Attachment G-1

Waste Characterization Strategy Form
(on CD included with this document)

Waste Characterization Strategy Form

Project Title	**Investigative Work Plan for S-Site Aggregate Area**
Solid Waste Management Unit or Area of Concern #	**The S-Site Aggregate Area consists of 105 individual solid waste management Units (SWMUs) and areas of concern (AOCs) in Technical Areas (TAs-) 11, 13, 16 and 25. 68 sites included in the work plan are subdivided into four Subagregates according to their location and operational histories:** • **K-site Subagregate - 11 SWMUs and AOCs** • **P-Site Subagregate - 22 SWMUs and AOCs** • **V-Site Subagregate - 21 SWMUs and AOCs** • **300s Line Subagregate - 14 SWMUs and AOCs** **Extended Drainage areas will be sampled down stream of the aggregate areas to document any impacts due to historic facility operations.**
Activity Type	**Mobilization, drilling, sample collection and analysis**
Field Team Leader	**Darrel Blain**
Field Waste Management Coordinator	**Joseph Voegtli, Angel Ripoll, Matt Whitaker**
Completed by	**Joseph Voegtli**
Date	**7/31/09**

Description of Activity: The purpose of the S-Site Aggregate Area Investigative Work Plan is to define the nature and extent of any contamination due to historic site operations and determine if unacceptable human health or environmental risk remains at any of the sites.

This WCSF describes the management of investigation-derived waste (IDW) and cleanup wastes generated during the investigation of sites comprising the S-Site Aggregate Area at Los Alamos National Laboratory (LANL or the Laboratory). This waste will be generated during field-investigation activities and may include, but is not limited to: drill cuttings, contaminated soil, contaminated personal protective equipment (PPE), sampling supplies, field test kits, fluids from the decontamination of PPE and sampling equipment, and all other waste that has the potential to come into contact with contaminants.

Relevant Site History and Description: The S-Site Aggregate Area is located in the western portion of the Laboratory, and it consists of 105 SWMUs and AOCs. The sites are either located within the S-Site Canyon subwatershed, or they discharge directly to the Water Canyon Watershed from the mesa tops. Of the 105 SWMUs and AOCs at the site, 37 are not included in the current scope of work. The current regulatory status of the 37 sites is as follows:

- Nine sites were removed from Module Viii of the Laboratory's Hazardous Waste Facility Permit (HWFP) by NMED (NMED 1998, 063042; NMED 2001, 070010).
- Eleven sites have no further actions (NFA) that were approved by the Environmental Protection Agency (EPA 2005, 088464).
- One site has NFA proposal pending action by NMED (LANL 2002, 073664)
- Two sites are addressed in another investigation work plan approved by NMED.

- Fourteen sites are deferred from investigation per Table IV-2 of the March 1, 2005, Compliance Order on Consent.

The remaining 68 sites will be sampled as part of the S-Site Aggregate Area Work Plan implementation. To facilitate discussion of the sites comprising this aggregate area, the 68 SWMUs and AOCs are subdivided into 4 Subagregate areas, based upon their location and operational history.

K-Site Subagregate: The Technical Area (TA) 11 firing sites were constructed in 1944 for research on implosion symmetry using x-rays and the magnetic method. When K-Site was built, it originally housed the Betatron Facility and the Cloud Chamber. These two devices were kept in separate buildings, 11-002 and 11-003, and were used during the Manhattan Project (1942 to 1945). K-Site has also been home to photofission experiments, an air gun firing facility, a mortar impact area, a burning ground, laboratories, storage buildings, sumps, and Material Disposal Area (MDA) S. K-Site has posted radiological areas due to depleted uranium concerns. The major facilities currently in operation are a drop tower and a vibration table used for conducting environmental and effects tests on high explosives (HE) systems and components.

P-Site Subagregate: The P-Site Subagregate consists of the inactive sites at TA-16 and former TA-13. TA-13 was used for a wide variety of Laboratory activities dating back to World War II. It was constructed in 1944 to support the HE project of the Manhattan Project as a site for counter x-ray diagnostics of HE lens configurations, testing of initiator assemblies, and HE assembly and research in the magnetic method program. Because of its remote location, the area was also used to machine toxic or extremely sensitive explosives. P-Site included a firing site, a debris area, control bunkers, firing bunkers, storage buildings, purported burn pits, and an experimental chamber. The majority of the buildings in the western half of TA-13 were demolished in the early 1950s to make way for the construction of 16-340 Complexes. A wastewater treatment plant (WWTP) was constructed in 1953 that served all of TA-16 was disconnected in 1992 when the sanitary sewer system was connected to a Laboratory-wide system (LANL 1993, 020948, p. 5-228).

