Waste Management Plan (Generic Template)

1.0 <u>General</u>

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:

- a. Recyclable Materials
- b. Waste/Refuse Materials
- c. Reusable Materials

The procedures for the management, control and disposition of these items are described in subsequent sections of this plan. All **Company X** 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 intension 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 50% (or 75%) of all waste material generated will be recycled, re-used, or otherwise diverted from direct landfill disposal. To accomplish this goal **Company X** intends to recycle and reuse as many types of construction material as possible. 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 <u>Waste Minimization</u>

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,

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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 on-site **Company X** employee who will oversee and manage the field operations with regards to housekeeping and waste management. Any issues identified by this person will be discussed during internal weekly construction meetings.

2.3 <u>Maximizing Product Use</u>

Layout and cutting procedures should be used to minimize the amount of waste materials. Cut-offs and other scrap materials should be applied on this project to the extent practicable. This procedure will be emphasized to all subcontractors during internal weekly construction meetings.

2.4 <u>Materials Management</u>

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. This procedure will be emphasized to all subcontractors during internal 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.

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4.0 <u>Material Disposition</u>

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 <u>Recyclable Material</u>

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 so it is acceptable to the recycler. **Company X** will ensure containers protect the contents from environmental contamination.

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 Sandia Pollution Prevention personnel. Sandia will haul the Sandia furnished containers and must 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 <u>Company X Furnished Dumpsters</u>

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 Transfer Facility (Building 967). Refer to Sections 4.4 and for 4.5 for documentation and measurement requirements.

4.1.3 <u>Pick-up Frequency</u>

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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 <u>Empty Containers</u>

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:

- 1. 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
- 2. 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 as 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.,

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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 bi-annually 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 <u>Measurement of Waste Material</u>

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 Transfer Facility (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.

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ATTACHMENT A WASTE MATERIAL ESTIMATING WORKSHEET

Instructions:

- 1) Edit material/item list in left hand column as appropriate.
- 2) Include <u>all</u> 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				
Misc. Concrete/Asphalt				
Wood				
Wall Board				
Dirt				
Paper				
Cardboard				
Aluminum				
General Construction Waste				

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ATTACHMENT B WASTE MATERIAL DISPOSITION WORKSHEET

Instructions:

- 1) Edit material/item list in left hand column to match Waste Material Estimating worksheet.
- 2) Include <u>all</u> 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	ACE Metals, Inc.	Doug Vetter 284-3210
Misc. Concrete/Asphalt	Job site	Company X	Recycle	Sandia Concrete/Asphalt Recycle Center	Doug Vetter 284-3210
Wood	N/A	NA	Re-use	On Site or Returned to Company X	NA
Wood	On site Container	Company X	Recycle	Soilutions & NM Compost	Misch Lehrer 877-0220
Wall Board	On site Container	Company X	Recycle	American Gypsum Bernalillo Plant OR Soilutions & NM Compost	Kirk Moore (AG) 867-5200 Misch Lehrer (S&N) 877-0220
Clean Fill (Dirt)	On site	Company X	Recycle	Sandia Soil Borrow Area	Sandia Delegated Representative
Paper	Sandia Provided Container	Sandia	Recycle	Sandia SWTF	Doug Vetter 284-3210
Cardboard	Sandia Provided Container	Sandia	Recycle	Sandia SWTF	Doug Vetter 284-3210
Aluminum	Sandia Provided Container	Sandia	Recycle	Sandia SWTF	Doug Vetter 284-3210
General Construction Waste	On Site Container	Company X	Disposal	Kirtland Air Force Base Landfill	Sandia Delegated Representative

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ATTACHMENT C WASTE DIVERSION/LANDFILL LOG

Project: Project Y

Period: _____ to _____

Instructions: 1) Complete and maintain Log at Company X site office.

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

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ATTACHMENT D

WASTE MANAGEMENT PROGRESS REPORT WORKSHEET

Project: Project Y

Reporting Company: Company X

Report Period: _____ to _____

Instructions: 1) Complete and submit bi-annually and at end of project.

ial/item amounts (in coli	n tons) under applica lumns.	able disposition