EP-DIV-SOP-20016, R.0

Identification and Notification of Newly Identified Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) and Newly Discovered Releases

Effective Date:	10/2/12

Procedure Owner:	Signature:	Date:
Victoria George	/s/ Victoria George	10/2/12

Document No.: EP-DIV-SOP-20016

Revision: 0

Effective Date: 10/2/12 Page: 2 of 16

REVISION HISTORY

Document No./Revision No.	Issue Date	Action	Description
EP-DIV-SOP-20016, R0	10/2/12	New document	Total Rewrite; Supersedes QP-5.8 and QP-5.9

Document No.: EP-DIV-SOP-20016

Revision: 0 Effective Date: 10/2/12 Page: 3 of 16

TABLE OF CONTENTS

Section		<u>Page</u>
	TITLE PAGECHANGE SUMMARYTABLE OF CONTENTS	2
1.	PURPOSE AND SCOPE	4
2. 2.1 2.2	BACKGROUND AND PRECAUTIONS Background Precautions	4
3.	REFERENCES	5
4.	DEFINITIONS	5
5. 5.1 5.2 5.3 5.4 5.5 5.6	STEP-BY-STEP PROCESS DESCRIPTIONS Document Potential Newly Identified SWMUs and AOCs. Determine Whether the Site Meets the Definition of a SWMU or AOC Determine Whether Newly Discovered Release has Occurred Notify NMED SWMU Assessment Report Update PRS Database	7 9 10
6.	RECORDS PROCESSING	11
7.	ATTACHMENTS	12

Document No.: EP-DIV-SOP-20016

Revision: 0 Effective Date: 10/2/12 Page: 4 of 16

1. PURPOSE AND SCOPE

This standard operating procedure (SOP) states the responsibilities and describes the process for identifying newly identified solid waste management units (SWMUs) or areas of concern (AOCs), or newly discovered releases from SWMUs and AOCs, and providing required notification by Los Alamos National Security, LLC (LANS) and the U.S. Department of Energy (DOE) to the New Mexico Environment Department (NMED). This procedure integrates the criteria of the Quality Assurance Plan for the Environmental Programs Directorate (ADEP), hereinafter referred to as the Quality Assurance Plan.

All ADEP participants shall implement this procedure when (1) determining if conditions encountered in the field constitute a newly identified SWMU or AOC or a newly discovered release from a SWMU or AOC and (2) notifying DOE and NMED of any such SWMUs, AOCs, or releases.

2. BACKGROUND AND PRECAUTIONS

2.1 Background

This procedure conforms to the requirements of Sections V.C and V.D of the March 1, 2005 Compliance Order on Consent, as amended (Consent Order). These sections of the Consent Order require LANS and DOE to notify NMED within 15 days of discovery of any newly identified SWMUs or AOCs or any previously unknown release of a contaminant from a SWMU or AOC. The specific requirements for reporting are contained in sections V.C and V.D of the Consent Order and are reflected in this procedure.

Prior to conducting any new project activities at Los Alamos National Laboratory (LANL or the Laboratory), project participants must submit a Project Requirements Identification (PRID) questionnaire and/or Excavation/Soil Disturbance Permit Review (EX-ID) for review and approval. The PRID and EX-ID will be reviewed by subject matter experts (SMEs) from ADEP who will identify any existing SWMUs or AOCs and associated releases within or impacting the proposed project. The SME's comments will also instruct the project participants to notify the Laboratory's Environmental Protection Division (ENV) if conditions encountered in the field are inconsistent with the information provided in the SME's comments. ENV will, in turn, notify ADEP Regulatory Management (ADEP-REG) of those inconsistencies, who will then implement this procedure.

2.2 Precautions

Sections V.C and V.D of the Consent Order contain legally-enforceable requirements for notifying NMED of newly identified SWMUs or AOCs or any previously unknown release of contaminants from SWMUs or AOCs. Failure to comply with these requirements can subject LANS and DOE to significant penalties.

