PUB-3093, Revision 6

Guidelines for the Management of Waste Accumulation Areas (WAAs) at Berkeley Lab

Environment, Health, and Safety Division

Ernest Orlando Lawrence
Berkeley National Laboratory

Revision 6
Effective Date: March 2005

University of California
Berkeley, CA 94720

Prepared for the U.S. Department of Energy under Contract No. DE-AC03-76SF00098.

**Guidelines for the Management of Waste Accumulation Areas (WAAs)
at Berkeley Lab**

**PUB-3093
Revision 6
Effective Date: March 2005**

Approved By: _____

Nancy Rothermich
Waste Management Group Leader
Environment, Health and Safety Division

Approved By:

Phyllis Pei
Division Director
Environment, Health and Safety Division

Contents

Appendices

List of Figures

1. Introduction

Purpose

The purpose of this document is to set conditions for establishing and maintaining areas for the accumulation of hazardous waste at Berkeley Lab. Per regulatory definition a Waste Accumulation Area (WAA) is a storage area designed for the accumulation of hazardous wastes for up to 90 days in total quantities that can exceed 55 gallons (208 liters) of hazardous waste, one quart (0.946 liter) of extremely hazardous waste, or one quart (0.946 liter) of acutely hazardous waste. Smaller amounts of waste can be stored in WAAs or Satellite Accumulation Areas (SAAs). It is Berkeley Lab policy to limit the storage time for WAAs to 60 days. This is an internal management policy and not a Hazardous Waste Handling Facility (HWHF) permit condition. This document provides guidelines for

- employee and organizational responsibilities for WAAs,
- establishing a WAA,
- storing waste in a WAA,
- operating and maintaining a WAA, and
- closing out a WAA.

This document is a supplement to LBNL/PUB-3092, *Guidelines for Generators to Meet HWHF Acceptance Requirements for Hazardous, Radioactive, and Mixed Wastes at Berkeley Lab*. Refer to LBNL/PUB-3092 for further details about managing your hazardous waste.

Background

Hazardous waste, by definition, can cause serious injury to human health and the environment. The management of a WAA must be in compliance with all state regulations. These regulations can be found in California Code of Regulations, Title 22, Section 66262.34. Everyone using a WAA must exercise great care to ensure that hazardous wastes are handled safely and correctly at all times.

WAAs offer benefits to large-quantity waste generators. They provide a single area for the accumulation of large quantities of waste, and they prevent hazardous materials from entering the environment, in case of a spill, by means of required secondary containment. In addition, they contain emergency equipment in the event of a spill or release.

2. Responsibilities

Waste-Generating Organization

- Assigns a WAA manager and alternate for the WAA;
- assures that the waste is properly segregated, identified, packaged, and stored while in the area of generation (including the WAA);
- transports waste from the point of generation to the WAA; and
- ensures that all generators in their area receive proper training (EHS 604) and are familiar with the latest revisions of LBNL/PUB-3092 and PUB-3093.

Waste Generator

- Identifies hazardous waste produced by an operation or experiment, and
- contacts the WAA Manager or Alternate to get waste moved from an SAA to a WAA.

WAA Manager (and Alternate) for the WAA

The WAA Manager and Alternate are designated by the waste-generating organization's management as the responsible individuals for all activities associated with operating the organization's WAA. In particular, the WAA Manager is responsible for the accurate characterization of all wastes placed within the WAA and must only receive waste for individuals who have received the proper training (EHS 604). The WAA Manager and Alternate are the only individuals who can place waste inside of the WAA. Duties of the WAA Manager **or alternate** include

- maintaining spill records (see Appendix D for an example of a Waste Spill Log),
- accepting and placing waste inside of the WAA,
- ensuring that all additions to an accumulation container are properly recorded on the container's Accumulation Log,
- ensuring that all generators contributing to the waste accumulated at the WAA have completed EHS 604 training,
- ensuring that all wastes requisitioned from the WAA meet the acceptance criteria for transport and acceptance into the HWHF,
- ensuring that wastes have been requisitioned well in advance of the 60 day time limit,

- filling out the Hazardous Waste Disposal Requisition with accurate and complete characterization information,
- maintaining all logs,
- maintaining all required labeling,
- training of individual generators on procedures for use of their WAA, and
- initiating and completing closure of the WAA.

