


| | | |
|--|---|---------------------|
|  | Title: Waste Management Plan | |
| | Type: Non- Restricted\Procedures (SOP/WI/Mg.Proc) | Page 1 of 17 |
| Active Date: 17/11/2021 | Status: Active | Number: SOP-088 |
| Review Date:17/11/2023 | Owner: | Revision: 3 |

SOP-088


Waste Management Plan

Last Review Details – Refer to QPulse for full history

| Review Comments | Review Owner | Date |
|-------------------------------|--------------|------------|
| <QPulse_DocLastReviewDetails> | | 27/11/2019 |


Latest Revision Details – Refer to QPulse for full history

| Revision number | Revision Details |
|-----------------|--|
| 3 | Included IESC, minor changes in work practice and updated waste codes. |

| | | |
|--|---|---------------------|
|  | Title: Waste Management Plan | |
| | Type: Non- Restricted\Procedures (SOP/WI/Mg.Proc) | Page 2 of 17 |
| Active Date: 17/11/2021 | Status: Active | Number: SOP-088 |
| Review Date:17/11/2023 | Owner: | Revision: 3 |

Contents

| | | |
|----------------|--|----|
| 1 | Aim and scope | 3 |
| 1.1 | Aim..... | 3 |
| 1.2 | Scope – Waste generation sites | 3 |
| 2 | References | 3 |
| 3 | Terms and Definitions | 3 |
| 4 | Responsibilities..... | 5 |
| 5 | Frequency..... | 5 |
| 6 | Detailed Procedural Rules | 6 |
| 6.1 | Main Waste Categories | 6 |
| 6.2 | Supporting Reference Documents | 6 |
| 6.3 | Legislations – EU & Maltese | 7 |
| 6.4 | Permitting Obligations | 7 |
| 6.5 | Waste management structure – Employees..... | 8 |
| 6.6 | Waste segregation, protection & internal waste collection sites..... | 8 |
| 6.7 | Contracting of waste collection and disposal | 9 |
| 6.8 | Waste Records..... | 10 |
| 6.8.1 | Waste reporting | 11 |
| 6.9 | Waste data analysis..... | 11 |
| 6.10 | Training of staff & training material..... | 11 |
| 6.11 | Waste Reduction Plan & Programmes | 12 |
| 6.12 | Waste Management Plan Review | 15 |
| 7 | Relating Documents | 15 |
| Annex1: | | 16 |

| | | |
|--|---|---------------------|
|  | Title: Waste Management Plan | |
| | Type: Non- Restricted\Procedures (SOP/WI/Mg.Proc) | Page 3 of 17 |
| Active Date: 17/11/2021 | Status: Active | Number: SOP-088 |
| Review Date:17/11/2023 | Owner: | Revision: 3 |

1 Aim and scope

1.1 Aim

The objective of this plan is to identify how Enemalta plc shall manage waste generation and disposal activities in order to maintain a sustainable working environment with minimal waste generation, in order to protect both the environment and employees and at the same time meticulously serving its environmental obligations criteria at national and EU level.

1.2 Scope – Waste generation sites

This Waste Management Plan shall apply for all types of waste streams as identified and defined by the European Waste Catalogue and generated at the following Enemalta sites:


- 1) Marsa Site
- 2) Delimara Site (managed by IESC)
- 3) Distribution Network facilities, including:
 - i. District Offices
 - ii. Distribution Centres
 - iii. Substations
 - iv. Outdoor Distribution cables overhead and underground and any associated transformers
- 4) Stores facilities

2 References

ISO 14001-2015


3 Terms and Definitions

- 1) **Environment Management System (EMS):** An Environmental Management System (EMS) is a set of processes and practices that enable an organization to reduce its environmental impacts and increase its operating efficiency.
- 2) **IPPC permits:** these are permits that are issued by the local Competent Authority responsible for the Environment and which arise from obligations of the EU and local legislation concerning the Industrial emissions Directive.

