

**AIP MEMORANDUM**

**RE:** NMED AIP/LANL Prioritization And Ranking Of Los Alamos National Laboratory's (LANL) Operable Unit Summary Of Grouped PRS Rankings

**DATE:** Original Draft: August 31, 1994  
Updated: May 2, 1995

The New Mexico Environment Department (NMED) Department of Energy Oversight Bureau (DOEB) Agreement-in-Principle (AIP) LANL staff have compiled a prioritization list of LANL's Operable Unit (OU) grouped potential release sites (PRS). The list will provide a means for AIP staff to shorten the time-span required for corrective action review of PRSs in the LANL Environmental Restoration (ER) program. More importantly, it will allow AIP staff the ability to focus their review process of RCRA Facility Investigation Work Plans (RFIW), RFIW reports, voluntary corrective action (VCA), and expedited cleanup (EC) work plans on high-priority PRSs. It is important to note that this list is not intended to be used as a PRS exclusion tool by AIP. The AIP/LANL prioritization list is largely based on LANL's Operable Unit Summary Of Grouped Rankings. Additionally, AIP/LANL staff incorporated other criteria for ranking a PRS as a high priority concern of NMED such as: (1) the PRS involved significant liquid discharge, (2) the PRS was a firing site, (3) the PRS was a material disposal area (MDA), and (4) the PRS was located in the townsite (old TA-1).

For clarity, the list contains numbered and lettered items that are keyed to a specific OU, PRS, technical area (TA), and Field Unit (FU) if applicable, e.g., "1079 PRS C-45-001\* 1", where: The operable unit number is 1079, the PRS number is C-45-001, C indicates the PRS is an area of concern, The TA number is 45, and an asterisk indicates that the PRS scored a numerical risk ranking below 50 and that the PRS was included due to one of the other 4 criteria described above. The numeral 1 following the asterisk indicates the PRS is included in FU 1.

**NOTE:** A PRS is designated as: 1) solid waste management unit (SWMU) if suspected of containing a RCRA solid waste, 2) area of concern (AOC) if suspected of containing only radiological or non-RCRA constituents.



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1106PRS 21-011(k)	Outfall from Bldg. 257
1106 PRS 21-016(a) - (c), 21-11(c), 21-28(a)	<b>MDA T.</b> Absorption beds, shafts. Collectively Area T. Large amount of radioactive liquids historically disposed.
1106 PRS 21-015	<b>MDA B.</b> Six acre fenced-off buried waste area to the south of the main road into DP mesa. Mostly solid radioactive wastes.
1106 PRS 21-027(a)	Main culvert drain off of mesa into LA canyon.
1106 PRS 21-024(i)	Septic outfall.
1106 PRS 21-017(a)*	<b>MDA U.</b> Liquid wastes: polonium, actinium.
1106 PRS 21-018(a), (b)*	<b>MDA V.</b> Absorption beds for laundry wastes. Historical findings of high radioactive residues from laundry wastes by Alquist makes this of interest.
1106 PRS 21-26(i)*	Appears to be a major storm drain outfall at east end of DP mesa.
1106 PRS 21-013(a) - (e)*	Sewage treatment pits.
1132 PRS 39-001(a), (b)	<b>MDA Y.</b> Located in Ancho Canyon next to main drainage. Two additional pits to the east of MDA Y, together aka Aggregate A.
1132 PRS 39-004(a) - (e)	<b>Firing sites.</b> All active except 004(b). 1200 lbs mercury, natural U, DU, Ba, Be. Sites collectively known as Aggregate C.
1132 "Excavated soil dump"*	Proposed SWMU. <b>Firing site debris.</b>
1132 "Gas Gun"*	May be included in Aggregate C.
1132 PRS 39-006(a)	Active septic system emplaced near deactivated septic system. Collectively Aggregate D.

1132 PRS-39-005\* HE seepage pit. May already be included in Aggregate D.

1132 "Chemical seepage pit"\* Proposed SWMU.