EH&S Waste Management Group Leader

- Interprets environmental and legal requirements for waste generators, and
- provides guidance on compliance issues.

Generator Assistant (EH&S Waste Management Group)

- Provides advice and counsel to the waste-generating organization, including current guidelines for preparing and storing hazardous waste;
- provides technical support and training to the waste-generating organization on proper ways to segregate, identify, package, store, and transport hazardous waste;
- approves the establishment of all WAAs;
- conducts weekly inspections (this can be done by the Generator Assistant or designee);
- assists, when called upon, in arranging hazardous waste sampling; and
- provides information to waste generators on practices that minimize the amounts of waste generated and the expense of managing this waste.

3. Guidelines and Rules Specific to WAAs

Responsibilities for Establishing a WAA

The following responsibilities apply specifically to establishing a WAA.

WAA Manager or Alternate

- Identifies the waste that will be accumulated in the WAA and the containers that will be needed. (All potential waste should be identified before establishing a WAA.)
- Consults with the Generator Assistant during the planning, design, and establishment of the WAA.

Operations Team Leader (EH&S Waste Management Group)

- Reviews the final plans for vehicle accessibility for safe waste pickup.

Generator Assistant (EH&S Waste Management Group)

- Reviews and interprets applicable environmental regulations in consultation with the EHS Waste Management Compliance Team Leader;
- surveys, with the WAA Manager, the types and amounts of waste being generated;
- advises on WAA design and location to ensure that all equipment requirements and all containment, enclosure, and siting criteria have been met;
- informs the EHS Waste Management Compliance Team of the date of the establishment of a WAA and the date of closure of a WAA; and
- prepares the WAA contingency plan in consultation with the WAA Manager.

  Note: All WAAs should be assigned a unique identifier.

Establishing a WAA

A WAA should be established in an area that routinely generates large amounts of hazardous waste. The actual need for a WAA is best determined through consultation between the waste-generating organization and the Generator Assistant. **A WAA cannot be established without prior EH&S approval.**

Sometimes only a temporary WAA is needed, such as in construction areas or in areas where waste generation is irregular or infrequent. However, a temporary WAA must still satisfy the minimum legal requirements for a hazardous waste storage area. The Generator Assistant will

determine these minimum requirements, which are specific to the particular types of waste being generated. Once the need has been established for a WAA, whether temporary or permanent, the waste-generating organization is responsible for constructing the WAA.

Construction and Operation Criteria

During the planning and design stages for a WAA, the responsible organization must work with the Generator Assistant to ensure that appropriate safety and environmental criteria are incorporated into the final design. For details of construction requirements, contact the Generator Assistant for your division. The physical requirements for WAAs must include:

- secondary containment,
- shelter from the elements,
- controlled access,
- appropriate signs,
- a method to separate incompatible wastes,
- sufficient access to allow pickup of waste, and
- a washable surface (e.g., concrete or asphalt).

Where possible, the WAA should be a distance of approximately 50 feet from sanitary sewers or storm drains.

The WAA must also be located at least 50 feet from the facility property line if flammable or reactive waste is being accumulated.

All containers must be in good condition and compatible with the wastes they hold. LBNL/PUB-3092 lists containers and other items approved for use in SAAs. These containers and items will also be used in WAAs.

See Figure 3-1 for an interior view of a typical WAA.

Safety Equipment and Documentation

The following safety equipment must be maintained at or near all WAAs:

- portable fire extinguisher and/or fixed fire-suppression system,
- emergency spill kit,
- emergency eyewash and safety shower,
- telephone (either at the WAA or nearby, with a sign indicating the direction to the nearest phone),
- protective equipment (e.g., gloves, safety glasses),
- appropriate hazard warning signs (e.g., Flammables, Hazardous Waste Area),
- posted contingency plan for dealing with spills and other accidental releases of hazardous wastes, and
- posted names and telephone numbers (day and night) of responsible individuals (WAA Manager and Alternate).

See Figure 3-2 for examples of proper safety equipment and documentation for a typical WAA.

