOX INTO TWO SEPARATE 1/2" CONDUITS FOR LEAK DETECTOR PROBE WIRES. FIELD ROUTE THE CONDUIT SPLIT SO THAT IT DOES NOT INTERFERE WITH SAMPLE PIPING.

(5) REPLACE SOLAR EVAPORATIVE TANK LINERS. LINER COMPONENTS SHALL BE AS MANUFACTURED BY GSE ENVIRONMENTAL, CORONA, CA OR EQUIVALENT AS FOLLOWS:

- PRIMARY MEMBRANE SHALL BE 60 MIL HDPE, CONDUCTIVE SMOOTH
- GEONET SHALL BE 250 MIL HDPE, HYPERNET HF
- SECONDARY MEMBRANE SHALL BE 40 MIL HDPE CONDUCTIVE SMOOTH
- GEOTEXTILE SHALL BE 12 OZ/YD^2, GSE NW 12

(6) INSTALL/GLUE A 3 FOOT WIDE SECTION OF PUNCTURE RESISTANT 100 MIL HEAVY DUTY HDPE LINER UNDER ANIMAL RAMPS AND ALONG WALL BEHIND THEM.

RELEASED FOR PLANNING BY CM
CHRISTOPHER STACY (Affiliate)
Digitally signed by CHRISTOPHER STACY (Affiliate)
Date: 2026.05.20 09:32:00 -06'00'

DOES NOT CONTAIN UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION

REVIEWING/ DENYING OFFICIAL: NIKOLAS MENEAKIS (Affiliate) /PFE
(NAME/ORGANIZATION)
DATE: 05/15/2026

NO.	DATE	DC	CLASS REVIEWER	DESCRIPTION	DWN	DSGN	CHKD	SUB	APP
				INITIAL RELEASE PER DCF-17-52-0182-1850, DRN-001					

PFE DESIGN ENGINEERING TA-55

RADIOACTIVE LIQUID WASTE TREATMENT FACILITY
TANK AREA ENLARGED PLOT PLAN

TA-52 BLDG 181, 182, 183

DRAWN	M. DANIELS	DATE	04-23-2026
DESIGN	J. GRIFFIN		
CHECKED	N. MENEAKIS		
SUBMITTED	PATRICK PURDY (Affiliate)	APPROVED FOR RELEASE	KEIRA RAMOS (Affiliate)

Los Alamos NATIONAL LABORATORY
PO Box 1663
Los Alamos, New Mexico 87545

SHEET C-1

D.C.: - REVIEWER: - DATE: -

PROJECT ID -
DRAWING NO. U SK-171850-SK-C-1
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