Company X Project Y Contract Z

Sandia National Laboratories, Albuquerque, New Mexico

Waste Management Plan (Generic Template)

1.0 General

This Waste Management Plan specifies the procedure for the management, control and disposition of items designated as waste material for the **Y Project**, **Contract Z**. The following is a list of the different categories of materials that will be generated during the project:

- Recyclable Materials
- Waste/Refuse Materials
- Reusable Materials

The procedures for the management, control and disposition of these items are described in subsequent sections of this plan. **Company X** and all of its subcontractors are required to identify, maintain proper control, and provide documentation for the disposition of materials described in this plan. Sandia National Laboratories is also responsible for the disposition of some waste as described below. The intent of this plan is to minimize the amount of waste generated on this project to the extent practicable. The goal for this project is to ensure that at least 75% of all waste material generated will be recycled, re-used, or otherwise diverted from direct landfill disposal. Each subcontractor is required to follow this plan for the disposition of the waste generated by the subcontractor's activity. Waste Management will be an agenda item at the weekly construction meeting that **Company X** conducts. The waste management activities described in this plan will be maintained until substantial completion has been agreed upon by Sandia.

2.0 Waste Minimization

Company X is dedicated to maintaining a stringent set of guidelines to control the amount of construction waste and debris disposed in a landfill. **Company X** will be responsible for communication between field personnel and subcontractors regarding minimization requirements during internal weekly construction meetings.

2.1 Packaging

All vendors and their suppliers are encouraged to minimize the packaging for materials and equipment. Packing materials should be selected based on whether they can be recycled on this project. This request will be communicated through project meetings, weekly subcontractor meetings, written correspondence and through the project Waste Management Team that is made up of contractor representatives.

2.2 Housekeeping

Housekeeping activities must minimize the amount of waste and maximize the amount of recyclable material that can be efficiently gathered at the local collection points and minimize the amount of refuse materials. **Company X** will assign housekeeping responsibility to an onsite **Company X** employee who will oversee and manage the field operations with regards to housekeeping and waste management. Discuss any issues identified by this person during weekly construction meetings.

2.3 Maximizing Product Use

Layout and cutting procedures should be used to minimize the amount of waste materials. Cutoffs and other scrap materials should be applied on this project to the extent practicable. Emphasize this procedure to all subcontractors during weekly construction meetings.

2.4 Materials Management

All material should be stored in weatherproof containers or otherwise protected from contamination and deterioration prior to use. Containers should be opened as needed and work should be sequenced to use materials efficiently and in a timely fashion. This ensures that the material meets the specified requirements and that unused or off-spec product will not become a waste. Emphasize this procedure to all subcontractors during weekly construction meetings.

3.0 Licenses, Permits, Fees, and Taxes

3.1 All subcontractors working on the Y Project will be required to maintain and be responsible for all fees, licenses, permits, and taxes needed to comply with Federal, State, and Local Regulations and requirements.

3.2 Each subcontractor will identify haulers or trucking firms they will be using on this project.

4.0 Material Disposition

Attachment A provides an estimation of the waste material types and quantities to be generated during the construction of **Project Y**. Attachment B identifies the disposition pathway for each waste material type to be generated during the construction of **Project Y**.

4.1 Recyclable Material

All material for recycling will be placed in designated containers furnished by Sandia National Laboratories and **Company X**. These containers will be labeled clearly and according to types of material. Material must be stored and handled to avoid contamination so it is acceptable to the recycler.

4.1.1 Sandia Furnished Dumpsters

Sandia will provide individual appropriate containers at the job site for local collection of material as indicated in the Material Disposition worksheet in Attachment B. The location of the containers and pickup/delivery will be coordinated between Company X and P2 personnel. Sandia will haul the Sandia furnished containers and will provide Company X with weight information for each load. Refer to Sections 4.4 and for 4.5 for specific documentation and measurement requirements.

4.1.2 Company X Furnished Dumpsters

Company X will provide individual appropriate containers at the job site for local collection of material as indicated in the Material Disposition worksheet in Attachment B. The location of the containers and pickup/delivery will be coordinated by **Company X**.