Document No.: EP-DIV-SOP-20016

Revision: 0 Effective Date: 10/2/12 Page: 5 of 16

3. REFERENCES

Geographic Information System (GIS) - SWMU/AOC boundaries (http://gis-arcims-p/smdblocations/)

QP-5.10, Change Control for Spatial Features

SOP-4006, Document Development and Deliverables Compliance Process

EP-DIR-AP-10003, Records Management Procedure for ADEP Employees

EP-DIR-SOP-10008, Verification and Establishment of Boundaries for Solid Waste Management Units and Areas of Concern.

4. **DEFINITIONS**

<u>1990 SWMU Report</u> — The 1990 SWMU Report (LANL 1990, 7511.1, 7512.1, 7513.1, and 7514.1) is a hard copy compilation of information including, but not limited to, locations of SWMUs and AOCs and related possible contaminants at the time the Laboratory's RCRA Corrective Action program was initiated.

<u>Area of concern</u> — As defined in Section III.B of the Consent Order, "means any area that may have had a release of hazardous waste or hazardous constituent, which is not a Solid Waste Management Unit."

<u>Hazardous constituent</u> — As defined in Section III.B of the Consent Order, "means any constituent identified in 40 C.F.R. Part 261, Appendix VIII (incorporated by 20.4.1.200 NMAC), and any constituent identified in 40 C.F.R. Part 264, Appendix IX (incorporated by 20.4.1.500 NMAC)."

<u>Hazardous waste</u> — As defined in Section III.B of the Consent Order, "means any solid waste or combination of solid wastes which because of its quantity, concentration, or physical, chemical, or infectious characteristics meets the description set forth in NMSA 1978, § 74-4-3(K), and is listed as a hazardous waste or exhibits a hazardous waste characteristic under 40 C.F.R. Part 261 (incorporated by 20.4.1.200 NMAC)."

<u>Newly identified SWMU or AOC</u> — A SWMU or AOC, as defined by the Consent Order, not specifically identified by the 1990 SWMU Report or previous notifications to NMED discovered during the course of field investigations, construction activities, or other means. Newly identified SWMUs or AOCs do not include operational waste management units placed

Document No.: EP-DIV-SOP-20016

Revision: 0 Effective Date: 10/2/12 Page: 6 of 16

4. <u>Definitions (continued)</u>

into service after publication of the 1990 SWMU Report or operational releases occurring after publication of the 1990 SWMU Report.

<u>Release</u> — Any spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping, or disposing of hazardous wastes (including hazardous constituents) into the environment (including abandoning or discarding barrels, containers, or other closed receptacles containing hazardous waste or hazardous constituents).

<u>Solid waste</u> — As defined in Section III.B of the Consent Order, "means any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility, and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved materials in domestic sewage; or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under Section 402 of the Federal Water Pollution Control Act, as amended (86 Stat. 880), or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923)."

<u>Solid Waste Management Unit</u> — As defined in Section III.B of the Consent Order, "means any discernible unit at which solid waste has been placed at any time, and from which the Department [NMED] determines there may be a risk of a release of hazardous waste or hazardous waste constituents, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include any area at the Facility at which solid wastes have been routinely and systematically released; they do not include one-time spills."

5. STEP-BY-STEP PROCESS DESCRIPTION

5.1 Document Potential Newly Identified SWMUs and AOCs and Newly Discovered Releases

PRS Database Manager

[1] Documents the potential new SWMU, AOC, or release following notification by ENV of a potential new SWMU, AOC, or release. Identifies its location and general characteristics and completes Part I of the SWMU/AOC/Release Evaluation Report (Attachment 1). This information should include a general description of the site, its location, and any evidence of wastes or hazardous constituent releases.

Document No.: EP-DIV-SOP-20016

Revision: 0 Effective Date: 10/2/12 Page: 7 of 16

5. Step-By-Step Process Description (cont.)

[2] Determines whether the site has previously been identified as a SWMU or AOC. Reviews the SME comments on the associated PRID and/or EX-ID to identify nearby or impacted SWMUs and AOCs. Locates the site on the Laboratory's Geographic Information System (GIS) (http://gis-arcims-p/smdblocations/) to identify nearby SWMU/AOC boundaries. Consults the Potential Release Site (PRS) Database to identify the most current documents (e.g., Historical Investigation Report, Investigation Work Plan, Investigation Report) containing descriptive information of nearby or impacted SWMUs and AOCs. Visits the potential new site to verify information. Completes Part II of the SWMU/AOC/Release Evaluation Report (Attachment 1).