1079 PRS 10-001(a) - (d)\* **Inactive firing sites.** Phase reports of all firing sites will be reviewed by AIP staff.

1079 PRS 1-002, 45-001, 45-003 and C-45-001.\* Former acidic-rad waste treatment areas. Low likelihood of residual contamination since this was remediated under FUSRAP. Should review phase reports due to former high rad content and location.

1079 PRS 10-003(a) - (o)\* As above.

1079 PRS 10-004(b)\* As above.

1111 PRS 6-005, 6-007(a) - (e)\* **MDA F** and adjacent pit. Also known as Aggregate 1

1111 PRS 22-015(c) Plating and etching outfall and run-off area.

1111 PRS 6-003(a), (c) - (g), 6-008, 7-001(a) - (d)\* **Inactive Firing Sites.**

1111 PRS 22-010(b), 22-012, 22-015(d)&(e), 22-016 Sites draining into Pajarito Canyon. Also known as Aggregate B.

1111 PRS 22-010(a), 22-014(a)&(b), 22-015(a) &(b), 40-001(b), 40-005 40-007(e)\* Sites draining into Two-Mile Canyon, also known as Aggregate C.

1111 PRS 40-001(c), 40-004 40-006(a) - (c), 40-007(a) - (d), 40-009, 40-010, 40-4, 40-9, 40-12. Sites draining into Pajarito Canyon.

Due to the controversial nature of the current and past activities at OU 1148, all PRSs will be priority reviewed until data suggests otherwise.

1148 PRS 54-022 PCB leak just west of White Rock.

1148 PRS 54-001(f), 54-007(a) **MDA G.** Also known as Area G.  
and (b), 54-010, 54-012(a),  
54-013(b)  
PRS 54-014(b) - (d) TRU shafts and pits.  
PRS 54-015(a) - (f) & (k) TRU surface storage.  
PRS 54-015(j), 54-016(b) Mixed waste surface storage.

