Attachment E-1

Waste Documentation
(on CD included with this document)

Waste Characterization Strategy Form

Project Title	Cañon de Valle Aggregate Area at TA-14
Solid Waste Management Unit and AOC Numbers	SWMUs: 14-001(f), 14-002(a), 14-002(b), 14-002(c), 14-002(d and e), 14-002(f), 14-010, 14-004(a), 14-006, 14-007, 14-009 AOC: 14-001(a), 14-001(b), 14-001(c), 14-001(d), 14-001(e), C-14-001, C-14-002, C-14-003, C-14-004, C-14-005, C-14-007, C-14-008, C-14-009, 14-001(f), 14-002(a), 14-002(b0, 14-002(f), 14-010
Activity Type	Characterization Sampling
LATA Field Team Leader	Ali Furmall
Waste Management Coordinator	Mike Le Scouarnec
Completed by	Kim Oman
Date	July 8, 2011

Description of Activity

This work will be performed in accordance with the New Mexico Environment Department (NMED)-approved Field Implementation Plan (FIP) for Cañon de Valle Aggregate Area at Technical Area (TA) 14.

This waste characterization strategy form (WCSF) describes the management of investigation-derived waste (IDW) that is expected to be generated during the investigation (i.e., characterization sampling) within TA-14. The IDW may include, but is not limited to, municipal solid waste, drill cuttings, contact waste, decontamination fluid, petroleum-contaminated soils, and all other waste that has potentially come into contact with contaminants.

Relevant Site History and Description

TA-14, known as Q-Site, is one of five major firing sites at the Laboratory and is used for high explosives (HE) testing. TA-14 contains 10 structures and 5 firing mounds. TA-14 was used for close observation work on small explosive charges and included both open and closed firing chambers. TA-14 has always been a dedicated site for developing and testing of explosives, including tests involving radioactive materials.

Subaggregate 8, the TA-14 Firing Sites, consists of those SWMUs and AOCs located at TA-14 which drain into the Cañon de Valle watershed. This subaggregate includes 2 Consolidated Units consisting of 8 SWMUs and 2 AOCs, 2 individual SWMUS, and 14 individual AOCs. The following table summarizes the areas which pertain to this phase of the TA-14 Area Investigation:

Table 1 - Cañon de Valle Aggregate Area Sites

Site ID	Subunit	Site Description
TA-14		
AOC 14-001(a)		Firing Site (Inactive Electrical Pull Box)
AOC 14-001(b)		Firing Site (Inactive Electrical Pull Box, Former Location)
AOC 14-001(c)		Firing Site (Inactive Electrical Pull Box)
AOC 14-001(d)		Firing Site (Inactive Electrical Pull Box)
AOC 14-001(e)		Firing Site (Inactive Electrical Pull Box)
AOC 14-001(g)		Firing site - Open Burn/Open Detonation (active)
Consolidated Unit 14-002(a)-99	SWMU 14-009	Former Firing site - Surface Disposal Area
	SWMU 14-010	Former Firing site - Former sump, line, drain, and outfall
	AOC C-14-008	Former Storage Magazine
Consolidated Unit 14-002(c)-99	SWMU 14-002(c)	Former Control Building
SWMU 14-006		Inactive sump, drain lines, and outfall
SWMU 14-003		Former burning ground
SWMU 14-007		Inactive septic tank, drain lines, outfall and drain field
AOC C-14-001		Former storage magazine
AOC C-14-003		Former HE prep shop
AOC C-14-004		Former electronics shop
AOC C-14-005		Former storage magazine
AOC C-14-007		Former storage building
AOC C-14-009		Former storage magazine

Note: Shading denotes Consolidated Units.

Characterization Strategy

This WCSF identifies the types of wastes expected to be generated from site investigation activities. However, other types of waste may be an encountered. An amendment to this WCSF will be prepared and submitted for review and approval if any of the waste streams change in description or characterization approach or a new waste stream is generated. All IDW will be managed in accordance with Los Alamos National Laboratory (LANL) Standard Operating Procedure (SOP) 5238, *Characterization and Management of Environmental Program Waste*.

