

National Manual of Assets and Facilities Management

Volume 6, Chapter 22

Waste Management Plan for Municipalities

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Waste Management Plan for Municipalities

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Waste Management Plan for Municipalities

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1.0 PURPOSE

Waste is a substance or object that is no longer part of the normal commercial cycle or chain of utility. Irrespective of its processing method, waste has the potential to pollute land, air, and water. Due to its hazardous nature, waste generated by municipalities has the potential to cause harm to people and the environment, if not managed correctly. It is therefore essential to have robust measures in place which govern the processing of waste.

The purpose of this document is to guide the Entity in preparing its own Entity-specific Waste Management Plans by using the Waste Management Plan Template contained within Attachment 4.

This document is specifically intended for use by Facility Management (FM) personnel, but should also be read and understood by all personnel involved in the management of waste such that it can be suitably applied at all levels of the organization.

2.0 SCOPE

A Waste Management Plan represents the application of the Waste Management Procedure. The objective of having a robust Waste Management Procedure and associated Plan in place is to contribute to the Entity's sustainability strategy and to promote cultural change.

The municipal facility's Waste Management Plan shall demonstrate application of the Hierarchy of Waste (Reduce – Reuse – Recycle – Recover – Dispose). It shall also feature as a minimum:

- Schematics for Work Areas
- The approach to waste segregation, collection, transportation, storage, sorting, and recycling
- Roles and responsibilities of staff
- Work Instructions
- Resources required to deliver the plan (e.g. finances, time, equipment, and personnel)
- Emergency Actions

This document includes reference to some forms of Hazardous Waste such as Batteries, Luminaires, Oils (mineral and synthetic), or any other waste identified as hazardous under a Control of Substances Hazardous to Health (COSHH) Assessment that is not classed as Medical Waste, Healthcare Waste, or Clinical Waste.

This document does not include reference to Medical Waste, Healthcare Waste, or Clinical Waste such as Cytotoxic/Cytostatic Waste, or Pharmaceutical Waste. For guidance regarding such waste, refer to National Manual for Assets and Facilities Management (NMA&FM), Volume 6, Chapter 22 – Waste Management Plan for Healthcare Facilities – EOM-ZM0-PL-000080 and its associated Waste Management Procedure (Volume 5, Chapter 17, EOM-ZO0-PR-000077).



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3.0 DEFINITIONS

Table 1 contains definitions of common terms extracted from applicable laws cited within Section 4 (References), as well as additional terms which feature as part of guidance contained within this document.

Term	Definition
Controlled Waste	Controlled Waste is waste that is subject to legislative control under the laws of the Kingdom of Saudi Arabia
Duty of Care	Applies to any Producer of Controlled Waste. Bodies subject to the Duty of Care must identify each Waste Stream, describe the waste, and ensure its processing in line with legislation
FM Provider	Facility-appointed Contractor
Producer	Any person, company, or Entity whose activity leads to the production of waste
Segregation	Segregating Waste Streams in bags and containers allocated for them, starting from the point of producing them in the facility and through the stages of their on-site collection, packing, storage, and transportation
Hazardous Waste	Waste such as solvents, waste oil, and metal can be recovered and recycled. Some Hazardous Waste can be incinerated, usually with other fuel, to generate power. Specialist incinerators are used for this purpose and are subject to strict emission control
Transporter	The natural or juridical person (company or public or private establishment) who works in the field for the transportation of waste to the Waste Processing Facility
Toolbox Talk	A group discussion that focuses on a particular safety issue, usually at the point of work
Transportation Document	Extract contained within Attachment 4 – EOM-ZM0-TP-000083 – Waste Management Plan Template for Municipalities. For full version, request Document Number EOM-ZO0-TP-000067 from Expro
Waste	A substance or object that is no longer part of the normal commercial cycle or chain of utility
Abbreviations	
COSHH	Control of Substances Hazardous to Health
CRC	Carbon Reduction Commitment Energy Efficiency Scheme
EPR	Exempt Position Request
ESOS	Energy Savings Opportunity Scheme
EWC	European Waste Catalogue
FM	Facilities Management
GCC	Gulf Cooperation Council
HSE	Health, Safety, and Environment
H&S	Health and Safety
ISO	International Organization for Standardization
LED	Light-Emitting Diode
MOH	Ministry of Health
MOMRA	Ministry of Municipal and Rural Affairs
NA	Not Applicable
NMA&FM	National Manual of Assets and Facilities Management
PPE	Personal Protective Equipment
SLA	Service Level Agreement
USB	Universal Serial Bus
WEEE	Waste Electrical and Electronic Equipment
WMC	Waste Management Committee