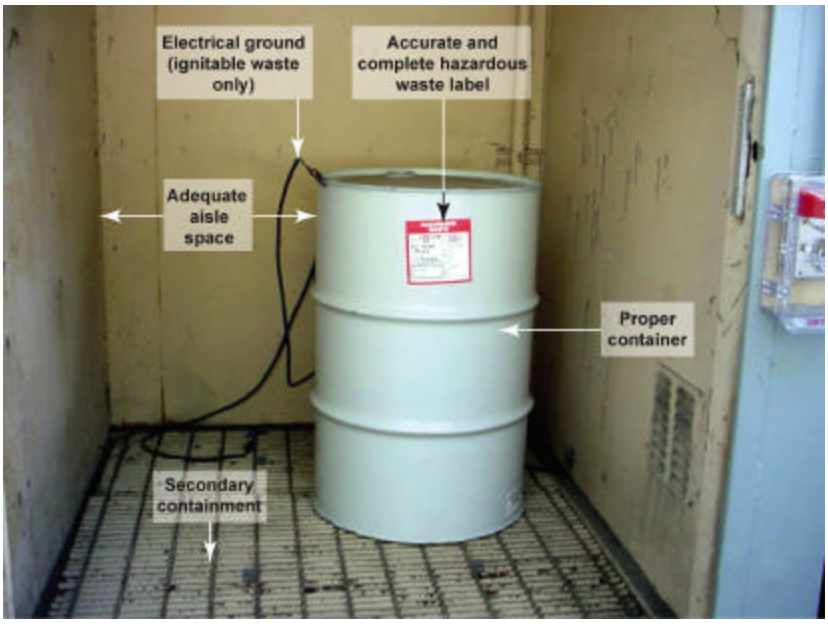

Figure 3-1. Inside a typical WAA.

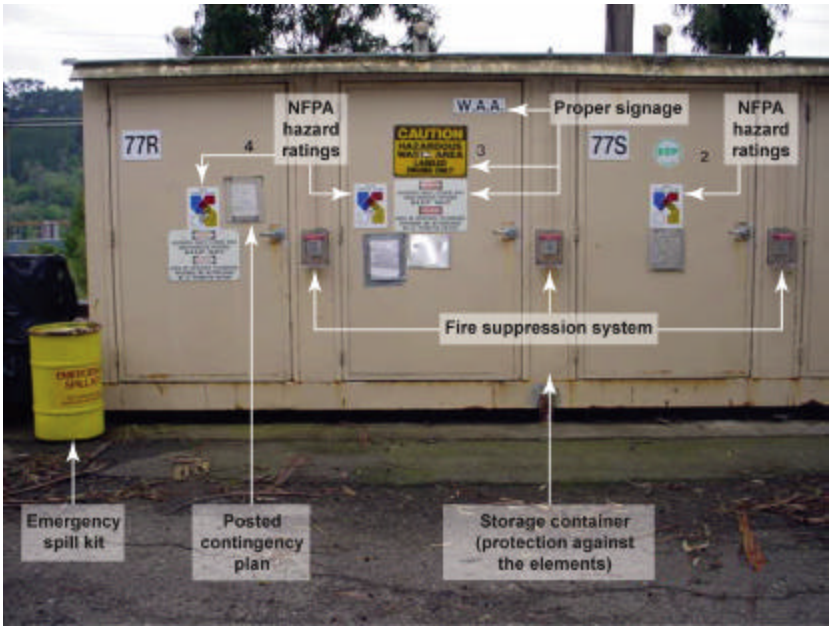

Figure 3-2. Proper safety equipment and documentation posted outside a typical WAA.

Storing Waste in a WAA

By Berkeley Lab policy, hazardous waste that has been properly segregated, identified, and packaged may be stored in a WAA at Berkeley Lab for up to 60 days. This is an internal management policy and not an HWHF Permit condition. Within that period, a Hazardous Waste Disposal Requisition should be completed by the WAA Manager or Alternate and sent to the Waste Management Group to schedule removal of the waste by Waste Management personnel. See the "hazardous wastes" section of LBNL/PUB-3092, *Guidelines for Generators to Meet HWHF Acceptance Requirements for Hazardous Wastes at Berkeley Lab*, for details.

