



TA03



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Date: September 22, 2009
Refer To: ENV-RCRA-09-173
LAUR: 09-06008

Mr. James Bearzi, Bureau Chief
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6303

Dear Mr. Bearzi:

**SUBJECT: BUILDINGS OR FIXED STRUCTURES SCHEDULED TO BE
DEMOLISHED DURING FISCAL YEAR 2010**

The purpose of this letter is to submit a list of buildings or fixed structures scheduled to be demolished during fiscal year 2010 (October 1, 2009 through September 30, 2010). This information is required under the provisions of the Settlement Agreement and Stipulated Final Order (Agreement) signed April 10, 2007 between the New Mexico Environment Department (NMED) the United States Department of Energy (DOE) and Los Alamos National Security, LLC (LANS). This list is submitted to satisfy the requirements of Paragraph 21 subparagraph (b) of the Agreement.

The attached table (LA-UR-09-06008) describes the buildings or fixed structures scheduled for demolition, and for each: the historic uses and dates of operation; solid waste management units (SWMUs) or areas of concern (AOC) within 50 feet; categories of potential wastes generated or managed there, the date or quarter in which the demolition is scheduled to begin and buildings or fixed structures identified in previous fiscal year that were not demolished.

If you have questions concerning this submittal, please contact Jack Ellvinger of my staff at (505) 667-0633.

Sincerely,

Anthony R. Grieggs
Group Leader
Water Quality & RCRA Group (ENV-RCRA)



ARG:CJ/lm

Enclosure: a/s

Cy: George Rael, LASO-EO, w/o enc., A906
Gene Turner, LASO-EO, w/o enc., A316
Michael B. Mallory, PADOPS, w/o enc., A102
Jay Johnson, ADPMSS, w/o enc., A102
Chris Cantwell, ADESHQ, w/o enc., K491
Alison Dorries, WES-DO, w/o enc., M996
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Cathy Juarez, ENV-RCRA, w/enc., K490
Cindy Hayes, ES-DO, w/o enc., P948
Allan Chaloupka, TA21, w/o enc., C348
Kevin Finn, ADEP-PM, w/o enc., C349
Duane Parsons, ADEP-PM, w/o enc., C349
Bill Atkin, PMF-MFG, w/o enc., C349
Ellen Louderbough, LC-LESH, w/o enc., A187
ENV-DO File, w/o enc., J978
ENV-RCRA, File, w/enc., K490
IRM-RMMSO, w/enc., A150

Sigma Mesa Demolition and Destruction
FY 2010

Technical Area (TA) and building number	Type of Structure	Current and historic uses	Approximate dates of Operation	Solid Waste Management Units (SWMU)/ Areas of Concern (AOC) w/in 50 ft. of footprint	Category	Date /Quarter Demolition expected to begin	Buildings or Fixed Structures identified in previous fiscal year that were not demolished	Additional information
3-043	Cast-in-place reinforced concrete with numerous spot footings, concrete columns and beams, spandrel beams, and floor and roof decks. Interior partitions consist of Concrete Masonry Unit (CMU) walls and gypsum board and frame walls. The exterior treatment or curtain wall system is aluminum frame with glass and transite panel infill. The exterior end walls consist of CMU infill. Significant areas include the basement, penthouse mechanical spaces, fall out shelter in basement, and auditorium space with fixed seating and stage. Two elevators and numerous stairwells serve the upper floors and the basement. Security facilities include vaults and special secure rooms.	Inactive. Served as the Laboratory's main administration building and consists of about 316,550 sq ft.	1955-2008	AOC 03-001(q) - former SAA, approved for NFA. SWMU 03-039(a) - former silver recovery unit - approved for NFA. AOC 03-040(b) , former storage area - approved for NFA.	Asbestos floor tile, fittings and valves, roofing material	1st Quarter	8-032	
21-2	Lab-Processing/Plutonium	Pre-engineered, steel framed warehouse-type building used for plutonium processing, waste storage activities and americium recovery operations. Later used for D&D activities and by the Environmental Studies Group (LS-6) of the Laboratory Life Sciences	1945-2006	AOC C-21-006 , location of a 1977 release of americium-241 from a leaking transport trailer near Building 21-2. The contaminated area was covered with asphalt. AOC C-21-021 , former storage hut - approved for NFA. AOC 21-008 , former incinerators - approved for NFA. SWMU 21-022(b)-99 , which consists of SWMUs 21-022(b,c,d,e, and g) , waste lines and their associated underground, plutonium-bearing, liquid waste sumps built in 1945 and were located along the north side of the TA-21 plutonium-processing complex. The sumps and sections of drainlines were removed in 1979-1980. These SWMUs will not be impacted by the D&D of Bldg. 21-2 and will be addressed in a future investigation work plan. SWMU 21-022(i) is a former sump and associated pump that was located in the equipment room at the southeast corner of Building 21-2; the sump was removed in 1994-1995.	Asbestos floor tile, fittings and valves, transite	3rd Quarter	16-430	