| | | |
|--|---|---------------------|
|  | Title: Waste Management Plan | |
| | Type: Non- Restricted\Procedures (SOP/WI/Mg.Proc) | Page 4 of 17 |
| Active Date: 17/11/2021 | Status: Active | Number: SOP-088 |
| Review Date:17/11/2023 | Owner: | Revision: 3 |

- 3) **ISO 14001: 2015 Environmental management systems – Requirements with guidance for use:** This is a standard which maps out a framework that a company or organization can follow to set up an effective Environmental Management System. It can be used by any organization regardless of its activity or sector. Implementing ISO 14001:2015 can provide assurance to company management and employees as well as external stakeholders that environmental impact is being measured and improved.
- 4) **Waste:** Usually consists of useless or unwanted materials.
- 5) **European Waste Catalogue codes (EWC):** these are codes which **classify waste materials and categorize them according to what they are and how they were produced.**
- 6) **Non-hazardous waste:** Non-hazardous waste is waste that is not specifically designated as hazardous by, or having hazardous properties described in, the Hazardous Waste EU Decision 2000/532/EC
- 7) **Hazardous waste:** This is a type of waste that poses substantial or potential threats to public health or the environment.
- 8) **Municipal waste:** This is a type of waste that consists of everyday items that are discarded by the public.
- 9) **Recovery:** Recovery is defined as any waste management operation that converts a waste material into a product with a potential economic or ecological benefit. Recovery mainly refers to the following operations:
 - i. material recovery, i.e. recycling (see below);
 - ii. energy recovery, i.e. re-use a fuel;
 - iii. biological recovery, e.g. composting;
 - iv. re-use.

Direct recycling or reuse within industrial plants at the place of generation is excluded.
- 10) **Disposal:** It is the least favoured option and is usually preceded by energy recovery, recycling, reuse, minimisation and prevention as the more environmentally favourable options.
- 11) **Recycle:** A process where used materials (waste) are converted into new products to prevent waste of potentially useful materials, reduce the consumption of fresh raw materials, reduce energy usage, reduce air pollution (from incineration) and water pollution (from land filling)

| | | |
|--|---|---------------------|
|  | Title: Waste Management Plan | |
| | Type: Non- Restricted\Procedures (SOP/WI/Mg.Proc) | Page 5 of 17 |
| Active Date: 17/11/2021 | Status: Active | Number: SOP-088 |
| Review Date:17/11/2023 | Owner: | Revision: 3 |

by reducing the need for "conventional" waste disposal, Since the material is already processed this might also lead to less use of electricity hence less generation of greenhouse gas emissions to produce the new product.


- 12) **Bunding of waste collection site:** The segregation of hazardous materials in such a way to prevent uncontrolled spillage and leaching of pollutants to the ground. Waste, especially hazardous is covered so that rain water does not contribute to the spreading of hazardous substances. The use of a banded area serves this purpose.This criteria applies especially to liquidhazardous waste.
- 13) **Waste Transfer:** Any movement of waste from the waste generation site to an authorised waste management facility for recycling or disposal.
- 14) **Waste Register:** Records of all waste transfers by weight according to their EWC code, site, and other details.
- 15) **Waste Carrier Permit:** All waste carriers must be authorised to carry waste by the local authority through a permitting process.
- 16) **Waste Management Facility Permit:** The permit of authorisation to run a Waste Management Facility where waste is processed
- 17) **IESC:** International Energy Services Centre is a company partially owned by Enemalta.

