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1.0 Objective

To ensure that waste generated by ADB are identified, classified and managed through environmentally sound procedures and practices.

2.0 Scope

This procedure applies to solid and liquid wastes being generated within ADB. It covers:

- Waste Classification and Segregation
- Waste Collection, Handling and Storage
- Waste Recording, Transfer and Disposal

This procedure does not cover damaged and/ or old (obsolete) electrical and electronic equipment, which currently are being disposed in accordance with ADB's accounting procedure. Refer to OP-AB-1.01 Asset Management

3.0 Definition of Terms

- 3.1 Biodegradable waste waste materials that can be reduced into finer particles (degraded or decomposed) by microbial organisms or enzymes; domestic type of generated waste from kitchen, canteen, and refuse from gardening or landscaping or similar materials, e.g., food refuse, garden refuse, paper, carton boxes and tissue paper
- 3.2 **Hazardous waste** solid waste or combination of waste which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; or pose a substantial or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed, i.e., STP sludge, used oil, contaminated materials, used batteries, spent chemicals, etc.
- 3.3 **Infectious waste** solid wastes which may cause human disease and may reasonably be suspected of harboring human pathogenic organisms, or may pose a substantial threat or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of or otherwise managed.

Prepared by	Reviewed by	Approved by
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	E ² HS MANAGEMENT SYSTEM SECRETARIAT/	MANAGEMENT REPRESENTATIVE FOR
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- 3.4 **Non-biodegradable waste** waste materials that cannot be easily decomposed by natural influences like biological action or sunlight, e.g., used plastic packaging materials, candy wrappers and polystyrene materials
- 3.5 **Recyclable waste** any waste material retrieved from the waste stream and free from contamination that can still be converted into suitable beneficial use or for other purposes, including but not limited to newspaper, ferrous and non-ferrous scrap metal, office paper, tin cans, jars, bottles, etc.
- 3.6 **Sanitors** sanitation staff deployed in kitchen and cafeteria in charge of maintaining cleanliness of the area, food containers, dishes and kitchen utensils

4.0 References

- 4.1 DAO 01-34, IRR of RA 9003, Ecological Solid Wastes Management Act
- 4.2 DAO 13-22, Revised Procedures and Standards for the Management of Hazardous Wastes
- 4.3 DAO 92-29, Implementing Rules and Regulations of RA 6969 Control of Toxic Substances & Hazardous Wastes

5.0 Policies and EHS Best Practices

- 5.1 All staff and subcontractors shall be oriented on waste management procedures and the consequences of non-compliance. The ISO Division Representative shall be responsible in disseminating information to all staff within his division. Likewise, the Contract Supervisor shall be in charge of the same for the Contractors' Staff he manages.
- 5.2 Waste should be managed in the following hierarchy:
 - a. Waste minimization through source reduction, process modification and/ or substitution
 - b. Resource recovery, recycling, and reuse of waste
 - c. Efficient collection, proper transfer and transport of waste
 - d. Efficient management of residuals and final disposal
- 5.3 Open burning of generated waste is strictly prohibited.
- 5.4 All waste handlers and other personnel directly dealing with collection and handling of wastes shall be equipped with appropriate PPE and paraphernalia such as, but not limited to gloves, masks and safety boots to protect them from the hazards of handling wastes. Refer to OP-ADB-2.05 Guidelines on the Use of Personal Protective Equipment.
- 5.5 Transfer, treatment and disposal of hazardous wastes shall be through DENR-accredited treaters and/ or recyclers only. For handling and storage requirements, refer to OP-ADB-



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2.04 Guidelines in Handling, Storage, and Use of Hazardous Substances. Note that special wastes shall be handled following the same guideline.