300s Line Subagregate: The 300s Line Subagregate consists of HE-processing buildings 16-300, 16-302, 16-304, and 16-306 along with their associated rest houses, buildings 16-301, 16-303, 16-305, and 16-307. The HE-processing buildings are located on the east side of the facility, and the rest houses are located on the west side. Construction of the 300s Line began at the end of 1951 and was completed in 1953. The primary function of this facility was casting HE such as TNT (2,4,6-trinitrotoluene), Composition-B, and Baratol.

V-Site Subagregate: The V-Site Subaggregate is a historic site located at the eastern edge of the old World War II–era complex and included HE-processing, machining, and casting buildings; HE magazines; material storage buildings; and the recently restored High Bay assembly building. V-Site was a critical, top-secret area during the Manhattan Project where operations included handling, loading, and testing of replicas or mockups of the first atomic bomb. This Subaggregate was burned over during the 2000 Cerro Grande fire, razing most of its remaining structures, except for buildings 16-516 and 16-517. Building 16-516 [Consolidated Unit 16-017(t)-99], is the historic High Bay assembly building where parts of the first atomic bomb were fit-tested before its transport and detonation at the Trinity Site. All V-Site operations have ceased; however, the High Bay building has been restored for historical purposes (LANL 2000, 066885, p. 2).

Extended Drainages: To determine if contaminants are migrating from S-Site Aggregate Area SWMU's and AOC's, this work plan proposes collecting 108 samples will be collected from transects (approximately every 200ft) along the drainages down gradient from s-site SWMU's and AOC's. Three surface (0.0 to 0.5 ft) and three subsurface (1.0 to 1.5 ft) samples will be collected from three locations across each transect and submitted for laboratory analysis.

CHARACTERIZATION STRATEGY

This WCSF identifies the types of wastes expected, based on the data for previous investigations; however, other types of waste may be encountered. All wastes will be managed in secure, designated areas appropriate to the type of the waste. Waste accumulation area postings, regulated storage duration, and inspection requirements will be based on the type of waste and its regulatory classification. The selection of waste containers will be based on U.S. Department of Transportation requirements, waste types, and estimated volumes of IDW to be generated.

All wastes will be managed in accordance with SOP-5238, Characterization and Management of Environmental Protection Waste, and every effort shall be made to recycle/reuse any appropriate waste stream. An amendment to this strategy form shall be prepared and submitted for review and approval if any of the waste streams change in description or characterization approach. Also, unanticipated waste streams generated as a result of this activity shall be subject to inclusion in an amendment to this strategy upon discovery or generation of the waste. The generation of no path forward wastes must be approved by DOE prior to generation of the waste.

IDW characterization will be completed using AK, such as environmental sampling data, process knowledge, MSDS, or by direct sampling of the IDW. If the waste is directly sampled, it must be sampled within 10 days of generation and a 21 day turnaround time for analyses requested. A waste determination must be made within 45 days of the generation date of waste. A Waste Acceptance Criteria (WAC) exception form (WEF) can be used if the generator does not meet the 45 day deadline. The generation of no path forward wastes must be approved by DOE prior to generation of the waste.

If analyses indicate the presence of listed constituents, a due diligence document review may be performed to identify whether the contaminants are from a known listed source. If no listed source is documented, the waste will not carry the listed hazardous waste numbers(s). If documentation of a listed source exists but the levels are below residential screening levels and Land Disposal Restriction treatment standards, a "contained-in" request may be submitted to NMED, who may approve dropping the listing(s) from the waste stream. A copy of either the ENV-RCRA approved due diligence or the NMED no-longer-contained-in approval letter must accompany all waste profiles prepared for the subject waste(s).

Investigation activities will be conducted in a manner that minimizes the generation of waste. Waste minimization will be accomplished by implementing the most recent version of the "Los Alamos National Laboratory Hazardous Waste Minimization Report". Waste streams will be recycled/reused, as appropriate.

Waste #1: Contact Waste - This waste stream is comprised of PPE and other solid waste generated during the course of investigation activities which comes into contact with contaminated media. This includes but is not limited to; plastic sheeting (e.g., tarps and liners), gloves, coveralls, booties, paper towels, plastic and glass sample bottles, and disposable sampling supplies (filters, tubing, plastic bags). The estimated volume is approximately 1 cubic yard (Note: Volume may change).

