



# ElectroGas Malta Project

Internal Emergency Plan – Roles and  
Responsibilities

21<sup>st</sup> September 2016

ENEM-AEC-E0-00-RP-SE-00016 REV 02

Prepared for:  
ElectroGas Malta Limited

<i>Rev</i>	<i>Date</i>	<i>Details</i>	<i>Prepared by</i>	<i>Reviewed by</i>	<i>Approved by</i>
00	25/03/2016	First issue for comments	S Hartz Process Safety	G Cook Process/ Mechanical Team Lead	K Aplin Technical Director
01	11/07/2016	Revised from comments	S Hartz Process Safety	K Aplin Technical Director	K Aplin Technical Director
02	21/09/2016	Final version	S Hartz Process Safety	K Aplin Technical Director	K Aplin Technical Director

**AECOM**

Major Projects & PMCM  
URS Europe, Middle East & India Region  
6-8 Greencoat Place,  
London,  
SW1P 1PL  
United Kingdom

Tel +44 (0)20 7798 5126  
Fax +44 (0)20 7798 5001

**www.aecom.com**

**Limitations**

AECOM under AECOM Infrastructure & Environment UK Limited (known as AECOM or URS) has prepared this Report under contract for the sole use of ElectroGas Malta Limited and only in pursuant of its obligations and requirements for the Delimara 4 LNG to Power Project. The conclusions and recommendations contained in this Report are based upon information provided by multiple stakeholders and upon the assumption that all relevant information has been provided by those parties from whom it has been requested and that such information is accurate. Information obtained by AECOM has not been independently verified by AECOM, unless otherwise stated in the Report. Certain statements made in the Report that are not historical facts may constitute estimates, projections or other forward-looking statements and even though they are based on reasonable assumptions as of the date of the Report, such forward-looking statements by their nature involve risks and uncertainties that could cause actual results to differ materially from the results predicted. AECOM specifically does not guarantee or warrant any estimate or projections contained in this Report. Where assessments of works or costs identified in this Report are made, such assessments are based upon the information available at the time and where appropriate are subject to further investigations or information which may become available. AECOM disclaim any undertaking or obligation to advise any person of any change in any matter affecting the Report, which may come or be brought to AECOM' attention after the date of the Report.

**Copyright**

© This Report is the copyright of AECOM under AECOM Infrastructure & Environment UK Limited. Any unauthorised reproduction or usage by any person other than the addressee is strictly prohibited.

## TABLE OF CONTENTS

<b>1</b>	<b>INTRODUCTION</b>
1.1	Objective
1.2	Reference Documents
1.3	Abbreviation List
<b>2</b>	<b>NORMAL OPERATING ORGANIZATION</b>
2.1	FSU
2.2	Delimara LNG Regasification Terminal and Power Plant
<b>3</b>	<b>EMERGENCY ORGANIZATION</b>
3.1	FSU
3.2	Delimara LNG Regasification Terminal and Power Plant
<b>4</b>	<b>EMERGENCY CONTROL SYSTEMS</b>
4.1	Emergency Control Centre
4.2	Station Bill at the FSU
4.3	Forward Control Point
4.4	Casualty Clearing Area
4.5	Safe Assembly Points and Areas
<b>5</b>	<b>ROLES AND RESPONSIBILITIES</b>
5.1	FSU
5.2	Delimara LNG Regasification Terminal and Power Plant
<b>6</b>	<b>OFF-SITE EMERGENCY ORGANIZATIONS</b>
6.1	Coordination with Off-Site Organizations
6.2	Civil Protection Department (CPD)
6.3	Transport Malta (TM)
6.4	Occupational Health & Safety Authority (OHSA)
6.5	Malta Environment & Planning Authority (MEPA)
6.6	Environmental Health Directorate
6.7	Emergency Services
<b>7</b>	<b>INCIDENT REPORTING REQUIREMENTS</b>
7.1	Purpose and Scope
7.2	Incident Investigations
7.3	Investigation Reports
7.4	Regulatory Notifications and Reports

## 1 INTRODUCTION

### 1.1 Objective

This document describes the Emergency Organization, defining the roles and responsibilities of each designated position in case of emergency (e.g. liquid/gas release or fire/explosion) at the FSU, the Delimara LNG Regasification Terminal (Regasification Compound and Jetty) and the Delimara 4 Power Plant (CCGT).