Table 1: Definitions



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4.0 REFERENCES

- EOM-ZO0-PR-000080 – NMA&FM Volume 5, Chapter 17: Waste Management Procedure for Municipalities
- EOM-ZM0-PL-000080 – NMA&FM Volume 6, Chapter 22: Waste Management Plan for Healthcare Facilities
- EOM-ZO0-PR-000077 – NMA&FM Volume 5, Chapter 17: Waste Management Procedure for Healthcare Facilities.
- EOM-ZN0-PR-000002 – NMA&FM Volume 17, Chapter 2: Sustainability Procedure
- EOM-ZE0-PL-000001 – NMA&FM Volume 14, Chapter 2: Emergency Management Plan
- EOM-ZE0-PR-000002 – NMA&FM Volume 14 Chapter 2: Emergency Management Exercise & Drills
- International Organization for Standardization (ISO) Quality Management Systems (9001:2015)
- Gulf Cooperation Council (GCC) Uniform Law for Medical Waste Management (amended in Jumada Thani 1440H/February 2019). KSA, Ministry of Health (MOH) – Laws and Regulations
- Gulf Cooperation Council (GCC) Uniform Law for Municipal Solid Waste Management, Rabi' al-Awwal 1437H. KSA, Ministry of Municipal and Rural Affairs (MOMRA) – Laws and Regulations
- International Organization for Standardization (ISO) 14001: 2015, Standard for Environmental Management Systems

5.0 RESPONSIBILITIES

Role	Description
The Entity	The body which controls activities which take place across all facilities shall ensure that: • A Waste Management Policy is established and maintained • All persons within the Entity (i.e. Senior Leadership Team, FM, first aiders, Waste Handlers, and Cleaning Staff) comply with the Policy, and associated Waste Regulations • Systems are in place to monitor compliance and report progress
Facility Director	The Facility Director is responsible to: • Implement the Entity's Waste Policy and associated procedures • Ensure that no conflict exists between any appointed Contractor's Waste Policy and procedures, and those of the Entity • Ensure all parties within the Facility are managing their waste as per Gulf Cooperation Council (GCC) Laws
FM Provider	The Entity-appointed Contractor shall: • Ensure compliance with waste storage, handling, and disposal practices, and with the requirements of statutory legislation, and facility and appointed Contractor local policies and procedures • Train staff on appropriate infection control and safety issues of waste, which include specific induction training. • Ensure formal written Risk Assessments are carried out on any waste-handling procedures posing a significant risk to staff or others • Ensure staff involved in waste handling as part of their normal duties has received the appropriate information, instruction, and training • Monitor its staff to establish compliance with policies, procedures, and safe systems of work
Waste Management Committee	It is comprised of representatives from senior management who generate waste; Waste Handlers; infection control, procurement and stores, catering, and long-term or resident Contractors; and Waste Management Service Providers. This committee should meet monthly to discuss the key performance indicators (e.g. volume of waste generated, hazardous versus general waste ratio, incidents, and audit findings) and to plan awareness programs and other initiatives to improve compliance with legal and other requirements.



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Procedure Review Board	Group of technical and executive personnel responsible for writing, reviewing, updating, and approving plans and procedures
Waste Management Officer	Responsible for ensuring that waste is managed according to legal and other requirements, checking that standards are maintained, everyone is aware of these requirements, relevant personnel are appropriately trained to safely deal with waste in their areas, and necessary data are recorded and transmitted to the Waste Management Committee (WMC) and regulatory authorities
Waste Handlers	Ensures that waste in the intermediate storage areas is properly segregated, contained, and labeled. Any problems noted must be immediately brought to the attention of the responsible person in that area
Health and Safety (H&S) Officer	The H&S Officer shall oversee activities at Waste Collection/Storage/Recycling Points alongside the Waste Management Officer, ensuring that: • Access is possible by appropriate vehicles to collect and remove waste to the correct facility • Points are accessible and resilient in case of emergency and for purposes of inspection and monitoring • All containers therein shall be checked regularly for leaks • Staff and Contractors are operating in a safe manner in accordance with Operating Procedures
Contractors	Ensure that its staff is aware of, and trained to comply with Waste Management requirements, routinely checking to ensure standards are maintained
All Staff	First aid shall be carried out only by qualified First Aiders. All employees are responsible for working safely and ensuring the safety of themselves and others through the application of safe system of work when handling, transporting, and storing waste

Table 2: Responsibilities



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6.0 PROCESS

Using the municipal facilities Waste Management Matrix Template (Attachment 1) as a basis for collaborative discussion, the Plan Writer shall facilitate a Kick-off Workshop in which collaborators shall, as a minimum:

- Agree upon the purpose of the plan (Aims, Key Components, and Outcomes)
- By means of a Flow Chart, define a Process which shall drive the Plan (i.e. outline the steps which the Procedure should follow)
- Complete the Waste Management Plan Template

The Plan Writer shall record Minutes of Meeting for later review to support in drafting the Plan, and for Quality Audit purposes.

6.1 Preparation

The Entity's Waste Management Plan should be written in line with the process outlined in Figure 1 (below).