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21-3	Lab-Processing/Plutonium	Plutonium and uranium processing and research, D&D operations	1945-2006	SWMU 21-022(b)-99 , which consists of SWMUs 21-022(b,c,d,e, and g) , waste lines and their associated underground, plutonium-bearing, liquid waste sumps built in 1945 and were located along the north side of the TA-21 plutonium-processing complex. The sumps and sections of drainlines were removed in 1979-1980. These SWMUs will not be impacted by the D&D of Bldg. 21-3 and will be addressed in a future investigation work plan. SWMU 21-006(d) may be associated with a concrete pad and French drain system called the 21-272 dock. Waste from a second-story chemical makeup room was reportedly dumped or pumped into a stone-filled seepage pit, most likely SWMU 21-006(c) located 15 ft outside the door to Room 322 at Building 21-3. SWMUs 21-006(c and d) were addressed during the DP Canyon Aggregate Area investigation and subsequent report.	Asbestos floor tile, fittings and valves,transite, woven material	3rd Quarter	16-435	
21-4	Lab-Processing/Plutonium	Plutonium and uranium processing and research, D&D operations	1945-2006	SWMU 21-022(b)-99 , which consists of SWMUs 21-022(b,c,d,e, and g) , waste lines and their associated underground, plutonium-bearing, liquid waste sumps built in 1945 and were located along the north side of the TA-21 plutonium-processing complex. The sumps and sections of drainlines were removed in 1979-1980. These SWMUs will not be impacted by the D&D of Bldg. 21-4. SWMU 21-006(e)-99 consists of SWMU 21-006(e) and AOC 21-006(f) , inactive underground seepage pits. SWMU 21-006(e) is described as located south of former Building 21-4. AOC 21-006(f) is a gravel seepage pit located on the south side of the DP West complex. The seepage pit may have received up to 4000 liters per day of hydrogen fluoride wastewater from a hydrofluorination process located in Room 413 of former Building 21-4. E11	Asbestos floor tile, fittings and valves, transite, woven material, fire door	3rd Quarter	16-437	
21-5	Lab-Processing/Plutonium	Plutonium processing and research, D&D operations	1945-2006	SWMU 21-022(b)-99 , which consists of SWMUs 21-022(b,c,d,e, and g) , waste lines and their associated underground, plutonium-bearing, liquid waste sumps built in 1945 and were located along the north side of the TA-21 plutonium-processing complex. The sumps and sections of drainlines were removed in 1979-1980. These SWMUs will not be impacted by the D&D of Bldg. 21-5 and will be addressed in a future investigation work plan.	Asbestos floor tile, fittings and valves, transite, woven material, fire door	3rd Quarter	18-005	