Waste will initially be managed as non-hazardous in accordance with the acceptable knowledge (AK) reviews already prepared for the potential release sites covered by this investigation (See Attachment 1). A final waste determination will be completed using investigation sampling data or by direct sampling of the IDW. If the waste is directly sampled, it will be sampled within 10 days of generation, and a 21 day turnaround time for analyses will be requested. A final waste determination must be made within 45 days of generation of the waste. A WAC exception form (WEF) will be used if the generator does not meet the 45 day deadline. The generation of no path forward wastes must be approved by Department of Energy (DOE) prior to generation of the waste; however, no such wastes are anticipated for this project.

Waste accumulation area postings, regulated storage duration, and inspection requirements will be based on the type 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. Immediately following containerization, each waste container will be individually labeled with a unique identification number and with information such as waste classification, contents, radioactivity, and date generated, if applicable. A non-hazardous waste label, date of generation, the generator's name, and container contents should be placed on non-hazardous waste containers as a best management practice. Waste streams with the same regulatory classification that are destined for the same receiving facility may be combined into a single container for disposal (e.g. contact waste with drill cuttings).

Samples will be collected using the methods described in this WCSF by trained and qualified sampling personnel. Sampling personnel will record waste sampling information in accordance with EP-ERSS-SOP-5058, *Sample Control and Field Documentation* and EP-ERSS-SOP-5181, *Documentation for Waste and Environmental Services Technical Field Activities*. The field notebook will be used to document sample collection activities (e.g., equipment and sampling methods used, number and location of samples, etc.). Sampling personnel will also record field conditions, problems encountered, local sources of contamination (e.g., operating generators or vehicles), the personnel involved, equipment and supplies used, wastes generated, and field observations.

If documentation exist that the contaminant(s) originated from a listed source, although none is expected during this phase of the investigation, but the levels are below residential screening levels and the land disposal restriction treatment standards, a "contained-in" request may be submitted to the New Mexico Environment Department (NMED), who may approve removing the listings from the waste stream. A request to submit a "contained-in" determination to NMED must be submitted to ENV-RCRA through the Subcontract Technical Representative (STR) within 70 days of generating the waste. A copy of the AK Review(s) or Due Diligence Report(s) already prepared for this investigation or the NMED "contained-in" approval letter should accompany all waste profiles prepared for the waste(s) with potentially listed contaminants.

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: 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, and other non-contact trash. It is estimated that approximately 1 cubic yard of MSW will be generated.

Anticipated Regulatory Status: MSW

Characterization Approach: MSW will be characterized based on acceptable knowledge (AK) of the waste materials (including Material Safety Data Sheets) and methods of generation.

Management 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 transferred/disposed of at the County of Los Alamos Solid Waste Transfer Station or other authorized off-site solid waste facility.

Waste # 2: Drill Cuttings (IDW) - Drill cuttings consist of soil and rock sediments produced during the drilling of boreholes. This may include small chips of unused core samples collected with a hollow-stem

auger core barrel. Cuttings will not contain residue of drilling additives (drilling mud or foam) as only dry drilling will be used. It is estimated that approximately 3 cubic yards of borehole cuttings will be generated during this investigation.

Anticipated Regulatory Status: Reusable (land applied), Industrial, Low-level waste (LLW), TSCA, PCB

Characterization Approach: Waste characterization will be based upon the analytical results obtained from direct sampling of containerized waste. A representative sample of the cuttings will be taken within 10 days of generation and submitted for analysis with a 21 day turnaround time. A hand auger or thin-wall tube sampler will be used to collect waste material from each container, in accordance with SOP-06.10, *Hand Auger and Thin-Wall Tube Sampler*. Auguring from the surface to the bottom of the waste will be employed in a sufficient number of locations to obtain a representative sample. Samples will, at a minimum, be analyzed for volatile organic compounds (VOCs); semi-volatile organic compounds (SVOCs); radionuclides (by alpha and gamma spectroscopy); isotopic uranium, isotopic plutonium, americium-241, tritium, and strontium-90; total metals; toxicity characteristic (TCLP) metals; high explosives (HE); perchlorates; nitrate; and total cyanide (see Table 2). If process knowledge, odors, or staining indicate the cuttings may be contaminated with petroleum products, the materials will also be analyzed for total petroleum hydrocarbons (TPH [DRO/GRO]) and polychlorinated biphenyls (PCBs). Other constituents may be analyzed as necessary to meet the WAC for a receiving facility.