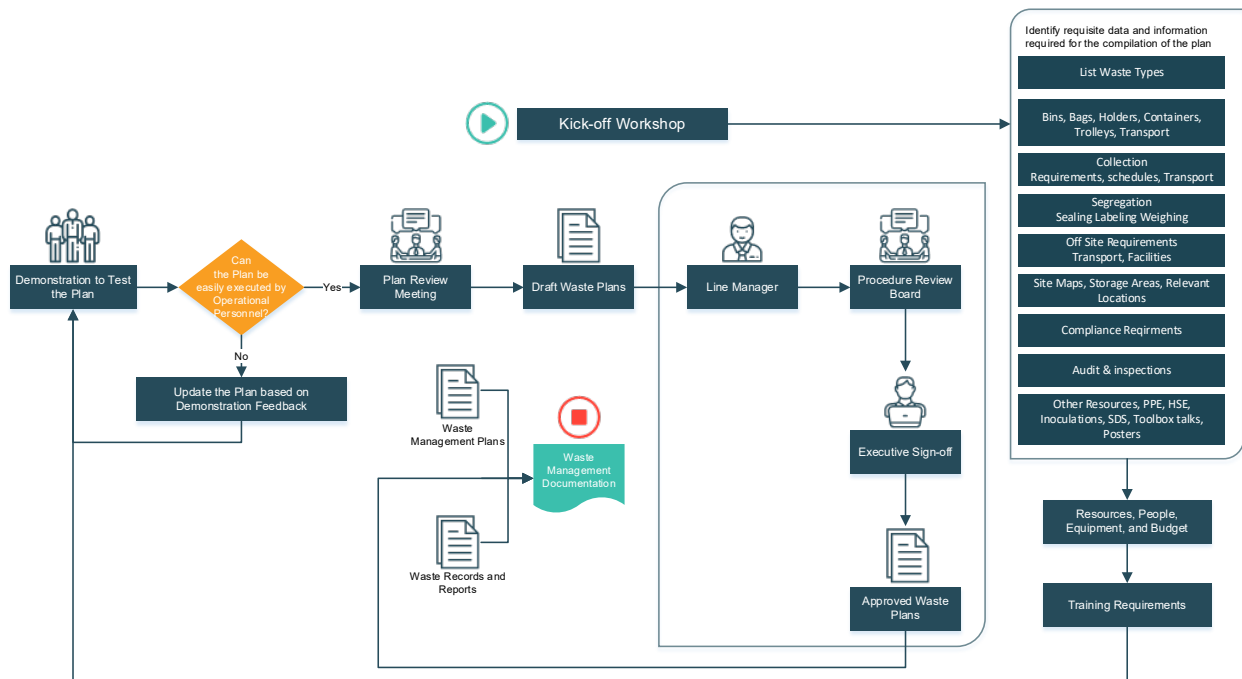


Figure 1: Waste Management Plan Preparation Process

6.2 Creating a Waste Management Plan for Municipalities

6.2.1 Targets and Strategies

Targets and strategies within a Waste Management Plan should include the methods for achieving them, communicating progress, and a mechanism for continuous improvement. Targets shall be suitably quantified to inform Key Performance Indicators (KPIs) and shall aid waste reporting. Targets contained within a Waste Management Plan may include, for example:

- Reducing the volume of total waste generated by the Entity, year-on-year
- Improving recycling/reuse rates
- Achieving best-practice certification and reporting compliance
- Establishing a Waste Management value chain involving materials, Contractors, and transportation



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Producers of waste should work on reducing the rate of waste production through waste initiatives which helps drive the Waste Policy and deliver cultural change, for example by:

- Adopting clean technology
- Selecting alternative materials which reduce the likelihood of impact to the environment and public health
- Establishing intra-departmental incentive schemes which offer rewards for minimizing waste production

Further suggestions are found within NMA&FM – Volume 17, Chapter 2 – EOM-ZN0-PR-000002.

6.2.2 Roles and Responsibilities

Roles and responsibilities shall be established for each category of personnel generating waste (Producers) or involved in its processing.

6.2.3 Implementation Plan

The Waste Compliance Matrix Template (Attachment 2) and Waste Generators Chart Template (Attachment 3) have been designed to support the Entity in generating a detailed Waste Management Plan which shall:

- Categorize site-specific types of waste
- Utilize the Hierarchy of Waste, (Reduce – Reuse – Recycle – Recover – Dispose)
- Emphasize use of Waste Streams
- Describe site-specific storage locations
- Describe site-specific responsibilities
- Detail waste collection frequencies

A Planning Workshop attended by key personnel and led by the Plan Writer shall enable completion of the Waste Management Plan by using the Attachments to drive progress.

6.2.4 Resources

Resource requirements shall form a critical part of Waste Management planning process. Resources may include people, or equipment. A detailed resource planning exercise will help to inform annual budgeting requirements.

6.2.5 Training Requirements

The Entity shall establish a Training Matrix (departments, categories of personnel, training requirements, frequency of training, and internal and external training Service Providers) and training records to feature as part of a Training Plan.

A Training Plan may include a schedule of themes for the year, with resources (pamphlets, posters, electronic information, and toolbox talks) to raise awareness regarding waste-related issues that will help to improve Waste Management in the facility.

Resources used to deliver training and promote awareness shall depend on factors including target audience and budget. Simple, clear messaging is essential, preferably using pictures and photos to convey information.



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6.2.6 Documentation

A centralized filing system compliant with ISO 9001:2015 shall be established by the Entity containing, as a minimum:

- Waste Management documentation (procedures, training and awareness, signage, Contractors, and authorizations)
- Details of waste storage, collection, transport, transportation certificates, treatment and disposal
- A site map highlighting waste receptacles, Waste Hold Areas, centralized storage areas, and other relevant locations
- Compliance requirements
- Auditing and inspection procedures and schedules

6.2.7 Operator Aids

Site-specific posters shall be strategically placed throughout the facility showing Waste Management requirements for specific Waste Streams, and how to ensure proper segregation, correct containment, and compliance with handling and storage requirements.