### 1.2 Reference Documents

The reference documents are tabulated below:

Reference	Designation	Issued by	Date
OPS-MALT-ALM-HSE-PLN-0003	Emergency Response Plan Manual	Bumi Armada	10/04/2015

Table 1: Reference Documents

### 1.3 Abbreviation List

AFM	Armed Forces of Malta
BLEVE	Boiling Liquid Expanding Vapour Explosion
BOG	Boil-Off Gas
CCA	Casualty Clearing Area
CCGT	Combined Cycle Gas Turbine
CCR	Central Control Room (Enemalta)
COMAH	Control of Major Accident Hazards
CPD	Civil Protection Department
D3PP/D3PS	Delimara 3 Power Plant/Delimara 3 Power Station
D4PP/D4PS	Delimara 4 Power Plant/Delimara 4 Power Station
EC	Emergency Controller
ECC	Emergency Control Center
EGM	ElectroGas Malta Ltd
ERT	Emergency Response Team
FCP	Forward Control Point
FSU	Floating Storage Unit
GRS	Gas Receiving Station
HFO	Heavy Fuel Oil
HSE	Health Safety & Environment
IEP	Internal Emergency Plan
IFV	Intermediate Fluid Vaporizers
LNG	Liquefied Natural Gas
MEPA	Malta Environment & Planning Authority
NG	Natural Gas
NMPCP	National Marine pollution Contingency Plan
OHSA	Occupational Health & Safety Authority
PPE	Personal Protective Equipment
RGU	ReGasification Unit
SAA	Safe Assembly Point
SAP	Safe Assembly Area
TM	Transport Malta
VCE	Vapour Cloud Explosion
VTS	Vehicle Transit System
[TBA]	To Be Attributed

## **2 NORMAL OPERATING ORGANIZATION**

### **2.1 FSU**

The Normal Operating Organization at the FSU consists of:

- Master,
- Chief Officer,
- 2<sup>nd</sup> Officer,
- 3<sup>rd</sup> Officer,
- Chief Engineer,
- 2<sup>nd</sup> Engineer,
- Able Seaman (AB 4),
- Chief Cook,
- Crew members.

### **2.2 Delimara LNG Regasification Terminal and Power Plant**

The Normal Operating Organization at the Delimara LNG Regasification Terminal and Power Plant consists of:

- Operations Personnel,
- Maintenance Personnel,
- Management and Support Personnel (normal working hours only),
- and Contractors Personnel (normal working hours only).

During normal working hours, the Management Personnel will initiate the Internal Emergency Plan. During off-normal working hours, Operations Personnel will initiate the Internal Emergency Plan.

### 3 EMERGENCY ORGANIZATION

#### 3.1 FSU

The Emergency Organization at the FSU is comprised of designated individuals from the permanent crew, who are trained, knowledgeable and practiced in responding quickly to all emergency situations. This organization is headed by the Incident Commander i.e. the Master.

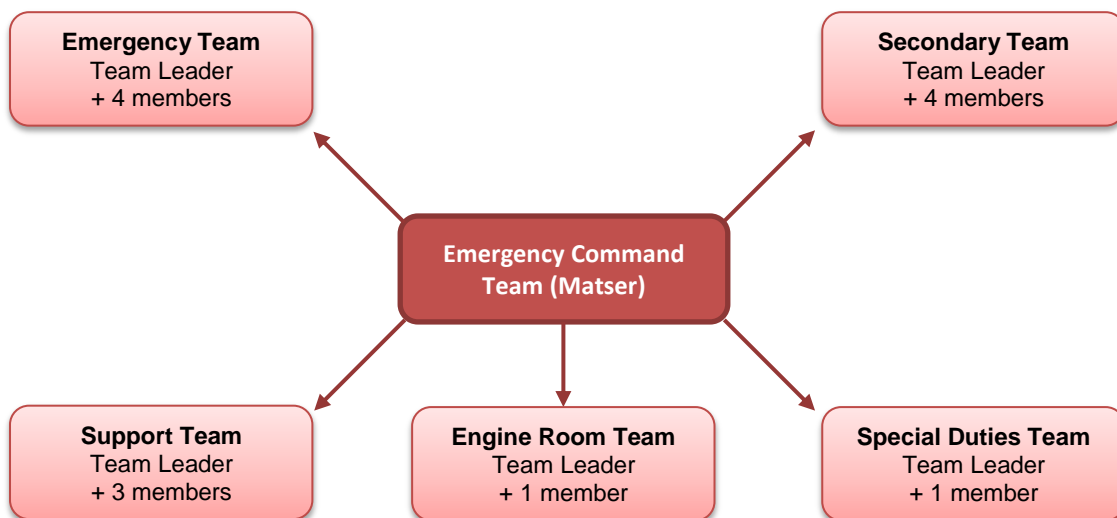


Figure 1: Emergency Organization at the FSU

#### 3.2 Delimara LNG Regasification Terminal and Power Plant

When the Internal Emergency Plan is put into effect, the personnel at the Delimara LNG Regasification Terminal and Power Plant will assume designated positions, each with the specific duties as depicted in the following chart.