4 Responsibilities

All Enemalta & IESC employees

5 Frequency

This document should be reviewed and updated every twenty-four (24) months, unless it is deemed necessary that it should be reviewed prior.

| | | |
|--|---|---------------------|
|  | Title: Waste Management Plan | |
| | Type: Non- Restricted\Procedures (SOP/WI/Mg.Proc) | Page 6 of 17 |
| Active Date: 17/11/2021 | Status: Active | Number: SOP-088 |
| Review Date:17/11/2023 | Owner: | Revision: 3 |

6 Detailed Procedural Rules

6.1 Main Waste Categories


The main categories of waste generated by Enemalta include, but are not limited to the ones listed in the following Table D1:

| Waste (description) | EWC |
|---------------------------------------|-----------|
| Paper | 15 01 01 |
| Plastic | 15 01 02 |
| Mixed | 20 03 01 |
| Sea Water Filtration | 10 01 26 |
| Wood | 15 01 03 |
| Scrap metal | 17 04 07 |
| Cable Off Cuts (Copper and Aluminium) | 17 04 11 |
| Glass | 15 01 07 |
| Construction | 17 01 07 |
| Aerosol Cans | 15 01 11* |
| WEEE | 16 02 13* |
| Oily rags and oil filters | 15 02 02* |
| Cont. Packaging | 15 01 10* |
| Neon Tubes | 20 01 21* |
| Transformer Oil | 13 03 07* |

6.2 Supporting Reference Documents

The following supporting reference documents are directly related to this Waste Management Plan:

- i) EU and Maltese legislation
- ii) IPPC Permits (latest revision) Section entitled Waste
- iii) EMS Policy
- iv) Environmental Management System Manual

| | | |
|--|---|---------------------|
|  | Title: Waste Management Plan | |
| | Type: Non- Restricted\Procedures (SOP/WI/Mg.Proc) | Page 7 of 17 |
| Active Date: 17/11/2021 | Status: Active | Number: SOP-088 |
| Review Date:17/11/2023 | Owner: | Revision: 3 |

v) EMS Standard Operating Procedures (SOP 022, SOP 029 & SOP 025)

6.3 Legislations – EU & Maltese

Waste produced in the Enemalta sites is regulated by various EU and Maltese legislation. A list of these legislation can be found in LST-001- Legislation Summary List on Q-Pulse© or on Enemalta Intranet Portal.


The Section related to Waste is Section E. These Waste Management Plan and EMS Procedures are bound by these legal obligations.

6.4 Permitting Obligations

The two sites Marsa and Delimara, technically referred to as “Combustion Installations”, are regulated by the Industrial Emissions (Integrated Pollution Prevention and Control) Regulations S.L. 549.77. Both the Delimara subsidiary permit for Enemalta as well as that for Marsa specify various obligations that Enemalta has to comply with as per Section entitled “Waste” and all the relevant subclauses to this section.

It is imperative that the obligations listed in the permits are incorporated in the respective EMS SOPs for DPS & MPS respectively, or in other sections of this Waste Management Plan. Although the Distribution sites are not regulated by the above permit obligations they have to conform to the legal obligations as indicated in section E of document LST-001. In addition, these sites will follow similar waste good practices as detailed in their EMS SOP.EMS obligations & as per ISO 14001 standard requirements.

The implementation of an Environment Management System is an obligation of the IPPC permit for combustion installations. Enemalta plc decided to extend this obligation to Distribution and so EMS should also cover the Distribution activities. Hence, the EMS obliges the EMS sites to follow the Enemalta environmental Policy through the various EMS documents, including but not limited to the EMS Manual, this Document and the related SOP’s for the various sites. In addition, these

| | | |
|--|---|---------------------|
|  | Title: Waste Management Plan | |
| | Type: Non- Restricted\Procedures (SOP/WI/Mg.Proc) | Page 8 of 17 |
| Active Date: 17/11/2021 | Status: Active | Number: SOP-088 |
| Review Date:17/11/2023 | Owner: | Revision: 3 |

practices and procedures shall be audited in accordance with the ISO 14001 EMS standard requirements, to achieve certification to this standard by external auditors.

EMS Waste Management Standard Operating Procedures are in place to provide sufficient details so that the various wastes at the sites are appropriately regulated and disposed of in accordance with the legislation indicated in section E of document LST-001 and good practices that minimise waste generation, handling and disposal.