6.2.8 Incident Management and Reporting

When preparing Waste Management Plans for municipalities, FM shall have in place the following associated with incident management and reporting:

- Procedures and associated documentation (such as incident registers, reports, follow-up audits, and work instructions) for hazardous spills, incident analysis, and trend reporting
- Emergency response including desktop and live simulations to test awareness and compliance. Refer to EOM-ZE0-PR-000002 – NMA&FM Volume 14 Chapter 2: Emergency Management Exercise & Drills (14.2.3)
- Contingency plans for dealing with emergency or abnormal situations, such as an incident that causes a surge of waste that could exceed a facility's capacity. Examples include:
 - Breakdown of the off-site Processing Facility, or transportation system, which may lead to the requirement for additional storage of waste. Refer to EOM-ZE0-PL-000001 – NMA&FM Volume 14 Chapter 2: Emergency Management Plan (14.2.2)

7.0 ATTACHMENTS

Attachment 1: EOM-ZM0-TP-000080 – Waste Management Matrix Template

Attachment 2: EOM-ZM0-TP-000081 – Waste Compliance Matrix Template

Attachment 3: EOM-ZM0-TP-000082 – Waste Generators Chart Template

Attachment 4: EOM-ZM0-TP-000083 – Waste Management Plan Template



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Attachment 1 – EOM-ZM0-TP-000080 – Waste Management Matrix Template for Municipalities

Waste Management Plan for <insert name of Municipal Facility>						
Last revision date:						
Type of waste	Waste Hierarchy					Other comments
	Reduce/Reuse		Recycle/Recover/Dispose			
	Action to reduce or reuse Waste Stream	Responsibility	Action to recycle or recover Waste Stream?	Storage location	Responsibility	
Hazardous	Place waste type poster adjacent to each bin to direct users to use the correct bin for each waste type	Facility Manager	Dispose	Laboratory	Laboratory Employees and users	
Paper waste	Reduce: Set printers to default double-sided printing	IT/Office Manager	Recycle	Paper recycling bins adjacent to printers and large wheelie bins in central hold area	Office Manager	Confidential paper waste to be disposed of in Confidential Waste bins
Food waste	Not Applicable (NA)	NA	Recover: Segregate from non-recyclable Waste Stream and introduce food waste bins	Local Bins Restaurant areas	Catering Contractor	Remove daily to ensure that there are no issues with smells
Lighting waste	Reduce: Introduce Light-Emitting Diode (LED) lights with longer life	Engineering Manager	Waste tube/box/coffin lighting	Engineering room	Engineering	Phased introduction/assists wider organizational commitments/targets such as Carbon Reduction Commitment Energy Efficiency Scheme (CRC), Energy Savings Opportunity Scheme (ESOS) compliance, and carbon reduction per head



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Attachment 3 – EOM-ZM0-TP-000082 – Waste Generators Chart Template for Municipalities

LOCATION	Municipal Solid Waste (MSW)	Recycling Waste										Hazardous Waste			
		Paper	Aluminum Cans	Cardboard	Toner Cartridges	Furniture	Clothing	Electric and Electronic	Landscape Waste	Food Waste (Bulk)	Used Cooking Oil	Feminine Hygiene Waste	First Aid Waste	Batteries	Luminaires
East Corridor Bathroom	X											X			
Head Office	X	X	X	X	X	X		X					X	X	X
Recreation Center	X	X	X	X				X	X	X	X	X	X	X	X



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Attachment 4 – EOM-ZM0-TP-000083 – Waste Management Plan Template for Municipalities

Document Details			
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CONTENTS

INTRODUCTION

This plan describes how waste products are stored, collected, and disposed of in line with contractual and legal requirements.

This plan will cover the following Waste Streams to ensure correct: segregation, use of Waste Hold Areas, internal movement, and internal storage. The plan focuses primarily on the following streams:

- *Clear Waste Stream – Municipal Solid Waste*
- *Black Waste Stream – Bulk Food Waste*
- *Green Waste Stream – Recyclable Waste*
- *Blue Waste Stream – Confidential Waste*

Hazardous Waste Streams shall be managed through Service Level Agreements (SLAs) set up between the Entity and Waste Contractors.

OBJECTIVE

To define and optimize the process by which waste is managed within Entity-controlled areas such that waste will be handled, stored, collected, and disposed of in line with contractual and legal requirements.

- *Maintain a Duty of Care from point of generation to point of final disposal, thus ensuring disposal by the most appropriate means*
- *Comply with Health, Safety, and Environmental (HSE), and waste-related legislation while reviewing and maintaining practices at all times in line with latest regulation and best practice*
- *Provide staff with clear and easily accessible guidance in the safe handling and disposal of waste in line with safety and infection control requirements*
- *Identify specific roles and responsibilities within its organizational structure for the effective management of waste*
- *Identify resources required to meet the objectives of this plan*
- *Minimize the impact that a business activity has on the environment through sustainable management*
- *Minimize risk to staff and visitors from exposure to hazardous or potentially Hazardous Waste*
- *Actively seek out opportunities to minimize waste at source and to reuse/recycle waste where possible*
- *Constantly strive to improve environmental performance through Risk Assessment, target setting, auditing, and periodic reviews of current practices*
- *Ensure consistency of approach to Waste Management throughout the Facility, whilst providing a flexible framework to accommodate the needs of individual sites/departments*