Storage and Disposal Method: The cuttings will be containerized at the point of generation in LANL approved 55-gallon steel drums, 1 yd^3 Wrangler Bags or other containers appropriate for the quantity of waste generated. Wastes will be stored in secure, designated non-hazardous waste areas. For nonhazardous IDW, the non-hazardous waste label, date of generation (i.e., initial placement in the container), as well as the generator's name and container contents will be placed on the non-hazardous waste containers as a best management practice. Based upon validated analytical data, the cuttings will be evaluated, using the Automated Waste Determination (AWD) system, for land application in accordance with ENV-RCRA-QP-11.0 *Land Application of Drill Cuttings.* If the cuttings meet the criteria for land application, the cuttings will be land applied in accordance with ENV-RCRA-QP-11.0. If the cuttings are characterized as LLW (exceeding the land application criteria) they will be managed in a radioactive waste staging or storage area until they can be shipped for disposal. Cuttings that cannot be land applied will be treated and/or disposed of at authorized off-site facilities appropriate for the waste classification.

Waste #3: Contact IDW - This waste stream is comprised of PPE, sampling equipment and other materials that contacted or potentially contacted contaminated environmental media and cannot be decontaminated. 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. It is estimated that approximately 1 cubic yard of contact IDW will be generated during this investigation.

Anticipated Regulatory Status: Industrial, LLW, Green is Clean

Characterization Approach: Contact IDW generated during drilling operations will be characterized using AK based on the direct sampling and analyses of the drill cuttings. Contact waste that is generated using a hand auger will be inspected before being placed in containers to determine if environmental media or staining is present, indicating contamination. If staining is present, an estimate of the portion or percentage of the item stained will be recorded. Results from the analytical data will be weighted by the extent of contamination for determining whether wastes are characteristics. If the cuttings with which the contact waste came into contact is listed, although this is not expected, then contact waste will be managed as listed, unless a "contained-in" approval is obtained.

Storage and Disposal Method: The contact waste may be separately containerized in drums or placed into the same containers as the media with which it is contaminated. Contact waste will be stored in

secure, designated non-hazardous waste areas. For nonhazardous IDW, the non-hazardous waste label, date of generation (i.e., initial placement in the container), as well as the generator's name and container contents will be placed on the non-hazardous waste containers as a best management practice.. If analytical data changes the waste classification, the waste will be stored in an area appropriate for the type of waste. For disposal, the separately containerized contact waste may also be combined with the material from which they originated (the WPF will document the decision to combine the waste streams). Wastes will be treated and/or disposed of in authorized on- or off-site facilities appropriate for the waste classification.

Waste #4: Decontamination fluids (potential) - This waste stream consists of liquid wastes generated from the decontamination of excavation, sampling and drilling equipment. This waste stream will be generated only if dry decontamination methods are not effective. It is estimated that less than 55 gallons of decontamination fluids will be generated from this activity.

Anticipated Regulatory Status: Industrial, Hazardous, Low-level waste (LLW), Mixed low-level waste (MLLW), Beryllium, Polychlorinated Biphenyls (PCB), Land Applied

Characterization Approach:

The decontamination water will be characterized based upon AK of the media with which it came into contact or using analytical results obtained from direct sampling of the containerized fluids. Representative waste characterization samples will be sampled within 10 days of generation and submitted for analysis with a 21 day turnaround time. A final waste determination will be made within 45 days of generation. Samples, if needed to meet a disposal facility WAC or due to poor AK, will be collected from the 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 properly operated in accordance with Chapter 7 and Appendix E of the RCRA Waste Sampling Draft Technical Guidance (EPA 530-D-02-002, August 2002, http://www.epa.gov/osw/hazard/testmethods/sw846/pdfs/rwsdtg.pdf). Samples will at a minimum be analyzed for TAL metals; radionuclides (by alpha and gamma spectroscopy); isotopic uranium, isotopic plutonium, americium-241, tritium, and strontium-90; VOCs; SVOCs; oil/grease; TSS; pH; explosive compounds; PCB; cyanide; nitrates/nitrites; and perchlorates; and pesticides/herbicides. Other constituents may be analyzed as necessary to meet the WAC of the disposal facility. Note that decontamination fluids destined for LANL's sanitary plant (SWS) must be sampled by ENV-RCRA for microtox analysis, total suspended solids (TSS), total dissolved solids (TDS), oil and grease, and pH. Submit a request for analysis at https://esp-esh-as01-f5.lanl.gov/~esh19/databases/rfa_form.shtml.