6.5 Waste management structure – Employees

In order to implement this Waste Management Plan, it is important that sufficient human resources are assigned to perform the required tasks of:

- i) Overall waste management that includes planning, monitoring, auditing, record keeping, reporting duties and training of employees. Compliance Office staff shall carry out these tasks.
- ii) Monitoring waste generation, segregation, collection / transfer to waste designated areas, recording in appropriate checklists any waste, and eventually disposal by permitted waste handling contractors to permitted waste management sites. At MPS, DPS and district offices this will be performed by designated employees within those sites or offices.

The waste site designated employee shall also oversee the collection of waste and to sign for the work carried out by waste contractors. In particular, the designated employee shall ensure that all transfers of hazardous waste are accompanied by the relevant consignment notes as per local legislation. Weekly checklists shall be filled in regularly to satisfy EMS waste monitoring obligations. These check lists keep track of contractor waste collection rounds and show which bins need emptying. Furthermore, waste site designated employee shall ensure that all hazardous wastes kept at all Enemalta waste sites are labelled and identified as per relevant SOP.

6.6 Waste segregation, protection & internal waste collection sites

| | | |
|--|---|---------------------|
|  | Title: Waste Management Plan | |
| | Type: Non- Restricted\Procedures (SOP/WI/Mg.Proc) | Page 9 of 17 |
| Active Date: 17/11/2021 | Status: Active | Number: SOP-088 |
| Review Date:17/11/2023 | Owner: | Revision: 3 |

Enemalta shall provide adequate facilities for waste segregation, protection and waste collection sites by the provision of appropriate separation bins, containers, or skips. Waste which may be subject to spillage or dispersal by adverse weather conditions should be collected in containers that are protected to minimise or eliminate such risks. Finally, separate containers shall be provided and segregated in appropriate internal waste collection site/s from where the waste is then ready for disposal.

It is also important to identify and address the needs of the specific category of waste which is collected into appropriate containers directly from its source of generation. This waste is to be handled and disposed strictly according to the established procedures for such waste.

Waste storage sites must be sufficiently bunded to protect and minimise the potential risks of spillages or leaching, especially those that may be hazardous (e.g., waste oils, oil-contaminated wastes, contaminated waste container bins).


All waste handling equipment should be adequate for the job by minimising the required human effort required, protecting the handling employees, protecting the waste containers from damages that might lead to spillages on the site and not causing damages to the site facilities or bunding.

6.7 Contracting of waste collection and disposal

Enemalta shall hire the services of waste contractors for the following:

- i) Provision of bins and skips at source for waste separation
- ii) Collection of materials
- iii) Deposit of materials at Permitted facilities
- iv) Sorting and processing for recovery of materials
- v) Export or local recycling of materials
- vi) Records and service chits

In addition, waste collection and disposal shall be carried out by contractors who:

| | | |
|--|---|----------------------|
|  | Title: Waste Management Plan | |
| | Type: Non- Restricted\Procedures (SOP/WI/Mg.Proc) | Page 10 of 17 |
| Active Date: 17/11/2021 | Status: Active | Number: SOP-088 |
| Review Date:17/11/2023 | Owner: | Revision: 3 |

- Use permitted waste carriers for the transfer of the waste.
- Use a permitted waste management facility authorised by the local environmental authority for the management or discarding of such waste.

These shall be in conformance to the current EU and local legislations.

In addition, each hazardous waste transfer shall have its Waste Consignment Permit Applications (CP) and Waste Consignment Notes (CN) as required by the local authority.


In the case of hazardous waste that shall be shipped abroad, the contractor shall have all the required authorisations from local and foreign authorities where the waste shall be in transit up to its final destination. This shall be in accordance to the respective EU and local legislation for Shipment of Waste.

The Compliance Office shall be responsible to assist management for the regular drafting of the tender to support the Procurement Section of Enemalta to issue the period contract tender/s for the disposal of the municipal and industrial wastes generated by the sites. The choice in the grouping of the waste streams shall be decided according to the needs of the Organisation. Other waste may require disposal contracts on a case-by-case basis, depending on the nature of the waste.