RESPONSIBILITIES

Role	Description
The Entity	The body which controls activities which take place across all facilities shall ensure that: • A Waste Management Policy is established and maintained • All persons within the Entity (i.e. Senior Leadership Team, FM, first aiders, Waste Handlers, and Cleaning Staff) comply with the Policy, and associated Waste Regulations • Systems are in place to monitor compliance and report progress
Facility Director	The Facility Director is responsible to: • Implement the Entity's Waste Policy and associated procedures • Ensure that no conflict exists between any appointed Contractor's Waste Policy and procedures, and those of the Entity



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	Ensure all parties within the Facility are managing their waste as per Gulf Cooperation Council (GCC) Laws
FM Provider	The Entity-appointed Contractor shall: - Ensure compliance with waste storage, handling, and disposal practices, and with the requirements of statutory legislation, and facility and appointed Contractor local policies and procedures - Train staff on appropriate infection control and safety issues of waste, which include specific induction training. - Ensure formal written Risk Assessments are carried out on any waste-handling procedures posing a significant risk to staff or others - Ensure staff involved in waste handling as part of their normal duties has received the appropriate information, instruction, and training - Monitor its staff to establish compliance with policies, procedures, and safe systems of work
Waste Management Committee	It is comprised of representatives from senior management who generate waste; Waste Handlers; infection control, procurement and stores, catering, and long-term or resident Contractors; and Waste Management Service Providers. This committee should meet monthly to discuss the key performance indicators (e.g. volume of waste generated, hazardous versus general waste ratio, incidents, and audit findings) and to plan awareness programs and other initiatives to improve compliance with legal and other requirements.
Procedure Review Board	Group of technical and executive personnel responsible for writing, reviewing, updating, and approving plans and procedures
Waste Management Officer	Responsible for ensuring that waste is managed according to legal and other requirements, checking that standards are maintained, everyone is aware of these requirements, relevant personnel are appropriately trained to safely deal with waste in their areas, and necessary data are recorded and transmitted to the Waste Management Committee (WMC) and regulatory authorities
Waste Handlers	Ensures that waste in the intermediate storage areas is properly segregated, contained, and labeled. Any problems noted must be immediately brought to the attention of the responsible person in that area
Health and Safety (H&S) Officer	The H&S Officer shall oversee activities at Waste Collection/Storage/Recycling Points alongside the Waste Management Officer, ensuring that: - Access is possible by appropriate vehicles to collect and remove waste to the correct facility - Points are accessible and resilient in case of emergency and for purposes of inspection and monitoring - All containers therein shall be checked regularly for leaks - Staff and Contractors are operating in a safe manner in accordance with Operating Procedures
Contractors	Ensure that its staff is aware of, and trained to comply with Waste Management requirements, routinely checking to ensure standards are maintained
All Staff	First aid shall be carried out only by qualified First Aiders. All employees are responsible for working safely and ensuring the safety of themselves and others through the application of safe system of work when handling, transporting, and storing waste



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REFERENCES

- Add site-specific references here
- Add Entity-specific references here
- Add sector-specific references here
- Add latest legislation here

DEFINITIONS

Term	Definition
<i>Food Waste: Black Waste Stream</i>	<i>All waste which can be classified as Food Waste is produced in bulk from kitchen facilities. Black Bags are used to identify this Waste Stream, which can be disposed in landfill if the Entity is unable to find a suitable off-taker (e.g. Energy from Waste Plant, composting facility)</i>
<i>Solid Municipal Solid Waste: Clear Waste Stream</i>	<i>All waste which is not subject to special requirements. Clear Bags are used to identify this Waste Stream, which can be disposed in landfill if the Entity is unable to find a suitable off-taker. However, all possible efforts should be made to reduce the amount of MSW and divert this stream from landfill.</i>
<i>Recyclable Waste: Green Waste Stream</i>	<i>The facility produces waste which can be classified as Recyclable Waste. This type of waste can be sent for sorting and processing. Green receptacles are used to identify this Waste Stream. Recyclables include:</i> • Clean aluminum cans • Clean cardboard • Clean paper • Clean plastic bottles • Clean steel cans • Junk Mail (with any plastic wrapping removed) • Magazines • Newspapers
<i>Confidential Waste: Blue Stream</i>	<i>A blue wheeled bin, lidded and sealed, displaying the words Confidential Waste for Shredding or similar. The containers are locked and sealed shut to ensure there is no breach of confidentiality. The bins will be placed as close to the areas that generate Confidential Waste as is reasonably practicable but will not be located in every room or office</i>
<i>Hazardous Waste</i>	<i>Included in this category are:</i> • Batteries and Accumulators, e.g., Lead-acid, magnesium, alkaline, zinc oxide, nickel-cadmium • Chemical waste, e.g., used formalin, mercury • Luminaires • Oils (mineral and synthetic) • Photographic Chemicals, e.g., developers, activators, neutralizers, fixers • Any other waste identified as hazardous under a COSHH assessment that is not classed as Medical Waste
<i>Other Waste</i>	<i>Waste which is not covered by specific plans may still require controlled disposal. Contact the Contractor Helpdesk for advice</i>



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WASTE GENERATION SOURCES

The following Waste Streams have been identified as the primary source for each functional area.