1148 PRS 54-001(a) - (e), 54-002, **MDA L.**  
54-006, 54-008, 54-009,  
54-012(b), 54-014(a),  
15(g) & (i)

1148 PRS 54-007(c), 54-013(a) Known as TA-54 West, mostly  
54-015(h), 54-016(a) septic systems and leech fields.

1148 PRS 54-005 **MDA J.**

1148 PRS 54-004 **MDA H.**

1148 PRS 54-007(e) Former animal holding facility.

1148 PRS C-51-002 Former radiation exposure facility.

1148 PRS 51-001, 51-002(a) TA-51 Experimental Engineering  
and (b), C-51-001 Test Facility.

1049 PRS C-0-008 Mortandad Canyon Major liquid-rad  
releases from TA-50

1049 PRS C-0-006 Los Alamos Canyon Major liquid-rad  
releases from TA-1 and TA-2

1049 PRS C-0-011 Pajarito Canyon Releases from MDA M  
and TA-18

1049 PRS 0-001 Sediment Traps Mortandad Canyon

1049 PRS C-0-005 Acid and Pueblo Canyons Major  
releases from old TA-1, TA-45 and  
SWTF

1049 PRS C-0-007 Sandia Canyon

1049 PRS C-0-009 Canada del Buey

1049 PRS C-0-001 Guaje Canyon

1049 PRS C-0-016 Water Canyon

1049 PRS C-0-018	Ancho Canyon
1049 PRS C-0-019	Chaquehui Canyon
1049 PRS C-0-013	Potrillo Canyon
1049 PRS C-0-004	Bayo Canyon Major explosive-rad releases from old Firing Site
1049 PRS C-0-012	Three-Mile Canyon
1049 PRS C-0-014*	Canon de Valle, Canon de Valle accepts waste streams of HE, solvents, metals and rad from TA-16 and MDA P and MDA R.
1078 PRS 1-001(c)*	Septic Tank 137/Outfall Contaminated with low-levels of plutonium affecting Hillside 137/drains to LA Canyon.
1078 PRS 1-001(d)*	Septic Tank 138/Outfall Contaminated with low-levels of plutonium, Hg and Pb affecting Hillside 138/drains to LA Canyon.
1078 PRS 1-001(f)*	Septic Tank 140/Outfall Contaminated with low-levels of uranium and DU affecting Hillside 140/drains to LA Canyon.
1078 PRS 01-001(a)*	Bailey Bridge Canyon Potentially contaminated construction rubble from D & D of old TA-1 buildings, measuring up to 2500 cpm (alpha), was pushed into the canyon beneath Bailey Bridge.
1082 PRS 16-003(k), 16-021(c)	Aggregate 16, 2 PRSs HE Sumps & Outfall @ TA-16-260.
1082 PRS 16-020	Aggregate 24, 1 PRSs Photoprocessing Facility.
1082 PRS 16-010(a,h,i,k, l,m,n), & 16-016(c)	Aggregate 26, 8-PRSs Burning Area.
1082 PRS 16-018	MDA P. Aggregate 41, 1 PRSs Material Disposal Area.
1082 0 PRSs	Aggregate 27, Canon de Valle.

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1082 PRS 11-001(a,b), 11-002, 11-003(b), 11-004(a-f), 11-006(a-d), C-11-001	Aggregate 34, 15 PRSs TA-11 <b>Firing Site.</b>
1082 PRS 13-001, 13-002, 13-004, 16-035, 16-036*	TA-13 & 16 Aggregate 33, 5 PRSs TA-13 <b>Firing Site</b> @ P-Site Inactive WW II Firing Site that saw much early activity w/HE, uranium & DU.
1082 PRS 16-019*	<b>MDA R.</b> Aggregate 28, 1 PRSs Material Disposal Area.
1098 PRS 2-005	Cooling Tower Drift Loss.
1098 PRS 2-009	Operational Releases.
1098 PRS 41-002	Sewage Treatment Plant.
1098 PRS 2-003	D & D Reactor Waste.
1098 PRS 2-006	Drains.
1098 PRS 2-008	Outfalls.
1098 PRS 2-011	Storm Drains & Outfalls.
1098 PRS 2-010	Chemical Shack.
1098 PRS 2-007	D & D Septic System.
1098 PRS 2-004	Omega West Reactor (OWR).
1098 PRS 41-003	Sump.
1098 PRS 2-012	Soil Con. Tanks.
1114 PRS 3-050(a)*	TA-3 Aggregate 1, 1 PRS, Could not find this SWMU in the RFI for OU-1114.
1130 PRS 36-004, C-36-006(e)	Aggregate <b>Firing Sites</b> Projectile Testing Area.
1130 PRS C-36-003	Photo Outfall.
1130 PRS 36-003(a)	Septic System.
1130 PRS 36-002	Sump.
1130 PRS 36-001, 36-004*	<b>MDA AA</b> & Burn Pits Material Disposal Area.

1147 PRS 50-009	<b>MDA C. Landfill</b> received radioactive and mixed waste from 1948 to 1974. It contains about $3.65 \times 10^6$ ft <sup>3</sup> of waste in 11.8 acres, in both pits and shafts (including a chemical waste disposal pit). Waste includes radionuclides, metals, hazardous materials, liquids, solids and gases.
1147 PRS 50-006(d)	TA-50 Treated liquid-rad effluent from TA-50-1 into Mortandad Canyon (NPDES Permitted). Monitored on a routine basis.
1147 PRS 50-006(a)	TA-50 Upper Ten Site Canyon contaminated from radioactive industrial waste sump overflow at TA-50-2.
1157 PRS 9-013	<b>MDA M</b> Material Disposal Area, potential COCs include HE, asbestos, metal and construction debris, solvents, and rad.
1157 PRS 8-006(a) *	<b>MDA Q</b> Material Disposal Area, WW II naval guns and projectiles.
1157 PRS 8-009(a)	Drain and Outfall, potential COCs include HE, acids, solvents, and VOCs.
1157 PRS 8-009(c,d,e)	Storm Sewer and Outfall serving Buildings TA-8-23,22,21
1157 PRS 8-009(f)	Outfall from Fluorescent Penetrant Laboratory at Building TA-8-22.
1157 PRS 9-010(a)	Inactive waste can shelter used to store HE-contaminated solid waste and solvent-contaminated wipes.
1157 PRS 8-005	Waste storage vessel, potential COCs include terphenyl, alpha naphthyl oxazole, styrene, methyl chloroform, and thallos iodide.
1157 PRS 69-001	Two-Mile Mesa Incinerator and Disposal Pond, used for burning classified documents.