Anticipated Regulatory Status: Industrial, Hazardous, Low-Level (LLW), Mixed Low-Level Waste (MLLW), Green is Clean (GIC)

Characterization Approach: Contact waste will be characterized using Acceptable Knowledge (AK) based on the characterization of contaminants found in the environmental media with which it has come into contact weighted by the extent of contamination on the materials. The extent of contamination will be evaluated as the waste is containerized and will be recorded in the waste accumulation log.

Storage and Disposal Method: This waste will be managed in approved containers at or near the point of generation and managed as hazardous waste in Satellite Accumulation Areas (SAAs) until a waste determination can be made. Authorized storage areas will be established in K-site, S-site, P-site, and V-site Subaggregate area in consultation with the Environmental Protection Division (ENV-RCRA). If this waste is characterized as non-hazardous, it will be relabeled and managed in a manner appropriate for its classification. Contact waste may be disposed in the same container as the solid media with which it came into contact (e.g., drill cuttings or environmental media). All contact waste will be treated or disposed at an authorized off-site facility appropriate to the final waste classification.

Waste # 2: Municipal Solid Waste (MSW) - This waste stream primarily consists of non contact trash including but not limited to paper, cardboard, wood, plastic, food and beverage containers, empty solution containers, but may also include commercial solid waste, and other non-contact wastes which are derived from project activities . It is estimated that approximately 10 cubic yards of MSW will be generated (Note: Volume may change).

Anticipated Regulatory Status: MSW

Characterization Approach: MSW will be characterized based on AK.

Storage and Disposal Method: MSW will be segregated from all other waste streams. It is anticipated that the waste will be stored in plastic trash bags or other appropriate containers and disposed of at the County of Los Alamos Transfer Station or other authorized off-site facility.

Waste # 3: Decontamination fluids - This waste stream consists of liquid wastes generated from the decontamination of excavation and sampling equipment. This waste stream will be generated only if dry decontamination methods are not effective. Any borehole casing used must be decontaminated before use and the decontamination fluid collected and analyzed separately. It is estimated that approximately 50 gallons of decontamination fluids will be generated from this activity. (Note: Volume may change).

Anticipated Regulatory Status: Industrial, Hazardous, LLW, MLLW

Characterization Approach: Waste characterization will be based upon the analytical results obtained from the direct sampling of containerized waste. The decontamination fluid will be analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), high explosives (HE), total metals, and toxicity characteristic (TCLP) metals, if necessary, and any analyses required by the receiving facility's WAC. Samples will be collected from the storage container in accordance with LANL SOP-06-15, *COLIWASA Sampler for Liquids and Slurries.* If the container does not permit COLIWASA or bailer sampling, the type of sampling equipment used will be appropriate for the waste container and based on Chapter 7 and Appendix E of the RCRA Waste Sampling Draft Technical Guidance (EPA 530-D-02-002, August 2002).

Storage and Disposal Method: Authorized storage areas will be established at K-site, S-site, P-site, and V-site Subaggregates. Decontamination fluids will be managed in approved containers and initially managed as hazardous waste pending analysis. If this waste is characterized as non-hazardous, it will be relabeled and managed accordingly. The decontamination fluids will be treated on-site if they meet the WAC for an on-site Clean Water Act facility. If they cannot be treated on-site, they will be treated/disposed at an authorized off-site facility appropriate for the type of waste. Decontamination fluids may be solidified using an approved absorbent such as Waste Lock 770. If the waste is hazardous or MLLW, solidification must occur in a registered <90-day accumulation area and the treatment must be pre-approved by ENV-RCRA.

Waste #4:Petroleum Contaminated Soils (PCS) - PCS may be generated from releases of products such as hydraulic fluid, motor oil, unleaded gasoline, or diesel fuel (e.g. from the rupture of hydraulic or fuel hoses, or spills during maintenance or filling equipment). Absorbent padding, paper towels, spill pillows or other absorbent material used to contain the released material may be added to the PCS waste for storage and disposal. This waste category is not intended to cover new spills of PCB-contaminated fluids but does cover new petroleum spills onto soils that are already contaminated with PCBs.