LOCATION	Municipal Solid Waste (MSW)	Recycling Waste								Hazardous Waste					
		Paper	Aluminum Cans	Cardboard	Toner Cartridges	Furniture	Clothing	Electric and Electronic	Landscape Waste	Food Waste (Bulk)	Used Cooking Oil	Feminine Hygiene Waste	First Aid Waste	Batteries	Luminaires
						</									

WORK INSTRUCTIONS

Sealing and Labelling

Waste generated by the facility must be securely sealed and labelled upon removal from the bag holder. The requirements which must be met are as follows:

- Sealing and labelling must occur immediately upon removal of the bag from the bag holder prior to it being deposited at the local storage point for collection
- Bags must not be filled to more than 75% full prior to sealing
- Sealing must form a leak-proof closure on the bag. This will be achieved using the swan neck technique prior to attaching the tape
- Time and date of assembly must be included

Sealing and labelling of bags must only be carried out by staff who have received the appropriate training and instruction – training must pay particular attention to the different types of waste and the need to ensure correct segregation. Anyone who is dealing with waste who has not received adequate training must seek further advice from Line Manager before proceeding.

Local Storage Waste

Every Entity temporarily storing waste in the facility until their transportation to the off-site Waste Processing Facility shall establish a centralized waste storage location which shall be:

1. Located in a firmly-sealed building equipped with means of preventing the permeability of water and rain, the spread of unpleasant odors, and the entering of rodents, insects, birds, and stray animals. It shall have a solid resistant floor that can be washed and disinfected and shall be equipped with appropriately specified drainage
2. Equipped with means of safety and protection against fire
3. Operated by officers specialized in the field of Waste Management



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4. Fitted with luminaires which are suitably specified, resulting in lighting levels which are appropriate for the work environment
5. Equipped with suitably specified air-conditioning devices enabling appropriate ventilation and maintaining a temperature range between 15-18 °C (the period of storing waste shall not exceed 72 hours)
6. Accessed easily for the purpose of storage and transportation of waste, and cleaning
7. Away from food stores, kitchens, and food preparation places
8. Accessible only by authorized personnel
9. Clearly sign-posted, indicating the contents of the location
10. Equipped with a running water source, a washbasin, cleaning tools, and disinfectant materials for daily cleaning, and for cases when waste spills onto the floor (personnel in charge of the location shall establish an emergency plan to handle accidental spillage or scattering of waste)

Requirements of Waste Handlers

The following plans must be adopted by persons handling waste:

Once a bag containing waste is sealed, it must immediately be placed in the appropriate local storage container: bags of waste should not be manually removed or handled again. Such practice must not be conducted in public, or office working areas.

- Care must be taken to minimize the potential for damage to bags or containers
- Manual handling and carrying of bags/containers must be minimized as far as practicable and meet the following criteria
 - Bags must only be handled by the neck above closure point
 - Bags must be carried held away from the body
 - Bags must not be thrown, dropped, or similarly mistreated

The following protective clothing must be worn by persons handling bags waste:

- Heavy duty gloves
- Gowns or overalls impermeable to fluids
- Surgical masks
- Protective footwear, and
- Protective glasses

Uncontaminated Glass

Uncontaminated glass must be placed in a glass storage box. When full, it can be placed in a safe place, ready for collection. After ringing Contractor Helpdesk, ask advice as to where the box should be placed ready for collection. This may be in the closest Waste Hold Area. This glass is then taken to the loading bay where it is deposited into the glass bank by Waste Handlers wearing suitable Personal Protective Equipment (PPE).

Cardboard Boxes

Cardboard boxes should be flattened and then placed next to the large black wheeled bin in the Waste Hold Area, not into the bin. If cardboard is placed into the bin directly, it cannot be segregated when it arrives at the waste dock. This means the cardboard will go to landfill rather than be recycled.



Aerosols

Aerosols should be emptied, and placed in a clear bag.

Recyclables

Waste for recycling shall be maximized so as to divert waste from landfill. Recyclables include:

- *Clean aluminum cans*
- *Clean cardboard*
- *Clean paper*
- *Clean plastic bottles*
- *Clean steel cans*
- *Junk Mail (with any plastic wrapping removed)*
- *Magazines*
- *Newspapers*

Cans and plastic bottles should be rinsed before being placed into the recycling bin.

Separate bins will be provided for recycling; the bins will be identified by a green Recycling label.

Waste which is disposed of into a green 1100-liter bin shall be clean from organic material, and loose – not bagged.

Confidential Waste

This category Includes:

- *Hard drives & Universal Serial Bus (USB) storage devices*
- *Commercially sensitive document*
- *Complaints/litigation information*
- *Staff and public information*
- *Photographs*
- *Staff personal details*

Local Storage and Use

The waste receptacle for Confidential Waste shall be a blue-wheeled bin, lidded and sealed, displaying the words "Confidential Waste for Shredding" or similar.

Hard drives & USB sticks should be disposed of into a suitable container within the FM department until there is sufficient number to justify a collection. When required, contact site Contractor Helpdesk to arrange a collection. The items are to be kept in a secure location until collection and are not to be placed into the blue-wheeled container.

If a need for an additional Confidential Waste bin is identified, then this should be addressed by contacting the Contractor Helpdesk. If a bin is filled before the next scheduled collection, then contact the Contractor Helpdesk.

Collection of Confidential Waste

If Confidential Waste is deposited into the blue Confidential Waste bin by mistake, contact Contractor Helpdesk.