All waste in a WAA must be

- segregated and separated from incompatible wastes (Section 6 of the Hazardous Waste portion of LBNL/PUB-3092 provides details), and
- labeled with an accurate and complete hazardous waste label.

Packaging in a WAA

The generator is responsible for packaging the waste so that it may be safely transported to the HWHF and stored pending disposal. Waste Management personnel will remove waste from the WAA only if it is packaged in tightly closed, properly labeled, and approved containers that show no signs of damage, deterioration, rusting, or leaking.

Waste Management will provide appropriate 55 gallon drums for the collection of wastes in the WAA. This prevents additional handling at the HWHF.

Storage Time Limits

The California Code of Regulations allows the accumulation of hazardous wastes in a WAA for a maximum of **90** days. Berkeley Lab policy allows the accumulation of hazardous waste in a WAA for a maximum of **60** days to assure sufficient time is allowed to arrange the removal of waste from a WAA, in compliance with the state regulations. This is an internal LBNL policy and not an HWHF Permit condition. The 60-day storage period begins on the date when the first waste is placed in the container in the WAA (called the WAA receival or accumulation start date). This date is recorded on the Hazardous Waste label (Figure 3-3) attached to the container.

If you are transferring waste from an SAA to a WAA, the WAA receival date is the date the waste is transferred to the WAA, **not** the date the waste was first added to the SAA collection container.

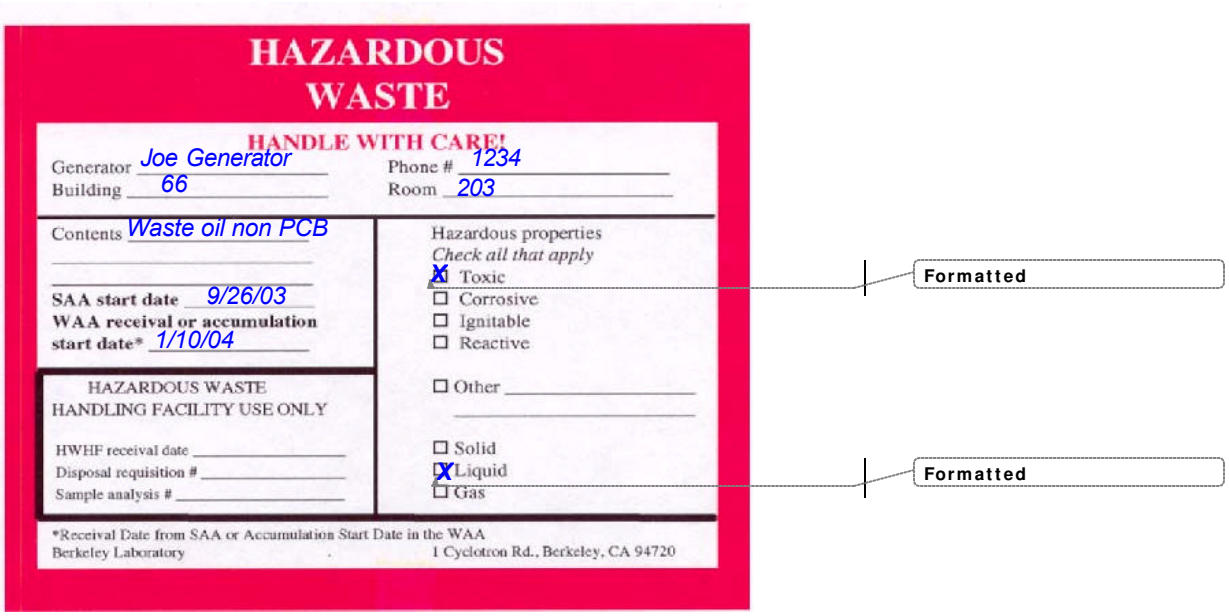

Figure 3-3. Hazardous Waste label.