If the site has previously been identified as a SWMU or AOC, go to Step 5.3. Otherwise, go to Step 5.2.

5.2 Determine whether the site meets the definition of a SWMU or AOC

PRS Database Manager

- [1] Determines the dates of operation of the site and/or date that release occurred. These dates should be identified by reviewing historical information sources identified in Step 5.1, reviewing available historical engineering drawings or archival photographs of the site, and interviewing facility staff familiar with the site. If the site has only been used after November 1990 (the date of regulatory notification of SWMUs and AOCs at the Laboratory under the corrective action provisions of the Resource Conservation and Recovery Act [RCRA]), or the release occurred after November 1990, the site/release is not a corrective action unit subject to the Consent Order.
- [2] Documents the dates of operation or release in Part III of the SWMU/AOC/Release Evaluation Report (Attachment 1). If the dates are after November 1990, notification under the Consent Order is not required. Processes records in accordance with Section 6.

Document No.: EP-DIV-SOP-20016

Revision: 0 Effective Date: 10/2/12 Page: 8 of 16

5. Step-By-Step Process Description (cont.)

[3] Recommends the regulatory status of the site to Corrective Action Projects (CAP) Program Director and Regulatory Management (REG) Program Director. The CAP and REG Program Directors will then determine the regulatory status of the site. The process to be used for determining whether a site meets the regulatory definition of a SWMU or AOC is shown in Attachment 2 (see definitions in Section 4). Assembles historical information related to use of the site, management of wastes at the site, and types and levels of contamination present at the site. If necessary to characterize site contamination, biased samples should be collected at the site and submitted for expedited analysis. Documents the site's status as a SWMU or AOC in Part III of the SWMU/AOC/Release Evaluation Report (Attachment 1). If the site does not meet the definition of SWMU or AOC, notification under the Consent Order is not required. Processes records in accordance with Section 6 of this procedure.

[4] If the site is determined to be a new SWMU or AOC, assigns a unique identifier to the new SWMU or AOC using the following convention:

SWMU/AOC XX-YYY(z);

Where:

XX is the Technical Area (TA) where the site is located.
YYY is the sequential number of SWMUs and AOCs in the TA
z is a sequential letter designator when multiple SWMUs or AOCs with the same description or process reside in a TA.

[5] If the site is determined to be a new SWMU or AOC, provides the geographical location information for the new SWMU or AOC to the ADEP Engineering and Technology GIS Manager.

GIS Manager

- [1] Establishes the boundary of the new SWMU or AOC in accordance with EP-DIR-SOP-10008, *Verification and Establishment of Boundaries for Solid Waste Management Units and Areas of Concern.*
- [2] Updates the GIS with boundary information for the new SWMU or AOC in accordance with *Change Control for Spatial Features*, QP-5.10.

Document No.: EP-DIV-SOP-20016

Revision: 0 Effective Date: 10/2/12 Page: 9 of 16

5. Step-By-Step Process Description (cont.)

Regulatory Manager

[1] If the site is determined to be a new SWMU or AOC, notifies the DOE Los Alamos Site Office (LASO) Environmental Programs Office (EPO).

- [2] Notifies the LANL Public Affairs Office, in coordination with ADEP's outreach staff, about the confirmation if the new SWMU or AOC is on the property of:
 - A private homeowner
 - Los Alamos County
 - Santa Fe County
 - The U.S. Forest Service
 - A pueblo
 - The Department of the Interior
 - The National Parks Service
 - The Bureau of Land Management
 - Other non-DOE sites.
- [3] If the site is determined to be a new SWMU or AOC, notification to NMED is required; go to Step 5.4. If the site is not a new SWMU or AOC, go to Step 5.3 to determine whether a newly discovered release has occurred.