Storage and Disposal Method: These wastes will be containerized in drums at the point of generation and will initially be stored as nonhazardous/non-radiological pending review of analytical results to determine final waste characterization. For nonhazardous IDW, the non-hazardous waste label, date of generation (i.e., initial placement in the container), as well as the generator's name and container contents will be placed on the non-hazardous waste containers as a best management practice.

If the decontamination water is characterized as LLW it will be managed in a radioactive waste staging or storage area it can be shipped for disposal. Radioactive waste staging and storage area registration and set up must be coordinated with the assigned LANL WMC. If the decontamination water is characterized as Hazardous or MLLW (with D-codes for characteristic waste) it will be managed in a less than 90-Day Storage Area (with a start date equal to the earliest date of generation by container) until it can be shipped for disposal. Decontamination water may be disposed of on-site at the SWWS or the RLWTF if the facility WAC requirements are met. If the non-hazardous waste fails to meet the RLWTF WAC only due to high COD, if approved by the ENV-RCRA Group, it can be treated (e.g., addition of 30% hydrogen peroxide) to bring down the COD level to the RLWTF limit of 250 mg/l so that the waste can be disposed

of at that facility (see Work Instruction –Treatment of Wastewater with High Level of Chemical Oxygen Demand (COD)). If the waste cannot be disposed of at either of these facilities. If the waste cannot be disposed of at either of these facilities, due to operational limitations or inability to meet the WAC, it will be solidified and sent to an authorized off-site facility for disposal.

Waste #5: Petroleum Contaminated Soils (PCS) (potential) - 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) onto soil. 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. It is estimated that less than one cubic yard of PCS will be generated.

Anticipated Regulatory Status: New Mexico Special Waste (NMSW), Industrial, LLW

Characterization Approach: The contaminated soil may either be sampled in-place (by gridding the spill location and collecting and combining incremental samples into one sample) 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-06.09) may also be appropriate. If the spill is new, it must be immediately reported to ENV-RCRA and the contaminated material must be containerized the same day it is spilled unless permission is received from ENV-RCRA to leave it longer (generally only granted for large spills). Representative samples of containerized waste will be collected within 10 days of generation and submitted for analysis with a 21 day turnaround time. Samples will be analyzed, at a minimum, for VOCs, SVOCs, TPH (DRO/GRO), and total metals. TCLP analysis may also be performed for TAL metals if the analytical results for the total metals divided by 20 indicate contaminants that exceed regulatory thresholds. The samples will also be analyzed for radionuclides (by alpha and gamma spectroscopy); isotopic uranium, isotopic plutonium, americium-241, tritium, and strontium-90. Other constituents must be analyzed as needed to meet the receiving disposal facility's WAC.

Storage and Disposal Method: PCS will be containerized at the point of generation on the same day that the spill occurred. If AK for the site indicates that the soil will not be contaminated with radioactive or hazardous materials, the PCS will be managed as NMSW and the NMSW start date will be the date the container is completely full or the date in which no additional NSW will be added to the container. If AK for the site indicates that the soil could be contaminated with radioactive or hazardous materials the PCS will be stored in a clearly marked and constructed waste accumulation area appropriate to the anticipated waste type. Waste accumulation area postings, regulated storage duration, and inspection requirements will be based upon the waste classification. The following provides the management and disposal pathways for PCS that has a final waste determination:

1. PCS that is not contaminated with radioactive or hazardous materials will be managed as NMSW if one or more of the following conditions are met:

    - If the sum of benzene, toluene, ethylbenzene, and xylene isomer concentrations are greater than 50 mg/kg.

    - If benzene individually is equal to or greater than 10 mg/kg (Note: If benzene concentrations are equal to or greater than 0.5 mg/L, based upon TCLP, it is a hazardous waste, not a NMSW).

    - If TPH (DRO + GRO) concentration is greater than 100 mg/kg.