Anticipated Regulatory Status: NMSW, industrial waste, hazardous waste, PCB waste, LLW, MLLW

Characterization Approach: The contaminated soil may either be sampled in-place or after containerization in accordance with SOP-06.10, Hand Auger and Thin-Wall Tube Sampler. If the spill is shallow (in-place sampling) or containers are small, Spade and Scoop Method for Collection of Soil Samples (SOP-06.11) may also be appropriate. The analysis of the samples will be dependent on where the spill occurred:

- If the spill occurred on clean soil, samples will be analyzed for VOCs, total petroleum hydrocarbons (TPH), gasoline-range and diesel-range (DRO/GRO), and total metals, at a minimum. These analytical suites are required to determine whether the waste is NMSW. Other constituents must be analyzed as needed to meet the receiving facility's WAC.
- If the spill occurs on soils with known hazardous contaminants or soils with no available information, samples will be analyzed, at a minimum, for VOCs, SVOCs, total metals, and TCLP metals, if necessary, as well as analytes needed to meet the WAC of the anticipated receiving treatment or disposal facility. If radioactive or explosives operations occurred in the vicinity, samples may also need to be analyzed for explosives, gross alpha, gross beta, and isotopic radionuclides, as appropriate.

Storage and Disposal Method: PCS will be stored in clearly marked and appropriately constructed waste accumulation areas. Waste accumulation area postings, regulated storage duration, and inspection requirements will be based on the waste classification.

If the PCS is not contaminated with radioactive or hazardous materials, it will be classified as:

- NMSW PCS if the sum of benzene, toluene, ethylbenzene, and xylene isomer concentrations are greater than 50 mg/kg, and the waste is not hazardous for benzene (>/= 0.5mg/L), or if TPH (DRO+GRO) concentration is greater than 100 mg/kg. NMSW will be managed in a registered NMSW area.

- Industrial waste if the contaminant levels are less than the NMSW and/or PCB regulatory levels.

If the PCS is suspect or known hazardous or mixed waste, it will initially be managed in a registered hazardous waste accumulation area until analytical data are available to make a waste determination. If the analytical data show that the waste is radioactive-only, the waste will be managed in a registered, posted radioactive waste staging or storage area. If the analytical data show that the soil is regulated PCB waste, it will be managed in a registered PCB area, hazardous waste accumulation area, or radioactive waste staging or storage area, as appropriate to the final waste classification.

All PCS will be treated/disposed at an authorized off-site treatment or disposal facility appropriate to the waste classification.

Waste # 5: Drill Cuttings (IDW)- This waste stream consists of soil and rock cuttings generated from drilling of boreholes, including drilling with a mechanical auger. The estimated volume to be generated is less than 5 cubic yards (Note: Volume may change)

Anticipated Regulatory Status: Industrial, Hazardous, LLW, MLLW

Characterization Approach: Waste characterization will be based upon the analytical results obtained from the direct sampling of containerized waste. Direct samples will be collected in accordance with SOP-06.10, Hand Auger and Thin-Wall Tube Sampler. Material will be collected from each container, coring from the surface to the bottom of the waste in a sufficient number of locations to obtain a representative composite sample with sufficient material for all analytical suites. If data from previous investigations identify that the waste is not expected to be characteristic, samples from all of containers from a single borehole will be composited to obtain a representative sample of the cuttings. If there is a potential for a characteristic waste, each container will be sampled and analyzed separately. The following analyses shall be performed: VOC's, SVOC's, radionuclides, total metals, cyanides, perchlorates, and toxicity characteristics (TCLP) metals, if needed, and any other analyses required by the receiving facility's WAC.

Storage and Disposal Method: Authorized storage areas will be established at K-site, S-site, P-site, and V-site Subaggregate. Cuttings will be collected in approved DOT containers at the point of generation and managed as hazardous waste in an authorized hazardous waste accumulation area pending analysis. If the waste is characterized as non-hazardous, it will be relabeled and managed in an accumulation area appropriate with its classification. The drill cuttings may be land applied if they meet the criteria in the ENV-RCRA Quality Procedure 011, Land Application of Drill Cuttings. . If they cannot be land applied, they will be transported for treatment and/or disposal at an authorized offsite facility.

Waste # 6: Extraction Vials from HE Test Kits- This waste stream consists of plastic extraction vials containing acetone, acetic acid, soil, water, and steel agitation balls. The approximate volume of waste will be less than five gallons of solvent mixed with soil.

Anticipated Regulatory Status: Hazardous, Mixed low level (MLLW)

Characterization Approach: The waste will be characterized based on AK of the solvents used and the analytical results from the environmental media mixed with the solvents.