5.3 Determine Whether Newly Discovered Release has Occurred

PRS Database Manager

[1] Determines whether release was previously reported to the U.S. Environmental Protection Agency (EPA). Reviews the site description provided in the 1990 SWMU Report (this constitutes the Laboratory's official notification of historical releases at LANL subject to RCRA corrective actions). If previously reported, identifies the type of release reported to EPA (e.g., discharge from an outfall, leakage from waste containers) and the constituents released (e.g., organic solvents, dissolved metals). Compares this information with characteristics of the observed release to determine whether the release is described by the previous notification. If so, documents this determination in Part IV of the SWMU/AOC/Release Evaluation Report (Attachment 1). If the release was previously reported in the 1990 SWMU Report, notification under the Consent Order is not required. Processes records in accordance with Section 6 of this procedure.

Document No.: EP-DIV-SOP-20016

Revision: 0 Effective Date: 10/2/12 Page: 10 of 16

5. Step-By-Step Process Description (cont.)

[2] If the release was not previously reported in the 1990 SWMU Report, review the historical documents identified in Step 5.1 to determine whether release was previously reported to NMED or EPA through other documents. Document this determination in Part IV of the SWMU/AOC/Release Evaluation Report (Attachment 1). If the release was included in a previous notification, notification under the Consent Order is not required.

- [3] If the site is determined to be a newly discovered release from a SWMU or AOC, notifies LASO EPO.
- [4] If the site is determined to be a newly discovered release from a SMWU or AOC, notification to NMED is required; go to Step 5.4. If the site is not a newly discovered release from a SWMU or AOC, skip Steps 5.4 through 5.6 and process records in accordance with Section 6 of this procedure.

5.4 Notify NMED

Regulatory Manager

[1] Determines the date that notification to NMED must be submitted. The Consent Order requires notification to be submitted within 15 calendar days of discovery of any newly identified SWMU or AOC or previously unknown release of a contaminant from a SWMU or AOC. The 15-day period begins with the date that the determination is made, using this procedure, that a site is a newly identified SWMU or AOC or a release is a previously unknown release of a contaminant from a SWMU or AOC. The 15-day period does not begin with the initial identification of the site or release. Provides the notification date to ADEP Records Management and Document Control staff and documents in Part V of the SWMU/AOC/Release Evaluation Report (Attachment 1).

Records Management and Document Control

[1] Enters the notification into the Correspondence Control and Action Tracking System as a formal deliverable with the Regulatory Manager as the point of contact.

Regulatory Manager

[1] Prepares a draft of the notification letter jointly with DOE. The specific requirements for notification of a newly identified SMWU or AOC are contained in section V.C of the Consent Order. The specific requirements for notification of a newly discovered release

Document No.: EP-DIV-SOP-20016

Revision: 0 Effective Date: 10/2/12 Page: 11 of 16

5. Step-By-Step Process Description (cont.)

from a SWMU or AOC are contained in section V.D of the Consent Order. If the site is a new radionuclide-only AOC or the newly discovered release is only radionuclides, the notification to NMED should state that the notification is for information purposes only and is not required under the Consent Order. Submits the draft notification letter to the Publications Team.

Publications Team Document Manager

[1] Finalizes the notification for submittal to NMED in accordance with SOP-4006, Document Development and Deliverables Compliance Process.

Regulatory Manager

[1] If the site is a newly identified SWMU or AOC, a SWMU Assessment Report must be prepared; go to Step 5.5. If the site is a newly discovered release from a SWMU or AOC, skip Steps 5.5 and 5.6 and process records in accordance with Section 6 of this procedure.

5.5 SWMU Assessment Report

Regulatory Manager

[1] If the site is a newly identified SWMU or AOC, a SWMU Assessment Report must be submitted within 90 days of the date that the notification is submitted (see Consent Order section V.C). Determines the due date for the SWMU Assessment Report and provides it to ADEP Records Management and Document Control staff. Documents due date in Section V of the SWMU/AOC/Release Evaluation Report (Attachment 1).

Records Management and Document Control

[1] Enters the SWMU Assessment Report into the Correspondence Control and Action Tracking System as a formal deliverable with the Regulatory Manager as the point of contact.