Other Hazardous Waste

Batteries

Used batteries should have the ends taped and then disposed of into a non-metal container. Where there are a larger number of batteries for disposal, the Facility Manager can arrange provision of a suitable container.

Luminaires

Where a luminaire requires replacement, the old fitting will be removed by Contractor and taken to the Waste Hold Area where it will be held until it is transported to an offsite Processing Facility.

Waste Electrical and Electronic Equipment (WEEE)

Disposal of electrical or electronic equipment shall be carried out by the Contractor. Electrical equipment for disposal must be inspected and authorized as being waste by a competent person. Once this is complete, it will be removed by the Waste Handlers. Call the Contractor Helpdesk to request removal.

Feminine Hygiene and First Aid Waste

Feminine Hygiene bins installed within all female toilets shall be collected and replaced periodically by a Contractor.

First Aid Waste generated as a result of qualified first aiders performing first aid shall be placed into yellow bins and removed by a Contractor as and when required.

Other Waste

Waste which is not covered by specific plans may still require controlled disposal. Contact Contractor Helpdesk for advice.

Collection of Waste from Waste Hold Areas

Full waste bins shall be collected from the Waste Hold Area on a scheduled collection system and replaced with empty ones. In accordance with the schedule, designated waste handling staff will manually wheel containers to the nominated collection points inside the service corridor or allocated area. At such points, designated vehicles will collect and transport the waste onward for process/disposal. If a bin is filled prior to the scheduled collection and there is no capacity in other bins in the Waste Hold Area, then advice should be sought from the Contractor Helpdesk.

Bins must be locked prior to removal from the Waste Hold Area, and remain locked during transit to the central storage area. No items are to be transported on top of the bins.

Decanting of waste shall not take place in public areas or in corridors, but may take place in the Waste Hold Area. Waste bags are NOT to be punctured.

Correct manual handling plans should be followed when moving the bins around a facility.

Central Storage and Collection

When in the central storage area, waste shall be further segregated into the correct categories. Waste shall be collected from the central waste storage area on an agreed schedule by the assigned Contractor.



Waste Management Plan for Municipalities

Monitoring Segregation

Each bin received will be opened and visibly checked by Waste Handlers to ensure the correct segregation of Waste Streams is being utilized. If waste is found to be in the wrong Waste Stream, the waste will be decanted into the correct Waste Stream. The area the waste came from will be noted by the Waste Handler and the information passed on to the Line Manager who will inform the relevant area and staff to highlight the problems this could cause.

Collection Schedules

Include collection schedules from Waste Hold Areas and transportation schedules to off-site facilities.

RESOURCES

Personal Protective Equipment

Workers on the transportation of waste shall be obliged to wear PPE (i.e. heavy duty gloves, gowns or overalls impermeable to fluids, surgical masks, protective footwear, and protective glasses). PPE shall be adorned based on a Risk Assessment.

Bags and Containers

Black plastic bag of at least 150 micrometers thickness and a maximum capacity of 100 liters shall be utilized for MSW and shall feature the phrase "Municipal Solid Waste" clearly displayed on the outside of the bag.

Transportation Trolleys

Transportation trolleys shall be:

- Yellow in color
- Made of rust-proof materials
- Resistant to acids and alkalis
- Leak-proof with easy-to-clean surfaces and angles
- Capacity for carrying ten bags at once

Transport trolleys shall not be flat-bed but shall featuring side walls with the phrase "Waste Trolley" clearly displayed on the side walls.

The collection and transportation of waste bags and containers requires the use of trolleys allocated for this purpose and shall be operated by trained staff to guarantee maximum levels of safety during the process of collection and transportation within the facility, so that the contents of the bags or containers will not scatter or leak.

Vehicles

Waste shall be moved around the municipality-controlled area by dedicated transportation trolleys. Trolleys shall be inspected, cleaned, and disinfected after every use.



EMERGENCY ACTIONS

Equipment Failure

Should air cooling or refrigeration fail within the Waste Hold Areas, contact the Facility Manager without delay. Arrangements will be made to repair the equipment and, if required, a temporary storage location will be created.

TRAINING

- *Waste Producers and Waste Handlers shall be given the necessary training for implementing waste policies and plans*
- *Waste Handlers will be trained in waste handling (including manual handling), dealing with waste that is incorrectly sealed, bagged or stored, and dealing with spillages*
- *Staff will be trained on the arrangements for reporting unsafe practices and conditions*
- *Refresher training and toolbox talks will take place at regular intervals. A Toolbox talk example is contained within the Appendix*
- *Staff will be trained in the use and disposal of any PPE and the importance of personal hygiene*
- *Staff to receive instruction and information on the Waste Management process during initial induction and to update on an annual basis, usually, on the following:*
 - *Definitions of the different waste types*
 - *Importance of segregation*
 - *Information on the final destination of the waste types*
 - *Introduction of the Waste Policy*
 - *Labelling requirements for each waste type*
 - *Packaging requirements for each waste type*
 - *Responsibilities of each staff group*
 - *Spillage Plans*
- *Staff should be shown the location of the nearest waste disposal facilities and informed on the location of the keys for Waste Hold Areas and bins therein*
- *Staff to receive training in their work area on local plans, location of bins, how to report any identified problems, or to obtain replacement bins and consumables. Emphasis must be given to the correct segregation of the different waste types and observation of correct plans. Correcting errors where necessary is a vital part of the training process*
- *Waste Handlers are to be given additional training on spillage, the use of PPE, manual handling plans, emergency plans and incident reporting*
- *Domestic staff to be given 'on the job' instruction in locations of Waste Hold Areas for their area and the necessary keys, appropriate waste collection plans, manual handling and spillage plans. Also included should be what to do to obtain additional consumables and arrange for replacing full bins*



DOCUMENTATION

Waste Label

Name of Establishment:
Name of Location (Section, Office, or Area):
Type of Waste: as per the categorization set forth in Article (4)...
Name of the person in charge:
Signature:
Date:
Other information: Weight.....