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21-116	Equipment Warehouse	Restroom, Equipment Warehouse, Conference Room	1950-2006	SWMU 21-024(b) was a septic system that formerly routed sewage from Building 21-17 (a passageway decommissioned in 1969) through a septic tank (structure 21-55) to the surface south of Building 21-5. The septic tank was removed during the DP Canyon Aggregate Area investigation and documented in the subsequent IR.	Asbestos fittings, gaskets, roofing	3rd Quarter	18-028	
21-149	Support	Infrastructure, Corridor between TA-21-5 and TA-21-150	1962-2006	None*	Asbestos floor tile, fittings and valves, fire door, surfacing	4th Quarter	18-030	
21-150	Lab	Plutonium fuel development; building contained laser lab, wet lab, offices, also served as a non-nuclear laboratory.	1962-2006	AOC 21-028(b) consists of three former SAAs located inside of building 21-150 under hoods within rooms 603, 605, and 607 for alcohols, solvents, and other miscellaneous chemicals. These SAAs have been removed from service and have been approved for NFA. SWMU 21-022(h) is a sump (structure 21-202), its drainline, and a formerly permitted outfall. Structure 21-202 is an acid industrial-waste sump built from 1961 to 1962 from 36-in. CMP. It received industrial wastewater and drainage from basement floor drains and roof drains in Building 21-150. This SWMU will not be impacted during the D&D of Bldg. 21-150, but will be addressed in a future investigation work plan.	Asbestos floor tile, fittings and valves, roofing material, transite	4th Quarter	18-031	
21-210	Administration and Lab	Office building used for research and administration; also housed light laboratories, restrooms and conference rooms	1965-2006	SWMU 21-024(i) is a former septic system that routed sewage from Building 21-152 through a septic tank (structure 21-181, which was removed from service in 1965) to the surface southeast of a high-temperature chemistry building (Building 21-209). Also, the blowdown from cooling towers (structures 21-166 and 21-167) was routed to the outfall for this SWMU. The septic tank and outlet drainline were removed in 2001 along with most of the inlet drainline. This SWMU will not be impacted by the D&D of Bldg. 21-152; the remaining inlet drainline will be addressed in a future investigation work plan. AOC C-21-032 is a standby diesel generator in the basement of Building 21-152. The generator was served by a 300-gal. day tank and a 1,000-gal. underground tank; AOC C-21-032 was approved for NFA. SWMU 21-024(h) is a former septic system that discharged sewage from Building 21-151 through a septic tank to the surface on the north rim of DP Mesa above DP Canyon. In the early 1960's, Building 21-151 was removed. In 1965, the polonium-processing and a high temperature laboratory (Building 21-152) was	Asbestos floor tile, fittings and valves, roofing material, transite	1st Quarter	18-032	
21-312	Corridor	Corridor connecting Building TA-21-21- and TA-21-2 for personnel, utility piping and conduits	1971-2006	None*	Asbestos fittings, valves	3rd Quarter	18-037	

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21-313	Corridor	Corridor between Buildings TA-21-2 and former TA-21-3 for personnel, utility piping and conduits	1971-2006	SWMU 21-006(a) is an unmarked underground seepage pit of about 0.1-acre, located between Building 21-2 and former Building 21-3. The pit was used to dispose of liquids from the Hanford radioactive materials container-washing operation. The liquids contained ethylene glycol, phosphoric acid, and plutonium. It is not known if the seepage pit is located on the north or south side of the corridor that connected the buildings. SWMU 21-006(b) , structure 21-118, the only pit with a known drainline, was used to dispose of ether wastes from Building 21-2 where a plutonium purification process used a double ether extraction. The pit may have been installed in 1945 as part of the new plutonium-extraction facilities at TA-21. The inlet line (structure 21-134) originated from the east side of Building 21-2 and ran southward to the pit. These SWMUs will not be impacted by the D&D of Bldg. 21-313 and will be addressed in a future investigation work plan. SWMU 21-023(a)-99 consists of SWMUs 21-023(a, b, and d) . These SWMUs are the former locations of septic tanks and their associated inlet and outlet lines	Asbestos fittings, valves, fire door	3rd Quarter	18-116	
21-314	Corridor	Corridor between Buildings TA-21-3 and TA-21-4 for personnel, utility piping and conduits	1971-2006	SWMU 21-023(a)-99 consists of SWMUs 21-023(a, b, and d) . These SWMUs are the former locations of septic tanks and their associated inlet and outlet lines beneath the footprint of a former plutonium processing building (Building 21-3N). Except for some of the lines, these septic systems underwent D&D in 1966. These SWMUs will not be impacted by the D&D if Bldg. 21-313 and will be addressed in a future investigation work plan. SWMU 21-006(e)-99 consists of SWMU 21-006(e) and AOC 21-006(f) , inactive underground seepage pits. The length of time during which the seepage pits operated is unknown. These SWMUs will not be impacted by the D&D if Bldg. 21-313 and will be addressed in a future investigation work plan.	Asbestos fittings, valves, fire door, roofing	3rd Quarter	18-119	
21-315	Corridor	Corridor between Buildings TA-21-4 and TA-21-5 for personnel, utility piping and conduits	1971-2006	SWMU 21-024(b) was a septic system that formerly routed sewage from Building 21-17 (a passageway decommissioned in 1969) through a septic tank (structure 21-55) to the surface south of Building 21-5. The septic tank was removed during the DP Canyon Aggregate Area investigation and documented in the subsequent IR.	Asbestos fittings, valves, fire door, roofing	3rd Quarter	18-122	

