

B.03.01.02 WASTE MANAGEMENT, STORAGE AND HANDLING

Reference drawings

- ENEM-URS-FS-00-DR-ME-00066 Chemical & Service Tank Locations Sheet 1 of 2
- ENEM-URS-FS-00-DR-ME-00067 Chemical & Service Tank Locations Sheet 2 of 2
- ENEM-URS-FS-00-DR-ME-00068 Operating Boundary Layout

The following table details the management of each waste stream including storage and handling arrangements.

Waste Type	EWC	Storage and Handling	Storage Capacity
Sea Water Cooling System Oxidants and Disinfecting Agents	10 01 26	Storage: N/A*† Handling: Oxidants and Disinfecting Agents pose a potential H&S risk to site staff and will be handled in accordance with the manufacturers instruction in the MSDS.	By Enemalta
Oil Sludge	13 05 02*	Disposal via specialist contractor	4,300l (CCGT OS)
Used Lube Oil	13.05.02	Disposal via specialist contractor	40m ³ (FSU)
Oily Water	13 05 07*	Storage: N/A* Handling: None	N/A
Oily rags	15.02.02	Sorted and stored in dedicated bin in one of the two waste handling areas and taken off site for specialist disposal	2No. standard waste bins
Boiler Wash Down Sludge	10 01 22*	Disposal via specialist contractor	1.2 m ³
Sanitary Waste Water (sewage)	16 10 02	From CCGT to public Sewer; from regasification plant to septic tank; from FSU treated on site.	6.0m ³ (Regas plant only)
Treated Effluent & Grey water from FSU	19 06 03	Stored on FSU and pumped periodically to receiving barge for licenced disposal	2100 m ³ (FSU)
HRSG Blowdown Water	10 01 22*	Storage: N/A* Handling: None	23m ³
Discharges from Demineralisation Tank	10 01 99	Storage: N/A* Handling: None	Enemalta
Excess Brine from Evaporator	10 01 99	Storage: N/A* Handling: None	Enemalta
Cleaning GTs	10 01 99	Offline cleaning undertaken 4 times a year using Turbotect 950 detergent. Resultant waste water collected in a 200 litre tank dedicated to each GT and periodically tankered to off site authorised processing company.	Temporary on site as required
Floor Washing from oily area	10 01 99	Storage: N/A* Handling: None	N/A

Waste Type	EWC	Storage and Handling	Storage Capacity
Bilge Oil / Water	13 05 07*	Disposal via specialist contractor, pumped onshore to be exported for treatment and disposed in the waste facility at the 'Hazardous Waste Storage and Treatment Facility'.	40 m ³
Discharge of Water for Regasification	05 07 99	Storage: N/A* Handling: None	
Gas filtration waste	10.01.19	Stored on site and disposed off site by specialist contractor	nominal
Solid Recyclable Wastes	20.03.01	Sorted and stored on site in water handling areas (adjacent to CCGT or on FSU) †	Bins to suit.
Food Waste (FSU)	20 01 08	Sorted and stored on FSU in waste handling area and lifted periodically to barge for disposal at registered municipal waste facility.	Standard waste bins stored on FSU.
Sewage Treatment Plant Sludge	19 08 05	Every five years removed from the FSU via barge and disposed of at sewage treatment plant	Stored in STP on FSU
Activated carbon filter waste	19 09 04	Disposal via specialist contractor	Stored in Demin polishing plant
Mixed bed filters waste from demin polishing plant	19 09 05	Disposal via specialist contractor	Stored in Demin polishing plant

*To join the cooling water system and following treatment (see B03.01.03) discharged to sea.

† The location of the waste management area for the facility is South of the CCGT plant as shown on drawing ENEM-URS-FS-00-DR-ME-00068, with a local area in the regas plant and a further management area on the FSU.

The main waste management area is south of the CCGT plant, refer to drawing ENEM-URS-FS-00-DR-ME-00066. This will be a concrete slabbed area, fully bunded with a drainage connection to the CCGT oily drainage system which will be treated via the new oil separator within the CCGT site.

Waste storage and disposal sites and equipment will be maintained as appropriate in line with the certified Environment Management System (EMS) which will be compiled and certified as set out in section B2.1. It shall comply with all legal or permitting obligations. The facilities will be laid out to provide safe access for construction, operation, maintenance and emergency action, and will comply with the layout requirements according to hazardous area designation identified by the Hazard Assessment study.

Gas turbine compressor washing will be required during operation of the CCGT power station. Periodic on-line and off-line washing of the gas turbine compressors will require the use of washing products and demineralised water as rinse fluid. The GT compressor washings will remove deposits and scales on the compressor blades created during operation to prevent any fouling that could result in a reduced compressor flow intake capacity, loss of compression efficiency or even surge and stall of the compressor. Each Gas Turbine will include a compressor washing unit and the wash agent

and the rinse fluid will be stored in two 80 litre tanks. A drain collector of approximately 100 litre capacity will be included with each unit. Resultant waste water will be collected and stored before being periodically tankered off-site through an authorised processing company.

A small volume of washing products will be used during servicing activities for any mechanical equipment. These will be stored in the CCGT warehouse in small plastic containers. Chlorine dioxide shall be used as anti-biofouling agent for the seawater condenser and auxiliary cooling seawater heat exchanger. Additional dosing of chlorine dioxide to the quantities currently dosed will not be required after the Delimara 1 steam power plant stops operations. This will take place before the CCGT commences commercial operations.

The locations of the various storage tanks and waste management areas are shown on the following drawings;

- ENEM-URS-FS-00-DR-ME-00066 Chemical & Service Tank Locations Sheet 1 of 2
- ENEM-URS-FS-00-DR-ME-00067 Chemical & Service Tank Locations Sheet 2 of 2