To be placed on every waste bag/container once sealed and ready for transportation.

SAMPLE



Waste Management Plan for Municipalities

Transportation Forms: Form No. (1)

Application for Off-site Transportation of Waste

Kingdom of Saudi Arabia – Ministry of Health

Identification No. issued by the General Authority of Meteorology and Environment Protection

Directorate/District

Facility

Serial No.

Reference No.

A

Waste Source Certificate:

A.1. The waste, hereunder, have been assembled at for evacuation to

Name: Signature:

Position: Facility Name:

Phone No.: Address:

Waste Collection Date:

A.2. Waste Description (Quantity and Category):

.....

B

Waste Transporter Certificate:

I, hereby, witness that I have received the load of waste and that the information provided in A-(1) and A-(2) are correct and subject to any amendments. I shall give mention of as follows:

.....

This load has been received at

on

Name: Signature: Date:

Truck Number Plate: Phone No.

Name of Transportation Company:

Address:

C

Waste Receiver Certificate

Name and Address of the Establishment (Final Facility):

.....

This load of waste has been brought by truck having plate number at o'clock on and the transporter said that their name is on behalf of and I, hereby, witness that the information provided in A-(2) and amended, if the need arises, in (B) are correct and subject to any amendments. I shall give mention of as follows:

.....

Name: Signature: Position:

Date: Name of Establishment:

D

Treatment Completion Certificate

The above mentioned wastes have been treated using the technique of and have been disposed through

Name: Signature:

Date: Name of Establishment:

(print three copies)



Waste Management Plan for Municipalities

List the Waste Management documentation (procedures, training and awareness, signage, Contractors, and authorizations); details of waste storage, collection, transport, treatment, and disposal; a site map highlighting the storage areas and other relevant locations; compliance requirements; as well as auditing and inspection procedures and schedules.

Monitoring and Reporting

Monitoring for compliance with Waste Management policies and plans will be carried out through inspections by Contractor Helpdesk or in joint coordination with a Facility representative. Non-conformances relating to unsafe working practices must be dealt with immediately.

Duty of Care visits should take place to ensure that third parties involved in the waste disposal process are adhering to the agreed SLA.

APPENDICES

1. Waste Management Environmental Toolbox Talk

Appendix 1 – Waste Management Environmental Toolbox Talk

What?

- Waste is a substance or object that is no longer part of the normal commercial cycle or chain of utility. Waste can be described using terms such as general waste, recyclable waste, Hazardous Waste, medical waste, or electrical or electronic waste
- Waste can cause harm to the environment or human health if it is not managed correctly. We are required to take specific actions to manage waste to prevent harm

Why?

- Waste can cause harm to the environment or human health, if not controlled
- We have a legal 'Duty of Care' to ensure that we produce, store, transport, and dispose of waste without harming the environment. Legislation places specific requirements on how we manage waste. The Entity will face prosecution and fines if we do not meet these requirements
- The cost of disposing of waste is increasing. Reducing waste will save money

Did you know?

The waste hierarchy describes a common approach to reducing our waste. One should think about how we can 'Reduce, Reuse, Recycle, and Recover' our waste before we consider disposing of it.



Waste Management Plan for Municipalities

How?

Managing waste correctly is about having the right facilities to store and dispose of waste, and the right behaviors to encourage reduce, reuse, and recycling of waste.

Do's		Don'ts	
✓	Store waste securely in the correct skip or bin	✗	Don't overfill waste bins
✓	Clearly label waste skips or bins to help with basic waste sorting	✗	Don't place your hands into waste bins without the correct PPE
✓	Segregate Hazardous Waste from non-Hazardous Waste and store them separately	✗	Don't put waste materials in the wrong container
✓	Segregate recyclable waste, where facilities are provided	✗	Don't burn or bury waste – it is illegal
✓	Only use licensed waste carriers to collect your waste	✗	Don't mix up different types of waste – it prevents recycling
✓	Check that your waste is being taken to a licensed facility that is able to accept your specific waste type		
✓	Ensure there is a waste transfer note for general and recyclable waste or a consignment note for Hazardous Waste in place for each waste collection		
✓	Think of ways that you can reduce or reuse your waste		
✓	Protect materials from damage to prevent waste		
✓	Report any incidents of fly tipping or escape of waste as an environmental incident to your supervisor or Health, Safety, and Environment (HSE) Manager		

Questions

- What types of waste does your work activity create?
- Do you know where you can dispose of these? Do you have the right skips/bins for the waste you produce?
- How could you reduce, reuse, or recycle more of the waste?
- If you would like any further information, speak to your local HSE Manager or the Environment, Energy and Sustainability Team.

I have been briefed/read and understood this document and shall abide by the measures described.

Print name: _____

Sign: _____

Date: _____