



D3发电有限公司
D3 Power Generation Ltd.

Management Systems Procedure

EMSP 04-02-GWM

General Waste Management

Rev. 3



D3发电有限公司
D3 Power Generation Ltd.

| | |
|--------------------|---|
| DOCUMENT TYPE | PROCEDURE |
| DOCUMENT REFERENCE | EMSP 04-02-GWM General Waste Management |
| DOCUMENT TITLE | Waste Management |
| PROCESS OWNER | QHSE & P&T |

| | Written By | Reviewed By | Approved By | Authorised By |
|-------------|--------------|---------------|----------------|---------------|
| Date | 19/08/2021 | 20/08/2021 | 24/08/2021 | 28/08/2021 |
| Designation | HSE Officer | QHSE Manager | CTO | CEO |
| Name | Ms. B. Ziber | Ing. A. Pulis | Ing. D. Grixti | Mr. Xun Cheng |
| Signature | | | | |

Only signed hard copies and soft copies as found on the D3PG Ltd. Server are considered controlled documents.

| | | |
|---|-------------------------------------|---------------|
|  D3发电有限公司 D3 Power Generation Ltd. | Management Systems Procedure | |
| EMSP 04-02-GWM | General Waste Management | Rev. 3 |

Document Control

| Issue No | Date | Change details |
|----------|------------|---|
| 1 | 30/01/2018 | First Issue |
| 2 | 03/06/2020 | Added Section 6.4.1. Handling of used PPE or waste, related to Covid-19 or other flu-like illnesses, due to Covid-19 waste created. |
| 3 | 16/08/2021 | Fusion of EMSP 04-02-GWM_2 General Waste Management & EMSP 04-03-WMC_2 Waste Management for contractors |
| | | |
| | | |
| | | |

Document Distribution

| Department | Position | Name |
|---------------------------|----------|------|
| D3PG | All | All |
| IESC | All | All |
| Other contractors on site | Manager | / |
| | | |
| | | |
| | | |
| | | |

| | | |
|---|-------------------------------------|--------|
|  D3发电有限公司 D3 Power Generation Ltd. | Management Systems Procedure | |
| EMSP 04-02-GWM | General Waste Management | Rev. 3 |

Table of Contents

| | |
|--|----|
| 1. Purpose | 4 |
| 2. Responsibilities | 4 |
| 3. Terms & Definitions | 5 |
| 4. Regulatory References & Other Documents:..... | 6 |
| 5. Notes:..... | 6 |
| 6. Waste Management Procedure..... | 6 |
| 6.1. WASTE HIERARCHY | 6 |
| 6.2. WASTE IDENTIFICATION AND CLASSIFICATION | 7 |
| 6.3. WASTE STREAMS..... | 8 |
| 6.4. WASTE GENERATION OF CONTRACTORS | 9 |
| 6.5. HANDLING OF WASTE | 9 |
| 6.6. WASTE STORAGE AREAS | 10 |
| 6.7. COLLECTION POINTS..... | 11 |
| 6.8. WASTE REGISTER | 12 |
| 6.9. WASTE TRANSPORT | 12 |
| 6.10. ENVIRONMENTAL AUDITS | 14 |
| 6.11. WASTE DOCUMENT FILING AND REPORTING..... | 14 |
| 7. Relevant Documents | 14 |

| | | |
|---|-------------------------------------|---------------|
|  D3发电有限公司 D3 Power Generation Ltd. | Management Systems Procedure | |
| EMSP 04-02-GWM | General Waste Management | Rev. 3 |

1. PURPOSE

The objective of this procedure is to specify detailed rules, times and responsibilities related to the waste generation, identification, handling, storage, transport and disposal within D3PG Plant and working areas by the employees and any third party such that the Contractor adopts the same behaviour of D3PG Plant personnel and plant operating contractor.