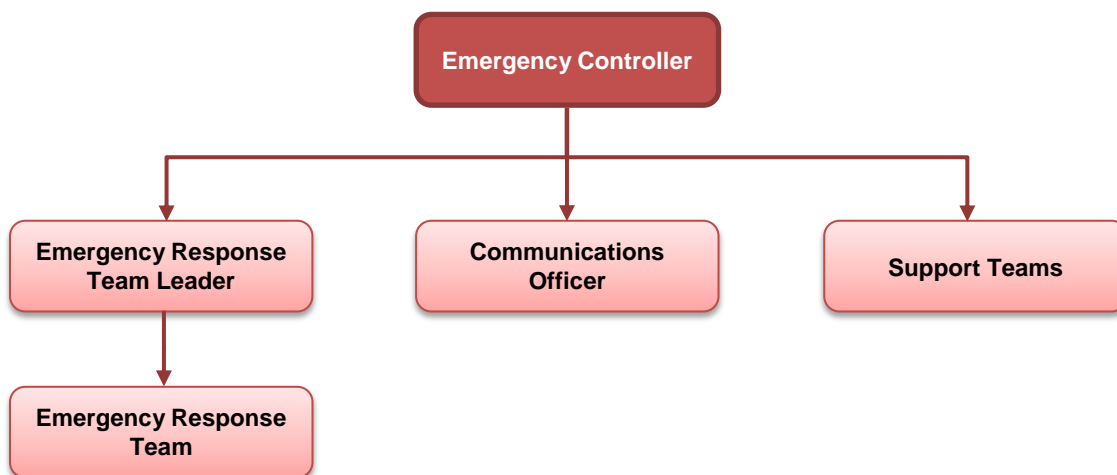


Figure 2: Emergency Organization at the Delimara LNG Regasification Terminal and Power Plant

## 4 EMERGENCY CONTROL SYSTEMS

### 4.1 Emergency Control Centre

Depending on the location of the incident, the Emergency Control Centre (ECC) is to co-ordinate emergency activities, as shown in the following table:

Area	Designation	Emergency Control Centre	Back-up ECC
A1	Floating Storage Unit (FSU)	Emergency Control Room	[TBC]
A2	Jetty	Regasification Electrical and Control Building / Meeting room	[TBC]
B1	Regasification Unit (RGU)		
B2	BOG Compressors Shelter		
B3	Regasification Control & Electrical Building and Utilities		
C	NG Pipe Rack from Regasification to Delimara Power Plant (D3PP / D4PP)		
D	Delimara 3 Gas Receiving Station (D3PP GRS)	Administrative and Control Building / Meeting room	[TBC]
E	Delimara 4 Power Plant (D4PP)		

**Table 2: Location of the Emergency Control Centre**

At Enemalta Power Plant, the Central Control Room (CCR) is to act as the Emergency Control Centre.

All calls in case of an emergency are to be routed to the Emergency Control Centre by radio, telephone, or runner.

Should the Emergency Control Centre be endangered, a standby control centre will be set up in another location from the above table, as directed by the Emergency Controller.