Storage and Disposal Method: Spent solvents will be stored in Satellite Accumulation areas established within the K-site, S-site, P-site, and V-site Subaggregates. After, waste determinations are made, the spent solvent will be sent to an authorized offsite treatment or disposal facility.

Waste # 7: Returned or Excess Samples - This waste stream consists of soil samples either returned from or samples collected but not submitted to an onsite or off site analytical laboratory or other facility. Returned excess sample material is estimated at less than 1 cubic yard.

Anticipated Regulatory Status: Industrial, Hazardous, LLW, MLLW

Characterization Approach: The waste will be characterized based upon AK from characterization sampling of the environmental media from which the samples were obtained or they will be directly sampled. Direct samples will be collected in accordance with SOP-06.10, Hand Auger and Thin-Wall Tube Sampler. Samples will be collected by coring from the surface to the bottom of the waste in a sufficient number of locations to obtain a representative composite sample with sufficient material for all analytical suites. The samples will be analyzed for VOCs, SVOCs, HE, total metals, radionuclides and TCLP metals, if necessary, and any analyses required by the receiving facility's WAC.

Storage and Disposal Method: Satellite Accumulation Areas (SAAs) will be established at K-site, S-site, P-site, and V-site Subaggregate. Returned excess sample material may either be stored with the same waste stream from which it originated (e.g., drill cuttings) or separately containerized in appropriate U.S. Department of Transportation (DOT) approved containers and stored at a Satellite Accumulation Area (SAA) pending analysis. Returned samples will be treated and/or disposed at an authorized off-site facility appropriate to the final waste classification.

CHARACTERIZATION TABLE

Waste Description	Waste # 1 Contact Waste	Waste #2 MSW	Waste #3 DeconFluid	Waste #4 PCS
Volume	1 cy	1 cy	50 gallon	1 cy
Packaging	Container	Container	Container	Container
Solid	X	X		X
Liquid			X	
Regulatory classification:				
Radioactive	X		X	X
Hazardous	X		X	X
Mixed (hazardous and radioactive)	X		X	X
Toxic Substances Control Act (TSCA)				X
New Mexico Special Waste				X
Industrial	X		X	
Municipal Solid Waste (includes Green Is Clean)	X	X		
Characterization Method				
Acceptable knowledge (AK): Existing Data/Documentation	X	X	X	X
AK: Site Characterization	X		X	X
Direct Sampling of Containerized Waste			X	X
Analytical Testing				
Volatile Organic Compounds (EPA 8260-B)			X	X
Semivolatile Organic Compounds (EPA 8270-C)			X	X[a]
Organic Pesticides (EPA 8081-A)				
Organic Herbicides (EPA 8151-A)				
PCBs (EPA 8082)			X	X[a]
Total Metals (EPA 6010-B/7471-A)				X[a]
Total Cyanide (EPA 9012-A)			X	X
High Explosives Constituents (EPA 8330/8321-A)			X	X
Asbestos				
Total petroleum hydrocarbon (TPH)-GRO (EPA 8015-M)				X[a]
TPH-DRO (EPA 8015-M)				X[a]
Toxicity characteristic leaching procedure (TCLP) Metals (EPA 1311/6010-B)			X[a]	X[a]
TCLP Organics (EPA 1311/8260-B & 1311/8270-C)				X
TCLP Pest. & Herb. (EPA 1311/8081-A/1311/8151-A)				
Gross Alpha (alpha counting) (EPA 900)			X[a]	X[a]
Gross Beta (beta counting) (EPA 900)			X[a]	X[a]
Tritium (liquid scintillation) (EPA 906.0)			X[a]	X[a]
Gamma spectroscopy (EPA 901.1)			X[a]	X[a]
Isotopic plutonium (Separation/alpha spec.) (HASL-300)			X[a]	X[a]
Isotopic uranium (Separation/alpha spec.) (HASL-300)			X[a]	X[a]
Total uranium (6020 inductively coupled plasma mass spectroscopy [ICPMS])				
Strontium-90 (EPA 905)			X[a]	X[a]
Americium-241 (Separation/alpha spec.) (HASL-300)			X[a]	X[a]
TTO, TSS, COD, TDS, MICROTOX, OIL & GREASE, pH			X	
Waste Profile Form #	TBD	TBD	TBD	TBD