2. RESPONSIBILITIES

- **Contractor:** Any contractor brought onto site for working purposes.
- **Plant operating contractor:** Contracted by D3PG to operate and maintain plant with all its equipment.
- **Waste contractor:** Engaged organization who collects and transports waste from D3PG site and provides with the necessary documents such as Consignment Note.
- **D3PG Officers and Operators:** Act in accordance to the requirements; asks for help for waste management and informs D3PG Procurement Officer when waste removal other than that allocated is required.
- **Waste Site Coordinator (WSC):** Manages activities at waste site, carries out checks, communicates with the waste carriers, verifies consignment notes, compiles the waste collection template and provides the information to D3PG QHSE Manager.
- **Responsible person:**
 - D3PG or Operating Contractor personnel is responsible for the task assigned to the Contractor.
 - Supervises the Contractors' personnel to ensure that there is good waste management practice being carried out and that this is being done in accordance with this procedure.
 - Ensures that the waste management sites/skip areas being used by the contractor are kept in order.
 - Informs the Contractor about any problems of waste mixing to rectify the problem.
- **Contractor Personnel (CP) :** Carry out waste management, waste separation, waste transportation and/or waste disposal within D3PG, under the supervision of the Plant Operating Contractor.
- **QHSE Manager**
 - Keeps record of any waste generated by the Contractor as submitted regularly through their waste register.
 - Provides support to the Responsible person if necessary.



- Responsible to identifying the correct EWC codes and to propose solutions for the compliance and defines responsibilities thereof.

➤ **HSE Officer**

- Provides training on waste management to the Plant Operating Contractor and his personnel if necessary.
- May carry out audits, in collaboration with the audit team, to ensure that there are no infringements regarding waste management by the contracting company.

➤ **All employees:** Act according to the requirements.

3. TERMS & DEFINITIONS

LR - Legal Requirement - obligation established by Maltese legislation, EU Regulations and Directives or any authorisation, permit, etc. released to D3PG and/or Enemalta plc.

Waste: Any substance, product or object whether in solid or liquid form, whether hazardous or otherwise, as specified in part 1 item 4 of LN 184/2011 or as amended, which the holder discards, or intends to discard, or is required to discard, and which is deemed to be waste by the Competent Authority, ERA .

Hazardous waste: Hazardous waste is waste that poses substantial or potential threats to public health or the environment as listed in Schedule 3 of SL 504.37.

Non-hazardous waste: Non-hazardous waste is waste which does not display one or more of the hazardous properties listed in Schedule 3 of SL 504.37.

Municipal waste: means waste from households, as well as other commercial, industrial and institutional wastes which, because of its nature or composition, is similar to waste from households.

EWC: European Waste Catalogue

Recovery: means any operation, the principal result of which is waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfil a particular function, or waste being prepared to fulfil that function, in the plant or in the wider economy. Schedule 2 of SL 504.37 sets out a non-exhaustive list of recovery operations: material recovery, energy recovery, biological recovery, re-use.
operations.

Consignor: The person who asks for the waste to be removed from the place where it is being held.

Consignee: The person to whom the waste is being transferred to.

CP: Waste Consignment Permit Application.

| | | |
|---|-------------------------------------|---------------|
|  D3发电有限公司 D3 Power Generation Ltd. | Management Systems Procedure | |
| EMSP 04-02-GWM | General Waste Management | Rev. 3 |

CN: Waste Consignment Note (Prenotification Copy).

EMS Environmental Management System.

ERA: Environment & Resources Authority.

Waste Management Facility Permit (WM): The permit of authorisation to run a Waste Management Facility.

SDS: Safety Data Sheet.

4. REGULATORY REFERENCES & OTHER DOCUMENTS:

| Doc. Type | Ref. No | Description | Clauses |
|-------------|----------------|---|------------|
| Standards | ISO 14001:2015 | Environment Management System | 6.1.2, 8.1 |
| Standards | ISO 45001:2018 | Health & Safety Management System | |
| IPPC Permit | IP 0002-07-Gii | Integrated Pollution Prevention Control | 2.8.2 |
| IPPC Permit | IP 0002-07-Fii | Integrated Pollution Prevention Control | 2.5 |

5. NOTES:

Procedures are reviewed periodically, at least once a year, in accordance to the Internal Audit Plan. Internal auditors audit the procedure and raise any inaccuracies with the process owners. Other reviews are carried out as required.