In most cases, the Generator will give the waste (in its original container) to the WAA Manager or Alternate who will place the waste inside of the WAA. The waste will either be added to an existing container, or the container itself will be placed in the WAA. If added to an existing container, the Hazardous Waste Accumulation Log (Figure 3-4) must be updated; the WAA manager or alternate must enter the date, Generator's initials, and type and amount of waste being added at that time on the Hazardous Waste Accumulation Log (see http://www.lbl.gov/ehs/waste/html/forms.htm). If the container itself is placed in the WAA, the container will remain at the WAA until it is full or until the 60-day storage limit approaches.

BERKELEY LAB

HAZARDOUS WASTE ACCUMULATION LOG

Container Description: _____

Date Added	*Description of What Was Added*	*Amount*	*Initials*

(HWHF12/19

Figure 3-4. Hazardous Waste Accumulation Log.

Transport of Waste from a WAA to the HWHF

Waste is transported from the WAA to the HWHF by Waste Management staff or contract vendors. Before Waste Management staff or contract vendors will pick up waste containers from a WAA, the generator must submit a Hazardous Waste Disposal Requisition via WebReq (see http://www.jhu.edu/~purchasing/webreq/) or hard copy (see http://www.lbl.gov/ehs/waste/html/forms.htm).

Waste Management staff will review the requisition and, if it is approved, schedule a pickup date. No waste will be accepted without complete labels and an accurately completed requisition. At the time of pickup, the Waste Management Technician or contract vendor will inspect the waste package, sign the Hazardous Waste Disposal Requisition, verify the package is safe to transport, and remove the waste.

Spill Prevention

A properly designed WAA must have secondary containment to prevent any accidental release of hazardous substances to the environment.

Secondary containment can be provided as a built-in feature of the WAA storage building or by use of a specially designed fiberglass hazardous-waste containment tray, equipped to hold up to 60 gallons of liquid, placed under each pallet of hazardous waste materials. The containment tray is available for purchase through an outside vendor; Waste Management staff can advise the Generator on spill-prevention equipment.

A concrete berm surrounding the perimeter of the WAA may be provided for additional protection, if necessary.

Spill-prevention methods also include keeping all containers closed except when adding waste. Generators must assure that loose funnels are removed from the openings of liquid waste drums and that caps or lids are secured after each addition of waste. If screw-in funnels are used, the lid must be closed except when adding waste.

Controlling Fugitive Emissions

The following rules apply to controlling fugitive emissions. The container cover **must** be secured in place if

- waste is not being added or removed from the container;
- the container is filled to the maximum intended fill level;
- for containers between 26 and 119 gallons, material is being added in a batch, and the time between the addition of the next batch is more than 15 minutes; and
- the operator is leaving the immediate vicinity of the containers.

4. Operating and Maintaining a WAA

General

The waste-generating organization is responsible for operating and maintaining the WAA in such a way that hazardous waste is properly handled and is not released to the environment.

Inspections

A weekly inspection is required by both federal and state regulations. This is performed by a member of the Waste Management Group. As a best management practice, the inspections are logged on the Hazardous Waste Accumulation Area Weekly Inspection Checklist, shown in Figure 4-1. These records are kept by EH&S for three years, then destroyed.

The following items must be checked:

- Use of appropriate containers and proper packaging of waste in containers. Lids on containers must be securely closed. Containers must be checked to ensure that they are compatible with the waste and that the waste has been packaged correctly.
- Adequate separation in the WAA between any incompatible wastes, and between ignitable wastes and sources of ignition. Aisle space between pallets should be adequate to conduct routine maintenance and inspection activities, and for any necessary emergency response.
- Location of safety equipment. Safety equipment must be in its proper location, easily accessible, and in good operating condition.
- Waste labeling. A completed Hazardous Waste label must be affixed to each container.
- Proper storage and condition of all containers. Drums and containers containing liquid waste must be off the ground, and on pallets, racks, or counters. Containers must show no signs of deterioration, rusting, dents, or leaking. All spills must be identified and acted on immediately.
- The time, date, building, location, WAA unique identifier, and name of the person conducting the inspection must be written on the inspection sheet.