1157 PRS 9-001(d) **Firing Chamber**, potential COCs include DU.

1157 PRS 9-003(a,b,d,e,g,h,i) Decommissioned Sumps and Pipes that served Buildings TA-9-14,1,2,3,13 Potential COCs include HE, solvents, DU and organics.

1157 9-005(a,d) Decommissioned Sanitary Septic Tank that served Buildings TA-8-20,21,22,23,24. Potential COCs include <sup>90</sup>Sr.

1157 9-001(a,b,c) Far Point **Firing Chamber** and Recovery Pit, Potential COCs include HE, DU and Be.

1157 9-002 Decommissioned Burn Pit, Potential COCs include photoprocessing metals.

1157 9-014 Camera Mount, Potential COCs include HE, DU, Pb, Hg, and Be.

  

1140 PRS 46-002 Sewage Lagoons.

1140 PRS 46-009 **Landfill** at the head of SWSC Canyon.

1140 PRS 46-003(h),  
46-006(f-g), 46-007,  
46-008(c) Surface Release Aggregate #7.

1140 PRS 46-004(c-e),  
46-004(p)\* Dry Well Aggregate #1  
Possible RCRA units or ground water issue.

1144 PRS 49-001 (a-g)\* **MDA A-B** hydronuclear shafts used to test safety of nuclear weapons. Extremely large inventory of Pu, U, and Pb in the shafts.

1122 PRS 33-002(a-e)\* **MDA K.** Aggregate #5 The septic system, sumps, leach field and cooling water outfall associated with the inactive high-pressure tritium facility.

1122 PRS 33-003(a-b) *	<b>MDA D.</b> Aggregate #1 Sampling of chamber two in this aggregate revealed higher contamination of Be than expected.
1122 PRS 33-001(a-e) *	<b>MDA E.</b> Phase I sampling will determine whether MDA E meets the requirements of a permanent disposal site.
1086 PRS 15-004(f), 15-008(a), 15-009(e)	<b>Inactive Firing sites.</b>
1086 PRS 15-004(a-b)	<b>Inactive firing sites.</b>
1086 PRS 15-004(g) 15-008(c), 15-009(i) 15-001	<b>Inactive firing site and associated surface impoundment.</b>
1086 PRS 15-001(a-c) 15-014(j-k)	The Hollow. The area is the main office buildings and laboratories for TA-15. All the SWMUs noted are associated with two sumps; one located at the rim of Canyon deValle, and the other on the rim of Water Canyon.
1085 PRS 12-001(b) *	<b>Inactive firing pit.</b>
1085 PRS 12-001(a) *	<b>Inactive steel lined firing pit.</b>
1085 PRS 14-009*	<b>Surface disposal area</b> containing ruptured sandbags. A survey in 1987 indicated detectable radioactivity above background.
1085 PRS 14-002(a-f) *	All PRSs are associated decommissioned firing sites.
1129 group 17 (TA-35) PRS 35-004(m)	Former waste container storage area.
PRS 35-014(g <sub>1</sub> -g <sub>3</sub> )	<b>Stained Soils:</b> Areas of visible staining of the soils by dielectric oils.
PRS 35-015(a)	Decommissioned waste oil treatment facility.