6. WASTE MANAGEMENT PROCEDURE

6.1. WASTE HIERARCHY

Reduce: Since all waste disposal options have some impact on the environment, the only way to avoid impact is not to produce waste in the first place. D3PG will seek to reduce waste through judicious purchasing and supplier relations.

Re-use: Before discarding an item see whether it can be re-used or re-purposed.

Recycle: Employees need to be fully committed in this process to ensure that the recyclable waste that is produced is not contaminated with other wastes. Employees must carefully check and sort their waste before discarding it to maximise recycling yields.

| | | |
|---|-------------------------------------|--------|
|  D3发电有限公司 D3 Power Generation Ltd. | Management Systems Procedure | |
| EMSP 04-02-GWM | General Waste Management | Rev. 3 |

Disposal: Waste sent to landfill is the worst option in environmental terms and D3PG will seek to keep this to a minimum by promoting the aforementioned options.

6.2. WASTE IDENTIFICATION AND CLASSIFICATION

Waste produced by D3PG employees, by subcontractors or third party working on behalf of D3PG can be classified into 2 main categories:

- Hazardous waste;
- Non-hazardous waste.

D3PG Waste Management Training includes classification, separation and disposal of waste. Waste shall be separated according to its classification and collected in dedicated containers as necessary.

1. Non-hazardous waste

This includes municipal waste, which usually consists of waste from households as well as other wastes, which are similar to waste from households. Examples include paper, plastic, wood, domestic waste, domestic metal and glass.

2. Hazardous waste

Hazardous waste is waste that can be explosive, oxidising, flammable, corrosive, carcinogenic, toxic or otherwise harmful to health or the environment. Examples include waste oil, aerosol cans, oil containers, oily rags, batteries, paints etc. Any hazardous waste must be disposed of according to the relevant legislation.

Domestic waste or mixed waste is generated mainly from everyday activities, like food remains. Industrial and domestic waste should never be mixed.

Industrial waste must be classified and collected into various waste streams as per Commission Decision 2000/532/EC. Each waste stream is assigned a European Waste Catalogue Code (EWC).

Industrial waste must be clearly distinguished between hazardous and non-hazardous and such waste streams are to be properly segregated.

Hazardous industrial waste must always be placed in closed containers, or else covered to avoid rainwater coming in, and subsequent overflow from the container.

| | | |
|---|-------------------------------------|--------|
|  D3发电有限公司 D3 Power Generation Ltd. | Management Systems Procedure | |
| EMSP 04-02-GWM | General Waste Management | Rev. 3 |

Proper bunding of hazardous industrial waste is to be available where required.

The WEEE (Waste Electrical and Electronic Equipment) Directive aims to conserve landfill and support more sustainable development by providing an impetus to boost recycling.

The RoHs (Restriction of Hazardous Substances) legislation aims to reduce environmental impacts of waste and improve recyclability.

Note: Damaged/expired non-hazardous PPE with D3PG logos (e.g. helmet, hi-viz vest) must be reported to QHSE and when disposed of, a certificate of destruction is provided to QHSE by the waste management company.

6.3. WASTE STREAMS

Waste Streams are further detailed as per EMSR 04-01-WCLC Waste Codes Location & Collection.

| REF | WASTE | EW C |
|-----|--|------------------------|
| 1 | Waste Oils in drums (200l) or IBCs (1000l) | 13 01 10* |
| 1a | Waste from occasional intervention E.g steam turbine overhaul | 13 02 05* |
| 2 | Contaminated packaging waste including metallic packaging e.g pressure containers | 15 01 10* 15 01 11* |
| 3 | Contaminated material: oily rags, filter materials, PPE contaminated by dangerous substances | 15 02 02* |
| 4 | Cables/joints containing oil, coal tar and other dangerous substances | 17 04 10* |
| 5 | Contaminated gravel/sand | 17 09 03* |
| 6 | WEEE | 16 02 13* |
| 7 | Fluorescent tubes and other mercury containing waste | 20 01 21 |
| 8 | Mixed Municipal Waste | 20 03 01 |
| 8a | Used PPE and waste related to COVID-19 or other flu-like illnesses (masks, tissues, gloves, wipes) | 20 03 01 |
| 9 | Mixed packaging: plastics, Paper, Cardboard and Metal Packaging | 15 01 06 |
| 10 | Wood | 15 01 03 |
| 11 | Batteries | 16 06 04 |
| 12 | Seawater filtration and street cleaning waste | 10 01 26 20 03 01 |
| 13 | Non hazardous insulation material | 17 06 04 |
| 14 | Mixed Metallic Waste | 17 04 07 17 04 02 |