6.8 Waste Records

Detailed records of each waste stream by weight and EWC code for MPS, DPS and Distribution shall be maintained of all waste generated at all sites using waste registers classified for each section. These waste registers shall be regularly maintained and updated once waste transfer information is submitted by the contractors.

Soft copies of Consignment notes shall be filed in the case of hazardous wastes in line with local and EU legislation. In the case of trans-frontier shipments of waste, TFS certificates must be made available. These are evidence that the waste was accepted in a permitted waste facility at its final destination.

| | | |
|--|---|----------------------|
|  | Title: Waste Management Plan | |
| | Type: Non- Restricted\Procedures (SOP/WI/Mg.Proc) | Page 11 of 17 |
| Active Date: 17/11/2021 | Status: Active | Number: SOP-088 |
| Review Date:17/11/2023 | Owner: | Revision: 3 |

In the case of MPS and DPS it is important that records are kept for 5 years as required by the IPPC permits.

6.8.1 Waste reporting

Waste reporting is required by the IPPC permits in the Quarterly Reports, and in the Annual Environmental Report in accordance with the templates provided in the same permits, mainly, quantities of separate streams according to their EWC, the waste contractors' details, and disposal destinations.


In addition, transfers of waste have to be reported in the annual E-PRTR reports, again in accordance with the template and guidelines required by legislation S.L. 549.47 (EPTRR Reporting Obligations), based on EU Regulation 166/2006.

Finally, other wastes that include packaging materials, waste batteries, and WEEE may require annual registration as “producers” as defined by law, if Enemalta imports directly packaged equipment, batteries, or WEEE sources. As an obligation of this registration, Enemalta is obliged to declare the amount of recycling it carries out during the registered year. If Enemalta participates within a waste collection scheme as allowed by the respective legislation of these waste streams, then this obligation is waived, but the reporting has to be catered for by the operator of the collection scheme.

6.9 Waste data analysis

For internal use, the Compliance Office staff shall report to MPS, DPS and Distribution management personnel their individual waste generation performance for analysis and review. This performance shall be coupled with any waste reduction programmes that may implemented at the time.

6.10 Training of staff & training material

| | | |
|--|---|----------------------|
|  | Title: Waste Management Plan | |
| | Type: Non- Restricted\Procedures (SOP/WI/Mg.Proc) | Page 12 of 17 |
| Active Date: 17/11/2021 | Status: Active | Number: SOP-088 |
| Review Date:17/11/2023 | Owner: | Revision: 3 |

The management staff responsible for the various sites shall be responsible to ensure that their staff is sufficiently competent and trained on waste management practices and procedures as outlined in this Plan in order to maintain the EMS fully operational and certifiable to the ISO 14001 standard in respect of waste management.

Human Resources Section shall ensure that training regarding waste as indicated in this Plan is included for all categories of employees. Training records and training aids shall be maintained, updated and refresher-training programmes initiated as and when necessary.

The Compliance Office staff shall give the necessary support to the Human Resources Section for the training of Enemalta personnel as and when required.


It is also important that the Compliance Office maintains a number of employees who are adequately trained and certified to carry out internal auditing in order to support the Compliance Office internal auditing programme and plan in compliance with the EMS and ISO 14001 requirements.

Visuals for waste separation shall be used to help employees on site to identify the various waste streams for both hazardous and non-hazardous waste. Each visual shall be identified by the EWC code. A booklet containing all waste streams is available on Q-Pulse© for easy reference. The booklet contains guidelines of what to put and what not to put in each bin.


6.11 Waste Reduction Plan & Programmes

It is important that management, with the support of the Compliance Office, reviews their waste generation and disposal quantities and evaluate ways on how they can eliminate or minimise such wastes.