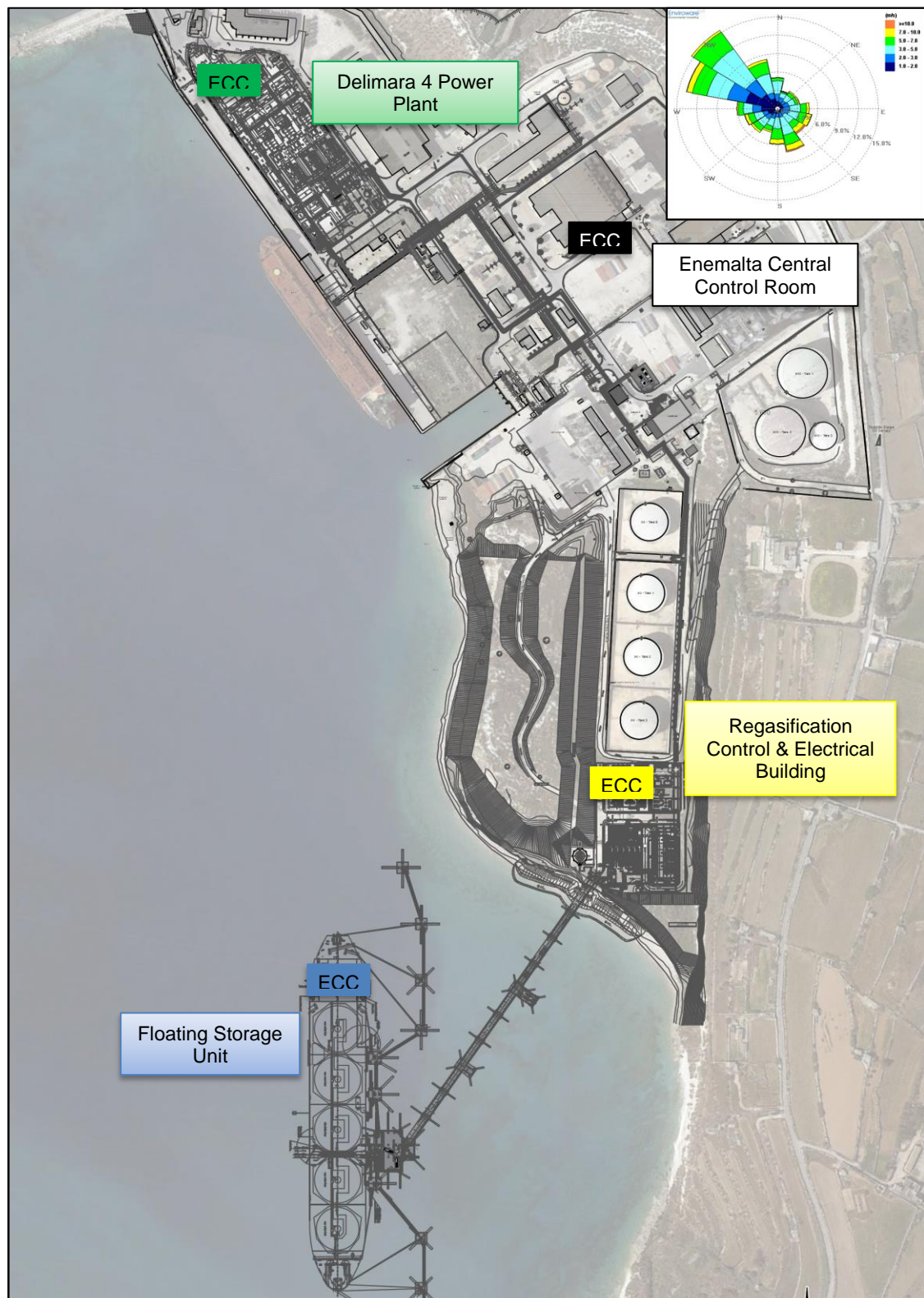
The Emergency Control Centre is provided with (non exhaustive list): the Internal Emergency Plan, communications systems (radio, internal/external, telephone, fax), Personal Protective Equipment (PPE), notebooks, paper board (status board), pencils, pens, camera, etc.

### 4.2 Station Bill at the FSU

At the FSU, the Station Bill will be displayed in the Wheel house, the ERT Muster stations, the CCR, the engine control room and the common alleyway near mess room. It describes the following:

- the emergency communication phone numbers and radio channels,
- various alarms, both audio and visual,
- the Muster Stations for the crew and ERT and the Muster Checkers duties,
- the rescue craft and lifeboat crews and duties,
- a plan of the FSU with relevant safety information indicated.
- the manning and duties of the CCR personnel, FT1 & FT2, the medical team and the pollution control team.





#### **4.3 Forward Control Point**

Depending on the type of emergency, a Forward Control Point (FCP) should be set up as close as possible to the incident (taking due regard to safety), to allow as clear an overview of the incident as possible. The Forward Control Point must have a continuous means of communication (e.g. radio, telephone and/or cell phone) with the Emergency Control Centre.

The Emergency Response Team Leader is located in the Forward Control Point.