| | | |
|---|-------------------------------------|---------------|
|  D3发电有限公司 D3 Power Generation Ltd. | Management Systems Procedure | |
| EMSP 04-02-GWM | General Waste Management | Rev. 3 |

A temporary waste stream has been introduced as per HSP 03-04 CrVI Testing and handling of CrVI contaminated equipment.

6.4. WASTE GENERATION OF CONTRACTORS

The Responsible Person shall ensure that the Contractor ultimately abides by D3PG Waste management practices. D3PG demands that once any breach or failure to abide to these practices is identified the contractor shall take remedial measures immediately. The responsible person shall also make it clear to the contractor that waste generated by the subcontracting operations can only be disposed of in D3PG skips if an agreement is reached between both parties which agreement shall be issued in writing.

6.5. HANDLING OF WASTE

Handling of waste is to be carried out in such a way as to minimize risk to human health and to the environment. In particular all precautions should be taken in order to avoid accidents that effect: humans; soil or water pollution or generates fire or explosion, toxic gas.

The following are good practices for internal transportation of Waste:

- always close containers containing liquids;
- containers carrying solid or liquid waste should be secured to the means of transport being used in order to avoid any spills of material;
- collect any waste which has fallen out of the container.

6.5.1 HANDLING OF USED PPE OR WASTE, RELATED TO COVID-19 OR OTHER FLU-LIKE ILLNESSES

At times of influenza or other infectious diseases season (inclusive of Covid-19, epidemics and contagious illnesses) used masks, gloves, tissues and wipes should never be disposed of in the recyclable waste stream. In the office area there is a designated lined bin with lid for such waste. It is marked -like other waste streams- for better understanding.

Sequence of safe handling and disposal:

- Used tissues, wipes and PPE like masks or gloves shall be disposed of into the designated bin.

| | | |
|---|-------------------------------------|--------|
|  D3发电有限公司 D3 Power Generation Ltd. | Management Systems Procedure | |
| EMSP 04-02-GWM | General Waste Management | Rev. 3 |

- Clean your hands with soap and water or hand sanitizer before touching the mask. Avoid touching the front of the mask. The front of the mask is contaminated. Only touch the ear loops/ties/band. Follow the instructions below for the type of mask you are using.
 - Face Mask with Ear loops: Hold both of the ear loops and gently lift and remove the mask.
 - Face Mask with Ties: Untie the bottom bow first then untie the top bow and pull the mask away from you as the ties are loosened.
 - Face Mask with Bands: Lift the bottom strap over your head first then pull the top strap over your head.
- It is good practice to cut the masks into two pieces to prevent possible reuse.
- Dispose of in the designated bin
- Wash hands or use hand rub after mask disposal.
- Waste shall be handled with gloves and mask on. Spray 5% bleach solution onto the content of the bin. Tie a knot on the plastic bag and dispose of it in the mixed municipal waste skip in the parking lot.

6.6. WASTE STORAGE AREAS

Waste storage areas are correctly planned. The following should always be observed:

- Avoid spills and leakages wherever possible. Try to minimise spills when these cannot be avoided.
- Skips for hazardous waste should be covered and the site should have suitable containment with appropriate drainage facilities.
- Spills are to be contained and collected. Ensure that spills do not contaminate soil or water.
- Soil or water are not to be polluted by rainwater which is contaminated through contact with waste.
- Waste storage areas should be separated and clearly identified.
- Each waste unit is to be clearly labelled and understood by all operators including those from transport companies and those collecting waste.
- Any hazard risks (flammable, toxic, etc.) should be clearly legible and immediately identifiable.
- Chemically incompatible wastes are to be segregated.