LBNL Weekly Inspection Log
Waste Accumulation Area

Building/Location:_____

INSPECTION ITEMS	YES	NO	N/A
1. Aisle spaces and exits are clear for emergency access.			
2. Appropriate WAA-designation and hazardous warning signs are posted.			
3. Unauthorized access to the waste is prevented (locked WAA doors, etc.).			
4. Waste containers are in good condition.			
5. Waste containers are compatible with the waste.			
6. Waste containers are kept closed unless in use.			
7. Incompatible waste containers are separated and segregated.			
8. Waste container labels are accurate and complete.			
9. Waste container labels are legible.			
10. Waste is within the allowable accumulation time limit of 60 days.†			
11. Secondary containment is provided for all liquid wastes.			
12. Secondary containment is free of cracks, debris, and signs of spills.			
13. Contingency plan is current, available, and has been updated in the past year.			
14. Fire extinguisher is charged and accessible with its pin intact.			
15. Shower is inspected and accessible.			
16. Spill kit is complete and accessible.			

ITEM #	DEFICIENCY AND CORRECTIVE ACTION	DATE CORRECTED	CORRECTED BY

I have conducted a WAA inspection as described above. Corrective actions required to address an imminent hazard have been started immediately. Otherwise, corrective actions will be started within three working days (at most) of the discovery of the deficiency.

Inspector:_____ Date:_____ Time:_____

I have reviewed this WAA inspection log. I have verified that any corrective actions required to address an imminent hazard were started immediately Otherwise, corrective actions were started within three working days (at most) of the discovery of the deficiency.

Compliance Specialist:_____ Date:_____ (May 10, 2000)

† This is an internal management policy and not an HWHF Permit condition.

Figure 4-1. Hazardous Waste Accumulation Area Weekly Inspection Checklist

Record Keeping

The WAA Manager must keep the following records relating to the WAA:

- copies of all Hazardous Waste Disposal Requisitions,
- copies of all Hazardous Waste Logs, and
- spill logs.

The waste records must be kept for at least three years. They should be kept in the WAA Manager's office, and they should be organized such that regulatory personnel would have no trouble reviewing the records. The spill logs must be maintained until the WAA completes clean closure.

Preparing Containers for Pickup

The WAA Manager or alternate must arrange for waste to be picked up from the WAA as soon as possible after the container is full, or (per Berkeley Lab's policy) within 60 days of the WAA Accumulation Start Date. The completed Hazardous Waste Disposal Requisition and other supporting documentation as necessary (Laboratory Waste Analysis Reports, Hazardous Waste Logs) should be faxed to EH&S, x4838. When inspecting and approving containers for pickup by HWHF personnel, the Generator Assistant must ensure that the containers meet appropriate safety criteria. In case of error, the Generator will repackage the waste under the direction of the Generator Assistant.

Maintaining a Current WAA Contingency Plan

The WAA Manager and the Generator Assistant must develop a contingency plan for dealing with spills or other accidental releases of hazardous waste in the WAA. This contingency plan must be based on the types of hazardous wastes accumulated in the WAA and must be updated as necessary to reflect any changes in these wastes. The contingency plan, and all updates, will be signed by the WAA Manager and the Generator Assistant and Compliance Team Leader (or designee). A copy of the contingency plan is posted in the WAA. A copy of the current WAA contingency plan is filed with the Waste Management Compliance Team Leader. The contingency plan must be reviewed annually to ensure accuracy and effectiveness of the plan. The annual review must be documented in the form of a letter to the WM Compliance Team Leader, if there are no significant changes to the contingency plan. Contingency plans with significant changes must be reviewed and signed.

The contingency plan must include the following:

- a list of emergency equipment (spill kit inventory, eyewash and safety shower, fire extinguisher);
- a map showing the location of each item of emergency equipment;
- a list of wastes specific to the WAA, maximum WAA storage capacity, and spill response category associated with each type of waste;

- a description of the proper response to a spill of each type and quantity of waste; and
- a map of evacuation routes away from the WAA.

The following must be posted prominently within the WAA, in clear waterproof plastic protective sleeves, in a manner so that they are easily visible from outside the WAA:

- the contingency plan, which includes
  - a list of emergency equipment and
  - a map of evacuation routes away from the WAA.

The contingency plan must not conflict with any elements of Berkeley Lab's *Master Emergency Plan* (PUB-237, latest revision).