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21-328	Receiving Building	Material receiving building and general storage	1973-2006	SWMU 21-024(d) is an inactive septic system that routed sewage from an office building (Building 21-1, which was removed in 1965) through a septic tank (structure 21-106) to the surface on the south rim of DP Mesa above Los Alamos Canyon. The septic tank contents were removed in 1995 and the septic tank was removed during the DP Canyon Aggregate Area investigation and documented in the subsequent IR.	Asbestos fittings, valves, roofing	1st Quarter	18-127	
21-220	Cooling Tower	The old TA-21-155 HVAC cooling tower	1965-2006	None*	Asbestos transite	2nd Quarter	18-128	
21-388	Emmissions Stack	Stack emmissions from TA-21-155	1978-2009	None*		2nd Quarter	18-129	
21-420	Cooling Tower	Newer TA-21-155 HVAC cooling tower		None*		2nd Quarter	18-138	
21-213	Warehouse	General warehouse	1964-2006	None*		2nd Quarter	18-141	
21-155	Research and Production	Offices, storage, equipment, also used for support of high temperature chemistry work, and for tritium research and production center	1949-2006	AOC C-21-011 is the location of a 1963, one-time release of radionuclides (uranium-235) from a plugged scrubber on the roof of Building TA-21-0155, the Tritium Systems Test Assembly facility. The affected area was cleaned up and the site was approved for NFA. SWMU 21-024(j) consists of an inactive septic tank (structure 21-194) and its associated drainlines. This septic tank received sewage from Building 21-155. The septic tank was removed during the DP Canyon Aggregate Area investigation and documented in the subsequent IR. SWMU 21-024(n) is a drainline that exits Building 21-155 and discharges into DP Canyon. This SWMU will not be impacted by the D&D of Bldg. 21-0155 and will be addressed in a future investigation work plan. AOC 21-025(a) was an off-gas system at the Tritium Systems Test Assembly (TSTA) facility, building 21-155; the AOC has been approved for NFA.	Asbestos tile, fire door, fittings, valves, roofing	2nd Quarter	18-147	
21-166	Equipment Building	Housed mechanical equipment for the south wing of TA-21-152	1945-2006	None*	Asbestos valves, fittings, transite, roofing, woven material	2nd Quarter	18-168	
21-167	Equipment Building	Housed mechanical equipment for the north wing of TA-21-152	1945-2006	AOC 21-028(d) is located directly northeast of Building 21-167 and is a less-than-90-day and was a former storage area located on a concrete loading dock on the northwest side of building 21-209. The AOC will not be impacted by planned D&D activities. Consolidated Unit 21-017(a)-99 , which is MDA U directly north of the building. MDA U will not be impacted by planned D&D activities.	Asbestos, valves, fittings, woven material, roofing	2nd Quarter	18-184	

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21-370	Equipment Building	Housed mechanical equipment for the north wing of TA-21-152	1945-2006	AOC 21-028(d) is located directly east of Building 21-370 and is a less-than-90-day and was a former storage area located on a concrete loading dock on the northwest side of building 21-209. The AOC will not be impacted by planned D&D activities. Consolidated Unit 21-017(a)-99 , which is MDA U directly north of the building. MDA U will not be impacted by planned D&D activities.		2nd Quarter	18-186	
							18-187	
							18-188	
							18-189	
							18-190	
							18-227	
							18-256	
							18-257	
							18-258	
							18-270	
							18-297	
							21-031	
							21-212	
							21-355	
							21-357	
							21-210	
							21-166	
							21-167	
							21-370	
							22-20	
							43-039	

* NOTE: All buildings at TA-21 are located within the boundary of SWMU consists of SWMU 21-021 and AOCs 21-019(a-m) and 21-020(a and b). This consolidated unit was investigated as part of a larger group of SWMUs that represent potential surface soil contamination from historical airborne releases from former incinerators, stacks, and filter houses at TA-21. Radionuclides were the predominant emission and the amounts fluctuated greatly with time. Historical surface sampling data showed slightly elevated radionuclide levels TA-wide including americium-241, cesium-137, isotopes of plutonium, uranium-234 and tritium.