#### **4.4 Casualty Clearing Area**

In the event of an accident with several injured, those injured will receive initial treatment on site prior to dispatch to hospital. This area will be the Casualty Clearing Area (CCA).

The Casualty Clearing Area at the FSU is located in the Hospital (Deck C).

If the event occurs at the Delimara LNG Regasification Terminal and Power Plant, depending upon the number of injured, the CCA would initially be located at the Enemalta Clinic. If necessary alternatives such as the Electrical and Control Room at the Regasification Unit or the Administrative and Control Room at the Delimara 4 CCGT can be used on the direction of the Emergency Controller.

At the Regasification Plant, the Electrical & Control Building is only provided with a first aid room.

The Emergency Controller is to inform medical personnel and ambulances of location of the CCA upon arrival.

#### **4.5 Safe Assembly Points and Areas**

Refer to document [ENEM-AEC-E0-00-RP-SE-00014: Alert and Evacuation](#).

## 5 ROLES AND RESPONSIBILITIES

### 5.1 FSU

Roles and responsibilities at the FSU in the case of an emergency are summarized in the following table:

Role	Location	Responsibilities
Emergency Command Team (ECT)	Emergency Control Room (ECR)	<ul style="list-style-type: none"> <li>Take charge of the situation</li> <li>Direct the activities of the individual Emergency Response Teams</li> <li>Keep a running log of the events</li> <li>Establish and maintain communication with external agencies</li> <li>Advise external agencies of possible dangers to other facilities or installations,</li> <li>Inform the Country Operations Manager on the situation</li> </ul>
Emergency Response Team (ERT)	Emergency Station Locker (Main deck)	<ul style="list-style-type: none"> <li>Deal with the emergency as instructed by Master</li> <li>Keep the Emergency Command Team fully apprised of the situation</li> <li>Advise on further action required</li> <li>Require for additional resources if needed</li> </ul>
Secondary Team	Hospital on Deck C	<ul style="list-style-type: none"> <li>Take/provide additional services as ordered by the Emergency Command Team</li> </ul>
Special Duties Team	When the alarm sounds the team shall proceed to their Muster Point (ECR)	<ul style="list-style-type: none"> <li>Technical advice to Master</li> <li>Ensure all equipment in Emergency Room available for emergency</li> <li>Assist Emergency / Support teams if required</li> </ul>
Engine Room Team	When the alarm sounds the team shall proceed to their Muster Point (ECR)	<ul style="list-style-type: none"> <li>Ensure all equipment in Emergency Room available for emergency</li> <li>Assist Emergency / Support teams if required</li> </ul>
Support Team	When the alarm sounds the team shall proceed to their Muster Point (Hospital)	<ul style="list-style-type: none"> <li>Medical aid where required</li> <li>Assist other teams with back-up as required by Master</li> </ul>

**Table 3: Roles and responsibilities at the FSU**

### 5.2 Delimara LNG Regasification Terminal and Power Plant

#### 5.2.1 Emergency Controller

##### 5.2.1.1 Role

The Emergency Controller (EC) is in command of the Emergency Organization at the Delimara LNG Regasification Terminal and Power Plant. If the emergency occurs outside of normal working hours, the Shift Supervisor will assume the Emergency Controller position until relieved by the Manager.

The role of the Emergency Controller involves interacting with both on-site teams (Emergency Response Team dealing with the emergency) as well as off-site organizations (off-site emergency services). If the emergency continues for an extended period, then the Emergency Controller position may be filled using different individuals. The Emergency Controller is normally based in the Emergency Control Center.

### 5.2.1.2 Responsibilities

The specific responsibilities of the Emergency Controller position are as follows:

- Using information provided by the Emergency Response Team Leader, the Emergency Controller will assess the emergency, define objectives to be achieved and determine the appropriate response for the intervention and identify the need for additional security requirements;
- Designate and direct the Communications Officer or act as the Communications Officer until another individual is designated for this position;
- Maintain the safety perimeter and control access to the hazardous area;
- Coordinate activities with off-site emergency services and, if acting as the Communications Officer request off-site assistance;
- Determine which resources are required and direct the call-in of additional Emergency Response Team Members;
- Direct on-site evacuation and provide recommendation for off-site evacuation;
- Maintain the Emergency Control Centre Status Board;
- Develop re-entry plans for any areas previously evacuated.