5. Closing Out a WAA

Introduction

When wastes are no longer to be managed in a WAA, consider closing it. WAAs are closed under requirements, specified in 22 CCR 66262.34(a)(1)(A). Closure performance standards are laid out in 22 CCR 66265.111, and standards for disposal or decontamination of equipment, structures, and soil is found in 22 CCR 66265.114. Closure performance standards are discussed below.

Closure Performance Standards

The WAA must be closed in a manner that minimizes the need for further maintenance and controls, and minimizes or eliminates postclosure release and migration of hazardous constituents. A WAA closure cannot be completed until all contaminated equipment, structures, and soil are properly disposed of or decontaminated. The City of Berkeley is the Certified Unified Program Agency (CUPA) for Berkeley Lab, and the Toxic Management Division of this organization holds the authority to request a demonstration that a WAA closure was performed in a manner that complies with closure standards. The CUPA for the Production Genomics Facility is the Contra Costa County Hazardous Materials Division. Failure to demonstrate compliance may result in additional closure activities, including sampling and analyses, and/or an enforcement action by the CUPA. A successful demonstration of compliance depends on proper documentation of closure.

WAA Closure Process

The process used to close a WAA is as follows:

- The WAA Manager notifies the Generator Assistant that the WAA is to be closed.
- If necessary, the Generator Assistant develops a cost estimate for the program's review and approval. The Division will be held responsible for any cost associated with the closure of their WAA.
- The Generator Assistant conducts Phase I of the closure process (see below).

  Note: Phase I closures only satisfy CUPA's closure performance standards. EH&S may require additional decontamination activities prior to reuse of the space.
- The WM Generator Assistant recommends clean closure or further investigation to the Site Restoration Program.

Phase I Closure Process

In the Phase I closure process, the Generator Assistant does the following:

- assures that all waste has been removed;

- conducts a records review of the spill log, incident reports, and WAA inspection records;
- interviews program personnel responsible for the WAA operation to determine the existence of spills or other contamination;
- conducts a visual inspection and notes any evidence of staining or spills. Photographs may be taken to document the investigation; and
- documents closure activities.

If no evidence of contamination is discovered during Phase I, or if the record review indicates that

- a release occurred to a sealed, totally enclosed secondary containment vessel (such as a secondary containment pallet), **and**
- the spill was cleaned up immediately and thoroughly, **and**
- none of the spill was released to the environment (as indicated by the record and visual inspection),

then Phase II sampling and analysis is not required. The closure report must state that the above three conditions occurred without causing environmental impact. The Generator Assistant prepares a formal memo to the Site Restoration Group endorsing WAA clean closure. The memo will include

- the location of the WAA,
- the type of WAA (for example, Paint Shop),
- operational dates of the WAA, and
- a summary of closure activities described above.

The documentation step is important so that proper records can be maintained in the event of an inspection.

Phase II Closure Process—Discovery of Current or Past Contamination

The Generator Assistant will do the following:

If evidence of current or past environmental contamination is discovered during the record review in Phase I, then Phase IIA, and possibly Phase IIB and Phase III, actions must take place. These later phases involve decontamination of equipment or remediation of contamination of the environment, and then confirmation sampling to assure that no residual contamination remains at the WAA. A Sampling and Analysis Plan (SAP) is needed to establish the plan and procedures for the sampling and analysis of the WAA, secondary containment, and its ancillary equipment. The SAP is used to ensure that the components of the WAA are characterized adequately for proper decontamination and disposition. The SAP may also include soil and/or groundwater if contamination in these media are also suspected. Detailed documentation of the closure activities is required. Actions under phases II and III will be performed under guidance of Environmental Services.

Phase IIA

Phase IIA is conducted if evidence of a possible release to the environment is revealed when conducting the visual inspection during Phase I. Examples of this include

- stains or substances on an unsealed concrete floor or other porous containment surface that could not be removed by sweeping (i.e., decontamination is required), or
- stains or substances on a containment surface that has cracks (including hairline cracks) or has a worn coating/sealant.

Phase IIA sampling is scoping in nature and is conducted to determine if, in fact, contaminants were released to the environment. If Phase I provides direct evidence of a release to the environment, or if Phase IIA reveals that this has occurred, then Phase IIB, and possibly Phase III, will be required.