PCS that is characterized as NMSW will remain in the registered NMSW area until it is shipped for disposal to an authorized off-site facility.

2. PCS that is not contaminated with radioactive or hazardous materials will be managed as industrial waste if the contaminant levels are less than the NMSW and/or PCB regulatory levels. PCS that is characterized as industrial waste will be removed from the registered NMSW area and stored as industrial waste until it is shipped for disposal to an authorized off-site facility.

3. PCS that is characterized as LLW will be moved to a radioactive waste staging or storage area it can be shipped for disposal to an authorized off-site facility.

4. PCS characterized as Hazardous or MLLW will be managed in a less than 90-Day Storage Area (with a start date equal to the earliest date of generation by container) or in a Satellite Accumulation area if less than 55 gallons, until it can be shipped for disposal to an authorized off-site facility.

CHARACTERIZATION TABLE 2					
Waste Description	**Waste #1 MSW**	**Waste #2 Drill Cuttings**	**Waste #3 Contact IDW**	**Waste #4 Decon Fluids**	**Waste #5 PCS**
Estimated Volume	3 CY	3 CY	1 CY	< 55 gallons	1CY gallons
Packaging	DOT approved containers	DOT approved containers	DOT approved containers	DOT approved containers	DOT approved containers
Regulatory classification:					
Radioactive Waste		X	X	X	X
Reusable Material or Green is Clean (GIC)		X	X		
Municipal Solid Waste (MSW)	X				
Waste destined for LANL's SWWS or RLWTF or HEWTF[1]				X	
Hazardous Waste				X	
Mixed (hazardous and radioactive) Waste				X	
Polychlorinated Biphenyls-Contaminated Waste (PCBs)		X		X	
New Mexico Special Waste					X
Industrial Waste		X	X	X	X
Characterization Method					
Acceptable knowledge (AK): Existing Data/Documentation	X	X	X	X	
AK: Site Characterization		X	X	X	
Direct Sampling of Waste		X		X	X
Analytical Testing					
Volatile Organic Compounds (VOCs) (EPA 8260-B)		X		X	X
Semivolatile Organic Compounds (SVOCs) (EPA 8270-C)		X		X	X
Organic Pesticides (EPA 8081-A)		X		X	X
Organic Herbicides (EPA 8151-A)		X		X	X
PCBs (EPA 8082)				X	
Total Metals (EPA 6010-B/7471-A or EPA 6020)		X		X	X
Total Cyanide (EPA 9012-A)		X		X	X
High Explosives Constituents (EPA 8330/8321-A)		X		X	X
Asbestos (EPA 600M4 or equivalent)					
Total petroleum hydrocarbon (TPH)-GRO (EPA 8015-M)		X[3]			X
TPH-DRO (EPA 8015-M)		X[3]			X
Toxicity characteristic leaching procedure (TCLP) Metals (EPA 1311/6010-B)		X			X[3]
Radium 226 and 228 (EPA 9320)		X		X	X
Gross Alpha (alpha counting) (EPA 900)		X		X	X
Gross Beta (beta counting) (EPA 900)		X		X	X
Tritium (liquid scintillation) (EPA 906.0)		X		X	X
Gamma spectroscopy (EPA 901.1)		X		X	X
Isotopic plutonium (Chem. Separation/alpha spec.) (HASL-300)		X		X	X
Isotopic uranium (Chem. Separation/alpha spec.) (HASL-300)		X		X	X
Total uranium (EPA 6020)		X		X	X
Strontium-90 (EPA 905)		X		X	X
Americium-241 (Chem. Separation/alpha spec.) (HASL-300)		X		X	X
Isotopic Thorium		X		X	
Perchlorates (EPA 6850)		X		X	X
Nitrates/Nitrites (EPA 300.09-soil or 343.2-water)		X		X	X
Oil / Grease (EPA 1665)				X	
Fluorine, Chorine, Sulfate (EPA 300)				X	
Total Suspended & Dissolved Solids (TSS) and Total Dissolved Solids (TDS) (EPA 160.1 and 160.2)				X	
Chemical Oxygen Demand (COD) (EPA 410.4)				X	
pH (EPA 904c)				X	
Microtox or Biological Oxygen Demand (BOD)[2]				X[2]	

[1] In addition to other analytes needed to characterize the waste (e.g., VOC, SVOC, total metals), analyze for TSS, TDS, Oil and Grease, gross alpha gross beta, tritium, and pH for liquids destined for the LANL sanitary waste water system (SWWS). For wastes destined for the RLWTF additional constituents include TTO, TSS, COD, pH, total nitrates/nitrites, and gross alpha, gross beta (not including tritium), and gross gamma or the sum of individual alpha-, beta-, and gamma-emitting nuclides.