### 5.2.1.3 Immediate Actions

When the Internal Emergency Plan is activated, the immediate actions to be taken by the Emergency Controller are as follows:

Step	Action
1	Go to the Emergency Control Centre.
2	Get the documents related to his role in the Emergency Organization.
3	Get information about the Alert and Evacuation process.
4	Get information about the immediate action already taken, including Emergency Shut-Down and Fire Protection systems.
5	Advise the Emergency Response Team Leader about his effective position.

**Table 4: Immediate Actions - Emergency Controller**

#### 5.2.1.4 Actions Checklist

Initial actions
<input type="checkbox"/> Establish initial contact with relevant site personnel and establish the nature of the emergency, the potential and current status of personnel, assets and the environment <input type="checkbox"/> Establish who has been informed and who needs to be informed external to EGM operators <input type="checkbox"/> Activate the Emergency Response Team Leader and the Medical Team (if required) <input type="checkbox"/> Classify the emergency, be prepared to reclassify as the emergency unfolds <input type="checkbox"/> Establish ERT at Forward Control Point if required <input type="checkbox"/> Consider whether site or external evacuation is potentially required <input type="checkbox"/> Ensure that the relevant authorities have been notified <input type="checkbox"/> Establish contact with key site operators and subcontractors management as applicable <input type="checkbox"/> React to un-availability of any ERT member or Medical Team member
General actions
<input type="checkbox"/> Ensure all ERT members are aware of the current situation <input type="checkbox"/> If possible maintain an 'open' line with the other site operators and subcontractors representatives <input type="checkbox"/> Consider the need to have Communications Officer support <input type="checkbox"/> Oversee the maintenance of the situation board & record log to ensure accuracy and timeliness <input type="checkbox"/> Maintain regular contact with the ERT Leader <input type="checkbox"/> Regularly confirm casualty and "Personnel On Board" status to maintain accuracy <input type="checkbox"/> Confirm all ERT members understand that all media comment will be made by the Emergency Controller or the Communications Officer <input type="checkbox"/> Call for information on any external contacts already made by other ERT members <input type="checkbox"/> Ensure business and regulator/government notifications are made as per requirements <input type="checkbox"/> If you have to leave the Emergency Control Centre, ensure you appoint a deputy
Strategic actions
<input type="checkbox"/> Discuss potential escalation with the ERT Leader <input type="checkbox"/> Step back from the detail on a regular basis to look at the overall response and potential escalation <input type="checkbox"/> Consider impact minimisation options <input type="checkbox"/> Keep ERT on track regarding response/communications/strategy objectives <input type="checkbox"/> Make decisions without consensus when necessary <input type="checkbox"/> Encourage proactive/lateral thinking from ERT and encourage regular discussions
Concluding actions
<input type="checkbox"/> Collect all Logs and chair ERT debrief session <input type="checkbox"/> Request and follow up on full incident reports and recommendations

**Table 5: Actions Checklist - Emergency Controller**

## 5.2.1.5 Assess the Emergency

Date	Hour	Location / Area
Emergency classification	<input type="checkbox"/> Manageable Emergency <input type="checkbox"/> Non-Manageable Emergency - Internal Emergency <input type="checkbox"/> Non-Manageable Emergency - External Emergency	
Type of accident	<input type="checkbox"/> Flammable Gas Release <input type="checkbox"/> Flammable Liquid Release <input type="checkbox"/> Fire <input type="checkbox"/> Explosion <input type="checkbox"/> Other: .....	
Substance(s)	<input type="checkbox"/> Liquefied Natural Gas (LNG) <input type="checkbox"/> Boil-Off Gas (BOG) <input type="checkbox"/> Natural Gas (NG) <input type="checkbox"/> Lube Oil / Transformer Oil <input type="checkbox"/> Other: .....	
Casualties	<input type="checkbox"/> None / Unknown <input type="checkbox"/> Number of death: ..... <input type="checkbox"/> Number of injured persons: ..... <input type="checkbox"/> Number of missing people: .....	
Accident status	<input type="checkbox"/> Extension <input type="checkbox"/> Stagnation <input type="checkbox"/> Regression	
Weather conditions	<input type="checkbox"/> Wind speed: ..... <input type="checkbox"/> Wind direction: ..... <input type="checkbox"/> Atmospheric stability: .....	
Hazards for the environment	<div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Release  <input type="checkbox"/> Fire (pool fire/jet fire)  <input type="checkbox"/> Explosion (flash fire/VCE)  <input type="checkbox"/> Pollution  <input type="checkbox"/> Other: ..... </div> <div> <input type="checkbox"/> Enemalta: .....  <input type="checkbox"/> Heritage: .....  <input type="checkbox"/> Residential Populations: .....  <input type="checkbox"/> Sensitive Buildings: .....  <input type="checkbox"/> Maritime area: .....  <input type="checkbox"/> Industry: .....  <input type="checkbox"/> Other: ..... </div> </div>	
Involved internal resources		
Requested additional resources		
Evacuation	<div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Floating Storage Unit (FSU)  <input type="checkbox"/> Jetty  <input type="checkbox"/> Regasification </div> <div> <input type="checkbox"/> Delimara 4 Power Plant  <input type="checkbox"/> Enemalta  <input type="checkbox"/> External evacuation required </div> </div>	