5.6 Only designated personnel shall handle hazardous wastes.

6.0 Details

6.1 Waste Classification and Segregation

- a. All wastes generated by ADB shall be classified and segregated into the following classification (Refer to Section 7.0 Waste Segregation and Disposal Scheme):
 - Biodegradable waste Note that for cafeteria, solid waste segregation scheme is further subdivided into WET and DRY classification.
 - Hazardous waste This shall be collected and stored in secured containers and transferred at the designated hazardous waste storage area.
 - Infectious waste This shall be collected and stored in secured containers and transferred at the designated storage areas. Sharps are to be placed into rigid, puncture-resistant containers.
 - Non-biodegradable waste This shall be collected and disposed daily by a third party service provider.
 - Recyclable waste Office paper, envelopes and folders for re-use shall be contained in a receptacle marked with "Paper for Re-use". Used office paper (both sides are printed), newspapers, magazines and other used paper materials for disposal shall be contained in a second receptacle marked with "Paper for Shredding." A third container marked with "Recyclables" shall be used for other recyclable materials like tin cans, glass jars and plastic bottles. Used carton boxes shall be collapsed and kept in the warehouse/ store for future collection. Condemned equipment and bulky scrap materials shall be labeled as such.
- b. Where practicable, segregation shall be at source, i.e. staff and other concerned personnel shall dispose garbage in designated bins placed at their work areas. Food wastes and packaging materials shall be collected and segregated by Sanitors. Mixed wastes where necessary, shall be further segregated at designated collection and storage areas.
- c. Where practicable, appropriate waste bins with cover shall be provided at designated waste collection areas. The bins shall be labeled according to classification described above.



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- d. Proper housekeeping and orderliness shall be observed in all designated collection points. Where, necessary, collection points shall be sanitized regularly to prevent foul smell. Refer to OP-ADB-2.01 Guidelines for Housekeeping and Safety at Workstations.
- e. The designated janitorial personnel <u>shall monitor waste generation in an area using OP-ADB-2.03F1</u> Daily Generated Waste Recording Form. <u>These reports shall be further consolidated in OP-ADB-2.03F2 Monthly Generated Waste Recording Form</u> for submission to E²HSMS Officer.
- f. Waste generation from food outlets shall be monitored and recorded in the OP-ADB-2.03F4, Weekly Generated Waste Recording Form for Food Services and monthly summary shall be prepared using OP-ADB-2.03F8, Monthly Waste Generation Report for Food Services for submission to E²HSMS Officer.
- g. As part of the Paper Conservation Program, the following waste segregation strategies under the PAPER FOR RECYCLING category shall be implemented:
 - Papers marked confidential shall be the responsibility of Concerned Staff. If desired for shredding, staff shall use the manual shredder at designated areas, or place in a sealed enveloped labeled "FOR SHREDDING."
 - Papers not marked confidential, but with both sides printed, shall go directly to Shredding Room.
 - Papers not marked confidential, but with one clean side, shall be re-used/ re-issued to staff as "draft paper."
- h. OP-ADB-2.03 F6 Waste Segregation Inspection form shall be used by Solid Waste Reduction Committee to verify and monitor the implementation and effectiveness of waste segregation strategies in different areas/ department. Inspection shall be done by Committee members.

6.2 Waste Collection, Handling and Storage

- a. Biodegradable and Non-biodegradable Waste
 - Collection of biodegradable and non-biodegradable waste at designated collection points shall be done daily in the offices and work areas.
 - Plastic bags containing collected waste shall be properly identified according to waste type.
 - Plastic bags shall be properly sealed or tied to avoid attracting flies and to facilitate handling and transfer by the appointed Building and/ or service contractor.



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b. Recyclable Waste/ Scrap Materials

- Collection of recyclable waste shall be at least once a week or more frequent depending on the amount of accumulated waste at the designated collection points.
- Where appropriate, the collected recyclable waste shall be transferred to Scrap Sorting Room (G896), a temporary central storage area until sizeable volume has been accumulated for disposal (selling and/or donation).
- All contractors must correctly segregate scrap materials according to classification during collection. The items must be weighed by classification, if applicable, before turnover to accredited scrap hauler.
- Concerned contractors shall deposit scrap materials in designated boxes in the Sorting Room.

Only the following items are accepted:

Metal scrapAluminum cans

- Old carton boxesPlastic bottles
- Wires and cablesWood palletPlastic scrap
- Old newspapers/publications
- Glass bottles
- Paper (white, colored, glossy)

Items NOT accepted are:

Garbage Wood Scrap¹
- Used tissue paper

Coffee cupsSpoiled foodOthers

Hazardous Materials²:
- Bulbs and lamps

- Chemical containers (in can or plastic)

- Contaminated rags

Used filtersBatteries

The Guard-on Duty or Shift Engineer can grant access to the Sorting Room when no HMR Personnel is present.³ No item must be left outside the door to the Sorting Room. The person requesting entry to the Sorting Room must fill out the logbook listing down the required information, prior to release of the key by the Guard-on-Duty or the Shift Engineer.