5.6 Update PRS Database

[1] PRS Database Manager updates the PRS Database with the information related to the new SWMU or AOC provided in the NMED notification letter.

Document No.: EP-DIV-SOP-20016

Identification and Notification of Newly Identified Revision: 0 SWMUs and AOCs and Newly Discovered Releases Effective Date: 10/2/12

Page: 12 of 16

6. RECORDS PROCESSING

PRS Database Manager ensures that documents generated by the performance of this [1] procedure are processed as follows:

Record Identification	Record Type Determination	Protection/Storage Methods	Processing Instructions
SWMU/AOC/Release Evaluation Report Supporting information attached in SWMU/AOC/Release Evaluation Report	Report	Submit records in accordance with EP-DIR-AP-10003, Records Management Procedure for ADEP Employees	Submit records in accordance with EP-DIR-AP-10003, Records Management Procedure for ADEP Employees

7. **ATTACHMENTS**

Attachment 1 - SWMU/AOC/Release Evaluation Report

Attachment 2 - Decision Process for Determining Whether a Newly Identified PRS is a SWMU or AOC

Document No.: EP-DIV-SOP-20016

Revision: 0 Effective Date: 10/2/12 Page: 13 of 16

Click here for "Required Read" credit.

Document No.: EP-DIV-SOP-20016

Revision: 0

Effective Date: 10/2/12 Page: 14 of 16

ATTACHMENT 1 Page 1 of 2

SWMU/AOC/Release Evaluation Report

Part I: General Information				
Date discovered: General location: Engineering structure number:	Technical area where potential release site is located TA Location of nearest structure(s):			
Person discovering site or release: Name:Organization:	Phone:			
Description of site (type and location or waste or structure	es, evidence of contaminant releases, etc.):			
Part II: SWMU/AO	C Reporting Status			
Is the site a SWMU or AOC previously reported to EPA of Yes No If yes: SWMU/AOC No Previous notification: 1990 SWMU Report Notification under Section V Date and ER-ID number of previous notification (if not 19	Notification under Module VIII of 1990 RCRA Permit V.C of Consent Order			
Part III: Regulatory Status (Complete	te if site was not previously reported)			
Period of operation or release: from: to: to: If no operation or release occurred prior to November 199				
Supporting information for operating/release dates (i.e., opinterviews): Identify references for supporting information submitted to RPF:	n. Attach supporting information not previously			
Results of regulatory status determination using process in Not SWMU or AOC SWMU AOC				

Document No.: EP-DIV-SOP-20016

Revision: 0 Effective Date: 10/2/12 Page: 15 of 16

ATTACHMENT 1

Page 2 of 2

SWMU/AOC/Release Evaluation Report

Summarize basis for regulatory determination (e.g., method and frequency of disposal/relectoracteristics, sampling results, etc). Identify references for supporting information. Attainformation not previously submitted to RPF:	ach supporting
Does the site intersect private property?	
Part IV: Release Reporting Status	
If the site is a SWMU or AOC previously reported to EPA or NMED (see Part II), is the of consistent with the nature of the release in the previous notification? Yes No	bserved release
Summarize basis for above determination (e.g., type of release is same as previously reported release are same as previously reported, etc). Identify references for supporting information information not previously submitted to RPF:	on. Attach supporting
Part V: Reporting Requirements	
<u> </u>	Date: Date: Date:
Regulatory Manager Signature: Date:	