Company X will haul the containers to the location designated in the Material Disposition Table and will maintain the weight information for each load. **Company X** will be responsible for obtaining weight information for non-

Sandia hauled materials through use of the truck scale located at Sandia's Solid Waste Collection & Recycling Center (Building 967). Refer to Sections 4.4 and for 4.5 for documentation and measurement requirements.

4.1.3 Pick-up Frequency

Recycled material containers will be hauled on an as needed basis, with coordination required between Company X field staff and Sandia project inspectors.

4.2 Empty Containers

A container that held any chemical or hazardous material, except a substance identified as an acute hazardous waste, is defined as an empty container if both of following criteria are met:

- All material has been removed that can be removed using the practices commonly employed to remove material from that type of container, such as pumping, pouring, or aspirating, and
- No more than 3% by weight of the total capacity of the container remains in the container.

Containers with capacity of 25 gallons or less that meet above criteria may be placed in the appropriate recycling container (i.e., roll-off, hopper, basket). Empty containers with capacity of greater than 25 gallons shall be managed separate from the recycle material collection containers. Those containers shall be marked with words "Empty Container" and staged separate from the recycling collection containers until they have been inspected by an SNL Hazardous Materials Inspector (HMI). Following inspection and acceptance they shall be managed according to the HMI's guidance.

Any containers that hold an acutely hazardous substance shall be regarded and managed as a hazardous waste.

4.3 Non Recyclable or Refuse Materials

All materials not identified in the material disposition table categories will be considered refuse material. It will be the responsibility of each **Company X** subcontractor to load and transport all material identified as refuse to a landfill designated by Sandia. This material may either be demolition debris or construction waste. Any permits required by the designated landfill site, will be the responsibility of each subcontractor. **Company X** will ensure that all procedures are followed. Permits will be valid throughout the duration of the project. These items will be tracked with the same requirements outlined in section 4.4.

*Personal trash such as papers, food containers, beverage cups, etc., shall be bagged, removed from the site, and properly disposed of by each subcontractor

4.4 Documentation

A record of each disposition activity (permits, landfill receipts, weights, weight tickets, and any other receipts) will be maintained at the **Company X** Site Office by the Construction Superintendent. A waste diversion/landfill log (refer to Attachment C) will be maintained and a waste management progress report worksheet (refer to Attachment D) will be completed biannually and at end of project to track and summarize the quantities of waste generated by the project. This documentation will be used to calculate

the percent of material diversion achieved. It is the responsibility of **Company X** to collect and maintain documentation.

4.5 Weighing Waste Material

Haulers of refuse and recyclable/reusable materials must provide weight documentation for all shipments from the project site. Truck scales are available at Sandia's Solid Waste Collection & Recycling Center (SWCRC) (Building 967), although other scales may be used. **Company X** will make arrangements to have non-Sandia provided containers weighed. If the empty weight of a vehicle is known, only its full weight must be determined. If methods other than weighing are used, the proposed method of generating the weight must be approved (for example: density, times, volume estimation). Refer to Section 4.4 for documentation requirements.

4.6 SNL Truck Scale Location and Use

Truck scale available from 7:30 am to 3:30 pm Monday – Friday.

Directions to SNL Truck Scale:

- From Hardin Blvd, travel south on 9th Street.
- After approximately 3/10 of a mile, turn east on East Ordinance Rd.
- After approximately 1/10 of a mile, turn north into the rear entrance for Bldg 967, Sandia's SWCRC.
- The truck scale is located along the southeast fence-line of the SWCRC.

Procedure to obtain documentation of vehicle weight:

- Upon passing through the rear entrance to the SWCRC, proceed slowly onto the truck scale platform.
- Gently bring the vehicle to a stop once all tires are on the truck scale platform.
- Upon securing the vehicle, exit the vehicle and proceed to the truck scale house.
- Observe the reading on the "Fairbanks" scale read-out for credibility of weight indicated. If a negative number or otherwise non-practical weight value is displayed, return to the vehicle and proceed forward off the truck scale platform. Again secure the vehicle and return to the truck scale house. If a numerical value other than "0" is displayed, press the key labeled "ZERO." The scale read-out should now be "0".

- Return the vehicle to the truck scale platform and again observe the reading on the scale read-out located within the truck scale house.
- Place a blank weight ticket (located on counter top in truck scale house) onto the "Fairbanks" printer. Slide the blank weight ticket into the printer against the paper guide and move it upward until resistance is encountered.
- Press the "print" key on the "Fairbanks" scale readout.
- Remove weight ticket from the back of the scale printer and maintain for project records.
- Leave the Truck Scale by proceeding north and exiting the SWCRC yard onto P Avenue.