**Table 6: Assess the Emergency - Emergency Controller**

#### 5.2.1.6 Define the Strategy

Depending on the scenario, the Emergency Controller will set the priorities for actions both on the hazardous area(s) and area(s) in danger, and considering the location of present on-site staff.

Refer to documents **ENEM-AEC-E0-00-RP-SE-00017: Emergency Response** and **ENEM-AEC-E0-00-RP-SE-00019: Scenarios**

#### 5.2.1.7 Anticipate any Escalation Scenario and Domino Effect

The Emergency Controller will analyse the incident area, starting from the initial situation (type of incident, location, extent) and evaluate the possible escalation scenarios and domino effects, as described in the following table:

Initial scenario	Potential escalation scenarios and domino effects
LNG spillage	Structure damage due to low temperature Flash fire, Vapour Cloud Explosion (VCE), Pool fire on land and/or water
BOG/NG release	Flash fire, Vapour Cloud Explosion (VCE), Jet fire
Vapour Cloud Explosion	Possible damage to building, structure and/or equipment due to overpressure, including control/safety systems and/or fire fighting systems
Pool fire Jet fire	Possible damage to building, structure and/or equipment due to thermal radiation, including control/safety systems and/or fire fighting systems Possible BLEVE (IFV at the Regasification Unit)

**Table 7: Possible Escalation Scenarios (none exhaustive list)**

The Emergency Response Team Leader will be advised on these possible escalation scenarios.

#### 5.2.1.8 Account for Internal and External Resources

The following sheets will help the Emergency Controller for accounting for internal and external resources: **Account of Internal Resources**, **Account of External Resources**.

Basically, resources include (none exhaustive list):

- Fire fighting (fire fighting trucks, hoses, fire pumps...);
- Rescue (ambulance ...);
- Medical (first aid, oxygen...);
- PPE, fire protective clothes, respiratory apparatus;
- Power supply (power generator, fuel);
- Food and drinks...



**Account of Internal Resources (to be completed during emergency)**

Designation	Location	Number			Specification
		Available	Involved	Predictable	
Fire fighting					
Rescue					
Protective equipment					
Medical					
Power supply					
Food and drinks					
Other					

**Table 8: Account of Internal Resources - Emergency Controller**



**Account of External Resources (to be completed during emergency)**

Designation	Location	Number			Specification
		Available	Involved	Predictable	
Fire fighting					
Rescue					
Protective equipment					
Medical					
Power supply					
Food and drinks					
Other					

**Table 9: Account of External Resources - Emergency Controller**

**5.2.2 Emergency Response Team Leader****5.2.2.1 Role**

The Emergency Response Team Leader will be the on-duty Shift Supervisor or Lead Operator. The Emergency Response Team Leader will command the on-site Emergency Response Team and will report to the Emergency Controller.

Generally, the Emergency Response Team Leader is involved with directing the Operations Team and also the off-site emergency services while they are performing emergency actions at the plant. He is responsible for the actions at the area of the incident and will concentrate on resolving the actual incident, including Rescue Response and Fire Fighting Response.

The Emergency Response Team Leader is the Forward Controller.

**5.2.2.2 Responsibilities**

The specific responsibilities of the Emergency Response Team Leader are as follows:

- Assess the emergency situation and assume the role of Emergency Controller until relieved by the designated Manager;
- Identify the actual and potential hazards that the emergency situation will, or may affect the area, its personnel and/or areas adjacent;
- Apply the strategy defined by the Emergency Controller;
- Direct the Emergency Response Team members and coordinate the actions of Operations Personnel;
- Identify specific off-site resources that may be needed for the emergency; and
- Provide the Emergency Controller with regular situation status reports.