[2] If Microtox analysis is not available, requires BOD.

[3]As Needed

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 will run TCLP analyses.

References

LANL (Los Alamos National Laboratory), April 2011. "Field Implementation Plan for Plan Cañon de Valle Aggregate Area Investigation, TA-14" Los Alamos, New Mexico.

LANL (Los Alamos National Laboratory), September 2006. "Investigation Work Plan Cañon de Valle Aggregate, Revision 1," Los Alamos National Laboratory document LA-UR-06-4960, Los Alamos, New Mexico. (LANL 2006, ER2006-0224)

Signatures	**Date**
Project Manager (John McCann)	7-26-2011
Preparer (Kim Oman)	7/25/11
Waste Management Coordinator (Mike Le Scouarnec)	7/26/11
ENV-RCRA Representative (Jocelyn Buckley)	7/26/11
Waste Certification Program Representative (Michelle Coriz) for Michelle Coriz	7/26/11
Waste Acceptance (Andy Elicio)	07/26/2011

GREEN IS CLEAN MATERIAL DISPOSAL REQUEST FORM

To: SWO GIC Operation for Pre-Approval FAX 665-8347				(X) Approved For Shipment to TA-54 Area G (665-4356): Date Approved 10/25/11		**SWO Approver Initials**	
SWO GIC Request #:	**SWO Reviewer Name:** KM-GRUETMACHER Z# 059731					**Authorized GIC Generator**	(X) Yes ( ) No
Acceptable Knowledge Materials: (X) For SWO verification and potential release ( ) For Database Entry Only (Direct released by generator without shipment to SWO)						Waste Generator Return: Name: John McCann	FAX #: 505-665-4747
WMC Z# 135015	WMC Name (PRINT) Michael LeScouarnec	WMC Tel. # 669-5625	WMC Mail Stop M992	Date Submitted 10/24/11	RCA Type ( ) β/γ ( ) α ( ) Both	Classified Material ( ) Yes (X) No	Pure Beta Emitter ( ) Yes (X) No
Generator Group PMF5-00	(X) Routine ( ) Non-routine	( ) Surface (X) Volume	Compactible (X) Yes ( ) No	(X) Generator Will Deliver ( ) SWO to Pick Up Load at (Specify) _____		Waste Verification Location (X) TA-54-2 (α,β,γ) ( ) TA-48 (β,γ) ( ) Other (Specify) _____	

GIC ID #	Generated At (TA-Bldg-Rm)	Charge Code* (Cost Cntr/ Prog/ Acct/Work Pkg)	Vol. (Ft^3)	Wt. (Lbs)	Material Description	Disposition (Percent) Solid	Re-cycle	LLW	Date Processed	Veri-fier Init.	Comments
7030165	14	MR3A-0531 -WV00	2.0	10.5	Contact Waste						
7032005	14	"	1.0	6.0	Contact Waste						

NOTE: This shipment is exempt from DOT requirements. The activity level is less than 2 nanocuries per gram, and does not meet the DOT definition of a radioactive material.

- **Waste Generator Certification:** *Based on my process knowledge of the waste and/or chemical/physical/radiological analysis, the waste is expected to be free of radioactive contamination, and I certify that the information on this form is correct. I understand that this information may be made available to regulatory agencies and that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.*

  Waste Generator Signature (Required): _____ **Date:** 10-25-11

- **Waste Management Coordinator:** *I have reviewed this form and to the best of my knowledge, the information is complete and accurate.*

  WMC Signature (Required): _____ **Date:** 10-25-11

- **GIC Verifier Name** (Required): _____ **Date:** _____

*Although there is no charge for Green is Clean waste, the complete generator "Charge Code" is required; it is the participant identifier in the database