Procedure for reporting and/or tracking actual load weights.

An "empty" weight as well as a "full" weight must be known for the vehicle in order to determine the quantity of material being transported. An "empty" weight can be determined using the SNL truck scale as described above, and need only be determined one time. Although slight variations in "empty" vehicle weight may occur due to fuel levels and individual drivers, these variations are considered minimal when determining the load weight. An "empty" vehicle weight (if known) may be hand written on weight tickets obtained for "full" vehicle weights to aid in computing individual load weights on a single weight ticket.

ATTACHMENT A

WASTE MATERIAL ESTIMATING WORKSHEET

Instructions:

- 1 Edit material/item list in left hand column as appropriate.
- 2 Include all waste material types to be generated.
- 3 Fill in columns with relevant recycling/disposal data.

Material/Item	Total Amount Generated (tons)	Amount Diverted from Landfill by Reuse, Salvage, or Recycle (tons)	Amount Sent to Landfill (tons)	Percent Diverted from Landfill (%)
Mixed Metals/Steel				
Wood				
Concrete				
Asphalt				
Ceiling Tile				
Carpet Tile				
Wall Board				
Clean fill Dirt				
Paper				
Cardboard				
Aluminum				
Non-recyclable				
Construction Waste				

ATTACHMENT B

WASTE MATERIAL DISPOSITION WORKSHEET

Instructions:

- 1 Edit material/item list in left hand column to match Waste Material Estimating worksheet.
- 2 Include all waste material types to be generated.
- 3 Edit remaining worksheet contents with relevant collection, transportation, disposition, and contact information as appropriate to suit project-specific requirements.

Material/Item	Local Collection Point	Hauler	Disposition	Disposition Location	Contact Name / Phone #
Mixed Metals/ Steel	Sandia Provided Container	Sandia	Recycle	Sandia local Scrap Metals Recycling Contractor	Andrew Gough 284-2184
Concrete/Asphalt	Job site	Company X	Recycle	Sandia Concrete/Asphalt Recycle Area (CARA)	Andrew Gough 284-2184
Wood (Reuse)	On site	Company X	Re-use	C&D Recycle Center	Andrew Gough 284-2184
Wood (Engineered Lumber)	On site Container	Company X	Recycle	Wood You Recycle	Andrew Gough 284-2184
Ceiling Tile	On site Container	Company X	Recycle	Sandia P2 Tent	Andrew Gough 284-2184
Carpet Tile	On site Container	Company X	Recycle	Sandia P2 Tent	Andrew Gough 284-2184
Clean Fill (Dirt)	On site	Company X	Recycle	Sandia Soil Borrow Area	Sandia Delegated Representative
Paper	Sandia Provided Container	Sandia	Recycle	Sandia Solid Waste Collection & Recycling Center (SWCRC)	Sam McCord 844-8916
Cardboard	Sandia Provided Container	Sandia	Recycle	Sandia SWCRC	Sam McCord 844-8916
Aluminum	Sandia Provided Container	Sandia	Recycle	Sandia SWCRC	Andrew Gough 284-2184
General Construction Waste	On Site Container	Company X	Disposal	Kirtland Air Force Base Landfill	Sandia Delegated Representative

ATTACHMENT C

WASTE DIVERSION/LANDFILL LOG

Project: Project Y

Period: _____ to _____

Instructions: Complete and maintain Log at **Company X** site office.

Material/Item	Quantity (tons)	Disposed, Reused, Salvaged, or Recycled	Destination	Date
List materials and	Fill in as	appropriate for each loa	nd or shipment of materia	als/items.
items as appropriate				

ATTACHMENT D

WASTE MANAGEMENT PROGRESS REPORT WORKSHEET

Project: Project Y

Reporting Company: Company X

Report Period: _____ to _____

Instructions: Complete and submit bi-annually and at end of project.

Material/Item	Land filled (tons)	Recycled (tons)	Reused (tons)	Salvaged (tons)
List materials and items as appropriate	Fill in material/item amounts (in tons) under applicable disposition columns.			