Waste Description	Waste #5 Drill cuttings (IDW)	Waste #6 Test Kits (RDX, HE)	Waste #7 Returned or Excess Samples
Volume	5 cy	1 gallon	1 cy
Packaging	Container	Container	Container
Solid	X		X
Liquid		X	
Regulatory classification:			
Radioactive	X		X
Hazardous	X	X	X
Mixed (hazardous and radioactive)	X	X	X
Toxic Substances Control Act (TSCA)	X		X
New Mexico Special Waste	X		X
Industrial	X		X
Municipal Solid Waste (includes Green Is Clean)			
Characterization Method			
Acceptable knowledge (AK): Existing Data/Documentation	X	X	X
AK: Site Characterization		X	X
Direct Sampling of Containerized Waste	X		X
Analytical Testing			
Volatile Organic Compounds (EPA 8260-B)	X		X[a]
Semivolatile Organic Compounds (EPA 8270-C)	X		X[a]
Organic Pesticides (EPA 8081-A)			
Organic Herbicides (EPA 8151-A)			
PCBs (EPA 8082)	X[a]		X[a]
Total Metals (EPA 6010-B/7471-A)	X		X[a]
Total Cyanide (EPA 9012-A)	X		X[a]
High Explosives Constituents (EPA 8330/8321-A)	X		X[a]
Asbestos			
Total petroleum hydrocarbon (TPH)-GRO (EPA 8015-M)			
TPH-DRO (EPA 8015-M)			
Toxicity characteristic leaching procedure (TCLP) Metals (EPA 1311/6010-B)	X		X[a]
TCLP Organics (EPA 1311/8260-B & 1311/8270-C)	X		X[a]
TCLP Pest. & Herb. (EPA 1311/8081-A/1311/8151-A)	X		X[a]
Gross Alpha (alpha counting) (EPA 900)	X[a]		X[a]
Gross Beta (beta counting) (EPA 900)	X[a]		X[a]
Tritium (liquid scintillation) (EPA 906.0)	X[a]		X[a]
Gamma spectroscopy (EPA 901.1)	X[a]		X[a]
Isotopic plutonium (Separation/alpha spec.) (HASL-300)	X		X[a]
Isotopic uranium (Separation/alpha spec.) (HASL-300)	X		X[a]
Total uranium (6020 inductively coupled plasma mass spectroscopy [ICPMS])	X[a]		X[a]
Strontium-90 (EPA 905)	X[a]		X[a]
Americium-241 (Separation/alpha spec.) (HASL-300)	X		X[a]
Waste Profile Form #	TBD	TBD	TBD

a = as needed
RR - Denotes required analysis for Rio Rancho Special Waste Landfill
CH – Denotes required analysis for Clean Harbors
NTS – Denotes required analysis for Nevada Test Site

Note: Section 1.2 of the TCLP method 1311 states "If a total analysis of the waste demonstrates that individual analytes are not present in the waste, or that they are present but at such low concentrations that the appropriate regulatory levels could not possibly be exceeded, the TCLP need not be run." The methodology for using total waste analyses determination for the 40 TC constituents is as follows;

Liquids – Wastes containing less than 0.5% filterable solids do not require extraction and therefore by filtering the waste and measuring the total constituent levels of the filtrate and comparing those levels to regulatory levels is appropriate.

Solids – Constituent concentrations from the extraction fluid of wastes that are 100% physical solids are divided by 20 (reflecting the 20 to 1 ratio of TCLP extraction) and then compared to the regulatory levels. If the theoretical levels do not equal or exceed the regulatory levels, the TCLP need not be run. If the levels do equal or exceed the regulatory levels, the generator may either declare the waste hazardous or run TCLP analyses.

References

LANL SOP-5238, *Characterization and Management of Environmental Protection Waste*
LANL SOP-06-15, *COLIWASA Sampler for Liquids and Slurries*
LANL SOP-06.10, *Hand Auger and Thin-Wall Tube Sampler*
LANL SOP-06.11, *Spade and Scoop Method for Collection of Soil Samples*
RCRA Waste Sampling Draft Technical Guidance (EPA 530-D-02-002, August 2002)

.Waste Characterization Strategy Form (continued)

Signatures	Date
ADEP Project Leader: John McCann	10-15-09
Preparer: Joe Voegtli	10/15/09
ERSS Waste Management Coordinator: Gordon Jio FOR GORDON JIO RON DeSOTO RD	10/15/09
Waste Certification Program Representative: Michelle Coriz	10/15/09
ENV-RCRA Representative: Ann Sherrard	10/15/09
WS-WA Representative: Andy U. Elicio	10/15/2009

	Los Alamos National Laboratory **ENV-ERSS**