Sample Entries:

Ī	Date/Time	Printed Name &	Company/	Area of Origin of	Item Description	Quantity	Shift Engineer or
Ì		Signature	Department	Items Deposited			Guard-on-Duty
Ī	29-Oct-04/ 12:30PM	Johnny Thor	EGSI	5/F South	Waste paper	1 cart	Tom Cruz
Ī	09-Nov-04/ 10:45PM	Mike Mechanic	СРМІ		Scrap metal	1 box	M. Mosqueda
L					-		

Wood scrap shall be deposited in the designated area near the gasoline station (c/o Landscaping Maintenance).

(i.e. on break, on Sundays or holidays, after-office hours, etc.)

² Hazardous Materials shall be sent to the chemical storage near the gasoline station (c/o OHS Officer).



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c. Hazardous Waste

- Busted or damaged bulbs and dry cell batteries generated at ADB shall be put in plastic bag and stored in the hazardous waste area. Bulbs shall be prevented from breaking during handling and storage.
- Containers of hazardous waste shall be labeled in accordance with the requirements of <u>DAO 13-22</u>, <u>Revised Procedures and Standards for the Management of</u> Hazardous Wastes. The prescribed label is presented below.

<u>HAZARDOUS WASTE</u>					
Waste Information	HW Class and No	Name of the hazardous waste class as specified in the revised Table 1. Chapter 2 of the Procedural Manual			
	Characteristics & Form	Toxic, Corrosive, Flammable, Explosive, reactive and/ or Infectious			
	<u>Volume</u>	Volume of the hazardous waste contained in the vessel, container, tank or containment building			
	Packaging date	Date on which the hazardous waste is packed in the vessel, container, tank or containment building			
	Shipping date	Date on which the hazardous waste must be removed from the storage area and transported offsite, if applicable			
	Waste transport record number	Manifest number if transported offsite			
Generator Information	ID Number	ID number issued by DENR upon registration			
	<u>Name</u>	Name of the waste generator (company name)			
	<u>Address</u>	Address of the waste generator			
	Telephone #	<u>Telephone number of the waste generator</u>			
	<u>Fax #</u>	Fax number of the waste generator			
	Name of HWMS or PCO	Name of Hazardous Waste Management Supervisor or the PCO			

- o The minimum size of the label is 20cm X 30cm.
- At a minimum, storage facilities shall meet the following requirements:
 - Be accessible in cases of emergency and for purposes of inspection and monitoring;
 - Be enclosed but adequately ventilated;
 - Have floors that are impermeable to liquids and resistant to attack by chemicals, not slippery, and constructed to retain spillages;
 - Be properly secured and not easily accessed by unauthorized persons;



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- Have provision for proper waste segregation in accordance with their chemical properties and waste types;
- Have provision for proper drum handling and storage;
- Have full emergency response equipment corresponding to the class of wastes being stored and associated potential emergencies.
- Empty ink and toner cartridges shall be kept in their original packaging for protection.

d. Infectious Waste

- Sharps and other infectious wastes generated at the Medical Services area shall be contained in a "sharps collector" which ensures secure storage, that is, the container cannot be opened once sealed. Collection of infectious waste by the Contractor shall be at least once a week or more frequent depending on the amount of accumulated waste at the designated collection points.
- Sanitary napkin bins shall be provided for every cubicle of Ladies' Comfort Room.
 Collection of infectious waste shall be at least once a day or more frequent depending on the amount of accumulated waste at each bin.

6.3 Waste Monitoring, Transfer, and Disposal

- a. Monitoring and Transfer
 - The designated personnel per area shall transfer generated hazardous wastes to the centralized Hazardous Waste Storage Area (HWSA), using the properly completed OP-ADB-2.03F3 Hazardous Waste Turnover Form. No hazardous waste shall be accepted for storage without the properly noted Hazardous Waste Turnover Form by the OHS Officer. The E²HSMS Officer shall ensure that the recorded inventory of hazardous wastes tally with the inventory by regularly updating OP-ADB-2.03F5 Hazardous Waste Monitoring Form.
 - Where practicable, recyclable and hazardous wastes generated at ADB offices and in other operational areas, shall be transferred to the HWSA for proper temporary storage and/ or final disposition.
 - The warehouse personnel in-charge shall be responsible in the physical inventory and safekeeping of wastes, especially the hazardous wastes stored in the designated HWSA.
 - The ISO Secretariat shall consolidate the waste monitoring data on a monthly basis using the OP-ADB-2.03F2 Monthly Generated Waste Recording Form.