The Phase IIA closure process is conducted by

- completing Phase I requirements,
- writing and following the SAP,
- comparing the analysis against acceptable release levels, and
- documenting the closure activities in detail.

If Phase IIA reveals contamination has occurred, then the closure process will proceed to Phase IIB.

Phase IIB

The Phase IIB closure process is conducted by

- decontaminating the WAA, secondary containment, or ancillary equipment using an appropriate method (for example, steam cleaning);
- writing and following the SAP;
- sampling soils at the surface and subsurface, if necessary, and
- documenting the closure activities in detail.

Phase III

Phase III is conducted if evidence of a release to the soils or subsurface is confirmed during Phase IIB. The Phase III closure process is conducted by

- completing Phase I and II requirements,
- conducting additional sampling to define the extent of contamination,
- remediation, and
- documenting the closure activities in detail.

The Generator Assistant confirms that the WAA has been closed in accordance with a closure protocol and prepares a closure endorsement memo, as described in the Phase I closure

process above. The Generator Assistant then prepares a Memo to File authorizing clean closure, as described previously.

If clean closure of a WAA site is not possible, it may still be possible to close the surface structures of a WAA. Under the Federal Facility Agreement (FFA), RCRA corrective action obligations that relate to the releases of hazardous substances, hazardous wastes, pollutants, or contaminants to the soil or groundwater may be deferred and handled under DOE's Comprehensive Environmental Response, Compensation, and Liability Act response obligation. Environmental Services will lead these efforts.

Documentation Files

Inspection logs and records of the WAA must be maintained until clean closure is achieved. Waste Management is the repository for storing these WAA closure documents, which may include

- historical documents,
- photographs,
- the Sampling and Analysis Plan,
- analytical results, if applicable,
- certifications, if applicable, and
- written summary of closure activities.

Appendix A: Locations of Permanent Waste Accumulation Areas (WAAs)

Building	Location	Division	WAA Manager	Phone
25	West side of building	Engineering	Rudy Bartolo	5558
51	A door	EH&S	Mark Lasartemay	6825
62	East side of building	MSD, CSD	Peter Ruegg	5395
76 C&M	East side of building	Facilities	Mike Botello	7939
76 Paint	East side of building	Facilities	Don Marcel	6026
77A Plating	South side of building	Engineering	Al Harcourt	7660
77 Paint	West side at Paint Shop	Engineering	Ed Tully	5907
85	HW8, Upper Yard	EH&S	Roshan Shadlou	6654
100	JGI, NE side of building	Genomics	Jimmy Choy	925-296-5649
400	JGI, N side of building	Genomics	Jimmy Choy	925-296-5649

Appendix B: Governing Documents and References

Regulations and Requirements

- 42 U.S.C. Section 6901 *et seq.*, *Resource Conservation and Recovery Act (RCRA)*
- 40 CFR Sections 260–279, *Hazardous Waste*; 761.1, *PCBs as applicable*
- 29 CFR 1910.120, *Training*
- 29 CFR 1910.1001, *Asbestos Hazardous Waste Control Law, Hazardous Waste Control Law*
- California Health and Safety Code, Section 25100 *et seq*.
- 22 CCR Section 66260 – 66268 as applicable.
- Disposal Site Waste Acceptance Criteria
- Berkeley Municipal Code, Chapter 11.52, *Hazardous Materials Management as applied to generator areas*
- 49 CFR Sections 173 – 177 as applicable, *Packaging, Shipping, Carrier Loading*

References

- LBNL/PUB-3092, *Guidelines for Generators to Meet HWHF Acceptance Requirements for Hazardous, Radioactive, and Mixed Wastes at Berkeley Lab*, latest revision
- LBNL/PUB-237, the LBNL *Master Emergency Plan*, latest revision
- LBID-2488, Occurrence Reporting and Processing System (ORPS)
- Waste Management Forms, http://www.lbl.gov/ehs/waste/html/forms.htm

Appendix C: Example of a Waste Spill Log for a WAA

Supervisor:_____

Location of WAA:_____

Date	Type of Waste	Quantity of Spill	Exact Location of Spill	Comments