1129 PRS 35-016(n)	Storm drainage that runs through the area of soil staining in PRSs' 35-015(g <sub>1</sub> -g <sub>3</sub> ).
1129 group 8 (TA-35) PRS 35-010(a-c)	Inactive Sanitary Lagoons.
1129 group 10 (TA-35) PRS 35-003(a-h,j,m-o, q-r)	Inactive or removed structures associated with the wastewater treatment plant. Waste treated at the plant originated from the radiochemistry laboratories.
PRS 35-004(h)	Container area associated with the wastewater treatment facility.
PRS 35-016(k-m)	Outfalls associated with the wastewater treatment facility.
1129 group 24 (TA-48) PRS 48-002(a-b)	Container storage areas of known <b>mercury</b> , oils spills and other hazardous waste contamination.
1129 group 23 (TA-48) PRS 48-002(e)	Container storage area for solvents.
PRS 48-007(a,d)	NPDES permitted outfalls.
1129 group 9 (TA-35) PRS C-35-007	Soil contamination of unknown hazards.
PRS 35-010(d-e)	Sand filters and discharge headwall from the sanitary lagoon.
1129 group 6 (TA-35) PRS 35-009(c-d)	Inactive septic system and leach field.
PRS 35-016(o-p)	Active storm drains and an unpermitted outfall.
1129 group 5 (TA-35) PRS 35-008	Canyon side disposal area.

PRS 35-014 (e <sub>1</sub> -e <sub>2</sub> )	Dielectric oil spill areas.
PRS 35-014 (f)	Soil stained from dielectric oil spill.
PRS 35-016 (e-f,i)	Outfalls from storm drains and non-contact cooling water that drain over the dielectric oil spills.
1129 group 16 (TA-35) PRS 35-016 (b)	Active NPDES permitted outfall for photo-processing effluent.
1129 group 11 (TA-35) PRS 35-003 (j-k)	Inactive above ground storage tanks for dielectric oils.
PRS 35-014 (b,d)	Stained soils possibly contaminated with dielectric oil.
PRS 35-015 (b)	Facility was used to treat dielectric oil and was found to be leaking in 1988.
1129 group 13 (TA-35) PRS 35-016 (a,q)	Outfalls associated with positive sample results in the 1987 DOE Environmental survey.
1129 group 21 (TA-48) PRS 48-007 (b,c,f)	NPDES permitted outfalls for non contact cooling water.
1129 group 4 (TA-35) PRS 35-016 (g-h)	Outfalls and storm drains associated with TA-35-213. Both are suspected for tritium contamination.
1129 group 18 (TA-35) PRS 35-016 (j)	Active storm drains.
1129 group 20 (TA-48) PRS 48-001	Inactive air exhaust system.
1129 group 27 (TA-52) PRS 52-002 (a)	Active septic system.

PRS 52-003(a)	D&D industrial waste treatment facility.
1129 group 12 (TA-35) PRS 35-014(a)	Soils contaminated by radionuclides released to the atmosphere from a laboratory exhaust stack.
1129 group 14 (TA-35) PRS 35-004(a)	Container storage area with apparent releases.
PRS 35-009(a,e)	Inactive septic system and an unlocated associated drainline.
1129 group 15 (TA-35) PRS 35-004(g)	Active container storage area.
PRS 35-009(b)	Inactive septic system.
PRS 35-016(c-d)	Inactive outfalls
1129 group 2 (TA-4) PRS 4-001	Inactive firing site.
PRS 4-002	Canyon side disposal area.
PRS 4-003(b)	Drains and outfall.
1129 group 1 (TA-4) PRS 4-003	Unlocated drains and outfall.
PRS 4-004	Soil possibly contaminated with photo-processing chemicals and radionuclides.
1129 group 3 (TA-5) PRS 5-001(a-c)	Inactive firing sites.
PRS 5-002	Canyon side disposal area.
PRS 5-005 (a-b)	Drains and outfalls.
PRS 5-006(e,h)	Soil contamination under former structures at TA-5.
1129 group 7 (TA-48) PRS 48-005	Inactive radioactive and chemical liquid waste lines.

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1129 group 22 (TA-48)  
PRS 48-003

Inactive septic system.

1129 group 25 (TA-55)  
PRS 55-011(a-e)

Storm drains possibly  
contaminated with radionuclides,  
solvents and metals.