Document No.: EP-DIV-SOP-20016

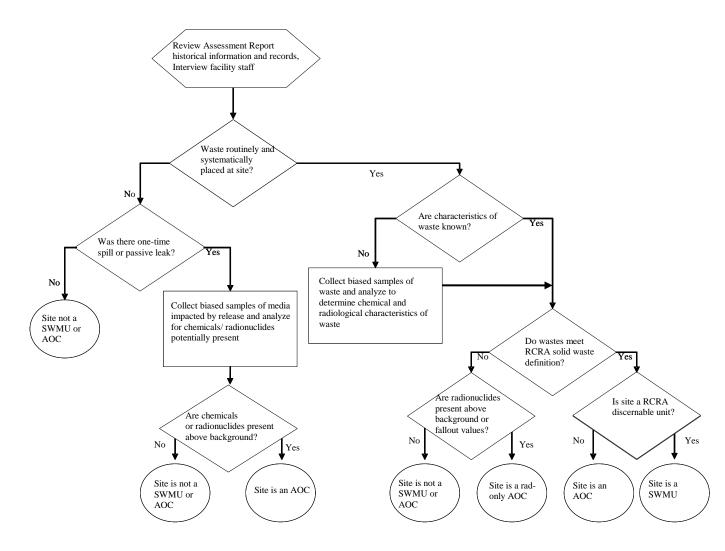
Revision: 0

Effective Date: 10/2/12 Page: 16 of 16

ATTACHMENT 2

Page 1 of 1

Decision Process for Determining Whether a Newly Identified PRS is a SWMU or AOC



Document Action Request					
Section 1 – Originator Request					
Document No.: EP-DIV-SOP-200)16				n No.: 0
Title: Identification and Notification of Newly-Identified SWMUs, AOCs, and Releases Page 1 of 1 o					of 12 tells
Description of requested action (Atta	ach numbered addition	nal sheets if nee	ded.):		
New Document			, 		
Originator Name (print): Joe English		Z#: 109376	Organ REG-J	ization: DO	Date: 5/31/12
	-Approval for Processi	ing - Responsible	Manage	r ·	
l —		Deactivation Cancellation		Perform Co Periodic Ro	
Superseded Document(s) and Revision 1	Number: QP-	5.8, R1 and QF	-5.9, R1	l	
Approved Disapproved (return to or		ments:	PCI	Rs N/A	
Signature:	Print Name, Title: Victoria George		Z#:	5	Date: 6/27/2012
Section 3	– Hazard Determinati	on – Responsible	Manage	r	
Hazard Determination: 🛛 Low	Moder	ate 🔲	High/Co	omplex 🔲	N/A
Document is authorized to serve as IWD	? Part I or	ıly 🔲 F	ull IWD		N/A
Section 4 -	Required Reviews (see	P315, Ch 16, Sec	ction 16.5	5.3)	
Discipline:	Name:	. // 	nature:		Date:
REG-DO Linda Nels	son (Trinde /	elso	2	4/27/12
	EG-DO Kate Lynnes Kate Lynnes 6/27/1				6/27/12
REG-SP Katie Wur	den	Katto Mour	den		U/27/12
Validation Required (SME):	Yes No	Waive (Commen	t: Low Ris	sk/Hazard
Scope of Validation:	Procedure	Change Onl	y		
Validation Method:	down	ation 🔲 🛚	Tabletop		First Time Use
Training Determination completed?	: X Yes N	/A Complet	ed by: \	J. George	
USQ/USI Number (if needed): N/A	Signature:		Z#:		Date:
,	/s/ V. Rhodes		11260	9	11/16/11
Derivative Classifier: Unclassified OUO UCNI Classified	Signature: Villain R.	Surne	Z#: 11276	5	Date: 09/12/12
□DUSA	Signature		Z#		Date
DUSA#					
Section 5– Final Approvals – Responsible Manager					
Release Details:					
Responsible Manager Signature: Print Name, Title: Z#: Date:					_
Victoria George			11	8515	275AFT 12
Additional approval Signature' Print Name, Title:			Z#	# :	Date:

DAR Continuation					
Document No.: EP-DIR-SOP-20016			Revision No.	: 0	
	Title: Identification and Notification of Newly-Identified SWMUs,				
	Description of Requested Action (continued from Section 1)				
	Approval/Disapproval Co	mments (continued from Sectio	n 2)		
	Required Reviews	(continued from Section 4)	7		
Discipline:	Name:	Signature:		Date:	
LC-LESH	Deborah Woitte	/s/Deborah Woi	tte 9/17	/12	
LC-LESH	Brett Henrikson	/s/Brett Henrik	son 9/17	/12	
	Validation Commer	nts (continued from Section 4			
	Release/Hold Detai	ls (continued from Section 5)		*	