- Appropriate emergency equipment for first aid, fire and spills is easily accessible. In case of hazardous waste, a Safety Data Sheet should be available with the waste.

The WSC will ensure that bi-weekly checks as per EMSF 04-01-WAI Waste Areas Inspections, are carried out in the waste storage area to ensure that all the waste is correctly disposed of and that all the required identification is in accordance with regulations.

The responsible person shall ensure that the site is checked and that it is properly clean and waste free before the works are terminated by any contractor. Waste generated within D3PG premises shall be taken off site by a fully licensed carrier as soon as reasonably practicable so as not to accumulate on D3PG premises.

6.7. COLLECTION POINTS

Waste at D3PG is being managed through a system comprising of several small, dedicated areas called collection points. (Annex 1: D3PG Waste Management Site Plan)

The collection points consist of several small bins, each bin dedicated to a different waste stream. The bins are in strategic areas all over the plant where specific types of waste are generated. These collection points are monitored by the cleaners daily. Inspections are also done as per EMSF 04-01-WAI Waste Areas Inspections and through weekly HSE Inspections.

1. Skip Areas

These areas house dedicated waste collection bins or skips. These skips are monitored through weekly HSE Inspections by the HSE officer and bi-weekly checks by WSC.

2. Waste Management Site

This area houses a number of waste collection skips both for hazardous and non-hazardous waste. The area is totally bunded and lies close to an interceptor. An area within the waste collection site has been dedicated to house also oil drums and Intermediate Bulk Containers (IBCs) full of hazardous material such as sludge, chemical waste, or waste oils. The location of this area is identified as per Annex 1.

Collection of waste from the waste management site needs to be carried out periodically and as required. D3PG operational contractor will inform the waste carrier when waste collection is required unless it is agreed

| | | |
|---|-------------------------------------|---------------|
|  D3发电有限公司 D3 Power Generation Ltd. | Management Systems Procedure | |
| EMSP 04-02-GWM | General Waste Management | Rev. 3 |

contractually. The WSC will liaise with the waste carrier for planning the waste collection. On the day of collection, the WSC will follow up with the waste carrier on the relevant documents and collection of information through the EMSF 04-03-Waste Collection Details. The relevant documents and check lists will then be provided to D3PG QHSE Manager for records.

6.8. WASTE REGISTER

The waste register is available as per EMSF 04-03-Waste Collection Details. This log details the disposal of waste and all records including the weight of the waste disposed of, as requested by ERA through the AER in the IPPC Permit.

In case of waste being disposed by the Waste Contractor from D3PG site, the Waste Contractor should regularly provide an updated copy of his waste register together with all weight chits from the waste disposal facility to the responsible person. A copy of any waste consignment notes should also be submitted in the case of disposal of hazardous waste. These records should include details about the waste (including the specific EWC code) and the weight of the waste disposed. The final destination of the waste (permitted waste site) is also to be provided, as well as the number plate of the carrier used to transport the waste to the permitted waste site.

6.9. WASTE TRANSPORT

Disposal of hazardous waste needs a valid permit from ERA and the actual transfer of the waste has to be accompanied by a consignment note which is a form issued by ERA. The consignment note is divided into two stages:

Stage One: Waste Consignment Permit Application (CP)

Stage Two: Waste Consignment Note (CN)

All Waste Consignment Permit Applications (CP) and Waste Consignment Notes (CN) have a unique number (code) allocated by ERA. The Waste Consignment Permit Application (CP) is used in order to obtain a permit for the disposal of waste while the Waste Consignment Notes (CN) must be used for the transfer of waste.