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 ADB shall require its subcontractors (see OP-PC-1.01 Guidelines on Institutional Procurement of Goods and Services) to utilize transporters duly authorized by the DENR to transport and treat hazardous waste. Subcontractors shall submit to ADB the completed Waste Manifest and a copy of the Clearance to Transport Hazardous Waste.

b. Waste Treatment and Disposal

- Biodegradable and non-biodegradable wastes shall be disposed by the appointed relevant service contractor.
- Recyclable/ reusable waste shall be either sold to DENR-accredited service contractor, recyclers or donated to charitable institutions.
- Supplier Returnable Materials ADB shall ensure that collection and transport are in accordance with the legal requirements, i.e., where practicable, containers are labeled, storage and transport is secured, and appropriate PPE are used during handling.
- For hazardous waste that can be reused or recycled, buyers or treaters shall be required to provide ADB the details of their operation, methods on waste treatment, storage and disposal, including a copy of their DENR accreditation. Where appropriate, buyers of hazardous waste must be informed of the "Dos and Don'ts" associated with the wastes.
- Treatment before Disposal/ Discharge the treatment technology to be used, at minimum, shall satisfy applicable legal requirements.
 - Wastewater generated at the ADB Headquarters shall go to the Sewage Treatment Plant before discharge or reuse as irrigation water.
 - Empty containers where practicable, these shall be returned to suppliers. Otherwise, these shall be drained-off, washed and kept for possible re-use or donation or selling to recyclers/ scrap management services.
 - Used batteries and light bulbs, oil containers, oil-contaminated rugs, used filters and empty containers of toxic chemicals shall be accumulated at hazardous waste area, and collected for transport to hazardous waste treatment facility.



Title of Manual

Best Practices and Operation Procedures Manual - Part I

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transfer, PPE and absorbents

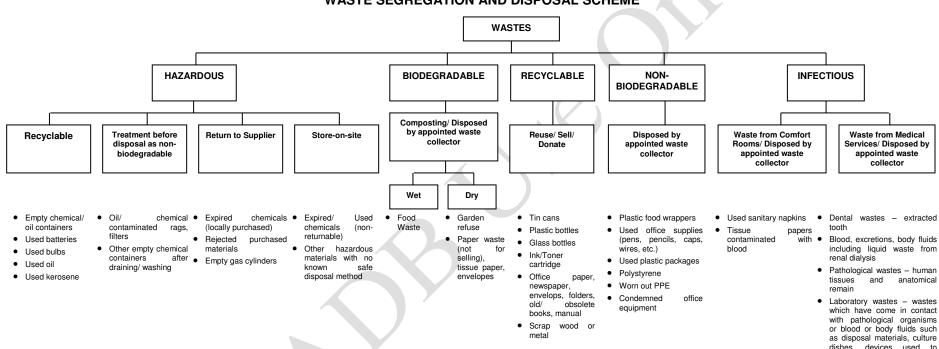
Sharps – syringes, needles, razor blades, scalpel blades, glass slides, glassware, pipettes and pipette tips

Scrums and vaccines

Materials from spill clean ups

7.0 Relevant Information

WASTE SEGREGATION AND DISPOSAL SCHEME



Note: 1. All wastes for selling/ donation shall be collected/ handled by the Asset Management Unit (AMU)



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8.0 Forms

OP-ADB-2.03 F1 Daily Generated Waste Recording Form

OP-ADB-2.03 F2 Monthly Generated Waste Recording Form

OP-ADB-2.03 F3 Hazardous Waste Turnover Form

OP-ADB-2.03 F4 Weekly Generated Waste Recording Form for Food Services

OP-ADB-2.03 F5 Hazardous Waste Monitoring Form

OP-ADB-2.03 F6 Waste Segregation Inspection Form

OP-ADB-2.03 F8 Monthly Waste Generation Report for Food Services

9.0 Revision History

Revision No	Brief Description	DRR No	Effective Date
9	Update of Definition of Terms, Revision of Policies and EHS Best Practices, Update of footnotes	11-640	19-Aug-2011
8	Update of applicable operating procedures and details in handling infectious waste, wastewater and hazardous waste; Inclusion of a legal requirement (DAO 04-36); Deletion of form OP-ADB-2.3 F7 Daily Solid Waste Disposal Slip; Inclusion of new form OP-ADB-2.03 F8 Monthly Waste Generation Report; Revision of forms to update document code (OP-ADB-2.03)	08-414	20-Oct-2008
7	Definition of special waste was added	07-282	04-July-2007
0	Part of the initial manual issued	-	01-Jul-2003