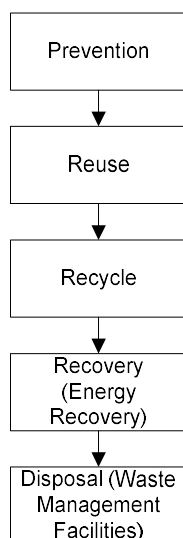
For this purpose, the Waste Reduction Flow Chart as included in the Annex should serve as a guideline for management to implement a waste reduction programme for each stream that may be subject to improvement through the analysis as detailed below.

| | | |
|--|---|----------------------|
|  | Title: Waste Management Plan | |
| | Type: Non- Restricted\Procedures (SOP/WI/Mg.Proc) | Page 13 of 17 |
| Active Date: 17/11/2021 | Status: Active | Number: SOP-088 |
| Review Date:17/11/2023 | Owner: | Revision: 3 |

In order to analyse waste generation data, the five-step waste hierarchy aims to achieve sustainable waste management by placing prevention at the top and disposal (say, at approved land filling sites) as the least favourable option. In addition the analysis should answer the What, Why, How, Where, When questions in order to identify the roots of any waste generation problem. Given that waste disposal costs are the common denominator and an important factor, costs of disposal serves well for comparison purposes between waste streams. In the case of scrap metals where Enemalta gets a refund for such waste the argument still holds since the amount of money indicates the quantities of scrap metals being handled. Disposal of scrap metals should not be an objective in itself to get refunds, but reduction of such waste is important.

| | | |
|--|---|----------------------|
|  | Title: Waste Management Plan | |
| | Type: Non- Restricted\Procedures (SOP/WI/Mg.Proc) | Page 14 of 17 |
| Active Date: 17/11/2021 | Status: Active | Number: SOP-088 |
| Review Date:17/11/2023 | Owner: | Revision: 3 |

Hence, it is advisable that the following hierarchy is followed in the analysis:




Waste prevention means measures taken before a substance, material or product has become waste that may reduce the following:

- a) the quantity of waste, including re-use of products or the extension of the life span of products.
- b) The adverse impacts of the generated waste on the environment and human health.
- c) The content of harmful substances in materials and products.

The recyclable waste streams such as paper, plastic, wood, scrap metal and cable off-cuts are all being recycled for this purpose, and in the case of packaging wastes or waste batteries recycling targets must be achieved as detailed in the legislation related to such wastes (S.L. 549.43 Waste Management (Packaging and Packaging Waste) Regulations,; S.L. 549.54 Waste Management (Waste Batteries and Accumulators) Regulations and S.L. 549.89 Waste Management (Electrical and Electronic Equipment) Regulations.

Finally, it is important that any waste reduction initiatives must have achievable targets that can be measured and monitored.


| | | |
|--|---|----------------------|
|  | Title: Waste Management Plan | |
| | Type: Non- Restricted\Procedures (SOP/WI/Mg.Proc) | Page 15 of 17 |
| Active Date: 17/11/2021 | Status: Active | Number: SOP-088 |
| Review Date:17/11/2023 | Owner: | Revision: 3 |

6.12 Waste Management Plan Review

It is the responsibility of the Compliance Office staff to update this Plan every two years or as deemed necessary prior such date. The review shall cater for changes in the content of this Plan especially legislation, or changes in practices or procedures.


7 Relating Documents

| Number | Type | Title |
|-----------|-----------|-----------|
| <NO DATA> | <NO DATA> | <NO DATA> |

| | | |
|--|---|----------------------|
|  | Title: Waste Management Plan | |
| | Type: Non- Restricted\Procedures (SOP/WI/Mg.Proc) | Page 16 of 17 |
| Active Date: 17/11/2021 | Status: Active | Number: SOP-088 |
| Review Date:17/11/2023 | Owner: | Revision: 3 |

Annex1:

Waste Reduction Flow Chart

| | | |
|--|---|----------------------|
|  | Title: Waste Management Plan | |
| | Type: Non- Restricted\Procedures (SOP/WI/Mg.Proc) | Page 17 of 17 |
| Active Date: 17/11/2021 | Status: Active | Number: SOP-088 |
| Review Date:17/11/2023 | Owner: | Revision: 3 |