1. Consignment Note (CN)

Only signed hard copies and soft copies as found on the D3PG Ltd. Server are considered controlled documents.

| | | |
|---|-------------------------------------|---------------|
|  D3发电有限公司 D3 Power Generation Ltd. | Management Systems Procedure | |
| EMSP 04-02-GWM | General Waste Management | Rev. 3 |

The Consignment Note (CN) consists of five part self-carbonising forms, The yellow copy should be provided to D3PG for records, on waste collection from D3PG.

Certain Contractors may opt to give also the Company's Waste Transfer note or Tracking Document besides the ERA Waste Consignment Note.

There is a procedure for the movement of waste of the same description being collected from the same premises and consignor, going to the same premises and consignee. These repetitive movements are called successions and can be applied to both single loads and to carrier's rounds. A Consignment Note (CP) should cover all consignment, which occurs during the validation period of the permit.

2. Waste Consignment Permit Application (CP)

A permit is needed for the disposal of each separate hazardous waste stream. Both notes and the relevant waste transport compliance will be handled by the waste contractor, including all legislative and relevant documents. The permit number can any times be found on the CN notes.

3. Transboundary movement of waste

Hazardous waste, which cannot be disposed of/recovered in Malta and which has to be shipped to another country for disposal/recovery will fall under the terms of the European Commission Waste Shipment Regulation. Transboundary movements of hazardous waste destined for disposal or recovery can only take place upon written notification by ERA, as the Competent Authority of dispatch, to the Competent Authorities of destination and transit (if applicable) through the use of the notification document. Subsequently, once all permits are in place, each shipment of hazardous waste destined for disposal or recovery must be accompanied by the movement/tracking document. The Contractor is responsible for all the required permits and related documentation, and provision thereof to D3PG.

Below are some of the documents required for appropriate transboundary movement of waste. Copies of these signed documents should be provided to D3PG by the Waste Carrier, to ensure the waste generated has been disposed of in accordance to national legislation.

- ✓ **Filled in Movement/Tracking Document**
- ✓ **Carriers Details**

Only signed hard copies and soft copies as found on the D3PG Ltd. Server are considered controlled documents.

| | | |
|---|-------------------------------------|---------------|
|  D3发电有限公司 D3 Power Generation Ltd. | Management Systems Procedure | |
| EMSP 04-02-GWM | General Waste Management | Rev. 3 |

Other documents which should be made available to ensure conformance include:

- ✓ **Permit of the facility** - A copy of the relevant authorization (license certificates) as well as type and duration of the authorization of the disposal/recovery facility under which the latter operates.
- ✓ **Carrier's Documents**
- ✓ **Waste permit for all carriers** - Relevant license certificates (and/or authorisation/registration numbers) of all transport companies for the transport of hazardous waste according to export/transit/import state law to be provided for each.

6.10. ENVIRONMENTAL AUDITS

D3PG reserves the right to carry out environmental audits in order to ensure that the Plant Operating Contractor and his sub-contractors are carrying out their activities in compliance with the requirements laid down in the D3PG Environmental Management System.

6.11. WASTE DOCUMENT FILING AND REPORTING

All documents related to waste (consignment note, waste consignment permit application, waste register) are kept for a minimum of 5 years for both hazardous and non-hazardous waste.

From time to time QHSE Manager is responsible to check and request records of all licenses. These can also be checked on the ERA website. This process is carried out at least once a year as per IMSP 08-01-LC Legal Compliance.

7. RELEVANT DOCUMENTS

Enemalta Induction Training

IMSP 08-01-LC Legal Compliance

EMSF 04-01-WAI Waste Areas Inspections

EMSF 04-03-WCD Waste Collection Details

EMSR 04-01-WCLC Waste Codes Location & Collection

Annex 1: D3PG Waste Management Site Plan.

HSF 03-01-HSEI HSE Inspection Checklist

Only signed hard copies and soft copies as found on the D3PG Ltd. Server are considered controlled documents.

| | | |
|---|-------------------------------------|--------|
|  D3发电有限公司 D3 Power Generation Ltd. | Management Systems Procedure | |
| EMSP 04-02-GWM | General Waste Management | Rev. 3 |

HSP 03-04 CrVI Testing and handling of CrVI contaminated equipment.