In the case of a major accident (loss of containment with flammable product release), the Emergency Response Team Leader will:

- Make strategic decisions to control and resolve the emergency;
- Assure life safety considerations are given the highest priority;
- Minimize environmental impacts through appropriate control strategies;
- Contain the emergency to limit property damage in the event that flammable vapour ignites;
- Coordinate the off-site emergency response services and provide advice as needed;
- Control all ignition sources in the proximity of LNG and flammable gas leaks;
- Consult with the Emergency Controller.

### 5.2.2.3 Immediate Actions

When the Internal Emergency Plan is activated, the immediate actions to be taken by the Emergency Response Team Leader are as follows:

Step	Action
1	Go to the Emergency Control Centre or as directed by the Emergency Controller.
2	Get information about the situation.
3	Get information about the strategy.

**Table 10: Immediate Actions - Emergency Response Team Leader**

### 5.2.3 Emergency Response Team

The Emergency Response Team (ERT) reports directly to the Emergency Response Team Leader. The Emergency Response Team's responsibilities include the direct actions to bring the plant facilities to a safe status.

The Emergency Response Team consists of Operations Personnel, Maintenance Personnel and selected Contractor Personnel and Off-site Emergency Personnel as requested by the Emergency Response Team Leader.

Upon receiving the emergency call, members of the ERT are to meet in the Emergency Control Centre or as directed by the Emergency Controller. Those committed in critical operations are to ensure their facility is made safe and handed over before proceeding to the emergency organization.

The specific tasks that the Emergency Response Team is responsible for include:

Task	Personnel involved	Role and actions
Control of LNG and flammable gas release	Operations and Maintenance Personnel	Implement the immediate actions required to terminate the release and mitigate the consequences of the incident.
Emergency recovery and restoration	Operations and Maintenance Personnel	Implement the immediate actions required to bring the area to a safe condition and mitigate the consequences of the incident.
Fire fighting	Off-site fire fighting brigade and trained employees	Apply fire water for fire fighting and fire protection.
Re-entry into areas that were previously evacuated	Operations and Maintenance Personnel	Re-entry will only be approved by the Emergency Controller, to search for unaccounted personnel, rescue trapped or injured personnel, perform maintenance or operations activities to terminate or mitigate the emergency, determine safe areas as well as personnel exclusion areas and determine the nature or extent of the emergency
Medical Aid	Trained employees and off-site rescue services	The Medical Aid activities include transporting injured persons to a safe location, administering first aid, maintaining accurate records of all first aid treatment, determining if transport off-site is needed to appropriate medical facilities (hospital)
Escort	Operations and Maintenance Personnel	Escort off-site emergency personnel as required

**Table 11: Tasks - Emergency Response Team**

At the direction of the Emergency Response Team Leader, the Emergency Response Team Members will:

- Secure valves, pumps, or other process equipment to cut off supply to any leak emergency;
- Remove ignition sources;
- Remove all personnel to safe locations and assist in rescue activities as required;
- Operate fire water and foam systems to control flammable vapour formation;
- Provide other assistance as needed.

#### **5.2.4 Communications Officer**

##### **5.2.4.1 Role**

In the event of an emergency at the plant, it is critical that information released to public agencies, the media, and ultimately the general public is accurate.

During an emergency situation, the employees may be contacted by the media or by members of the general public regarding the emergency. In order to assure that accurate information rather than misinformation or speculation is disseminated, only the Communications Officer is authorized to provide information to the media, local agencies or the public. Employees will refer all persons with questions regarding the emergency to the Communications Officer. If employees are questioned about statements or speculations that arise, they will also refer the person to the Communications Officer.

The Communications Officer is designated as the information point of contact by the Emergency Controller and acts as the spokesperson for disseminating information to all media outlets and also local and national emergency services.

##### **5.2.4.2 Responsibilities**

The specific responsibilities of the Communications Officer are as follows:

- Contact off-site emergency services to request emergency support as directed by the Emergency Controller during an emergency condition;
- Provide off-site emergency services and local authorities with the status of the emergency;
- Assist the Emergency Controller with all communications and logging;
- Designate a media area, prepare news releases and disseminate information to the media following established protocols.

#### 5.2.4.3 Immediate Actions

When the Internal Emergency Plan is activated, the immediate actions to be taken by the Communications Officer are as follows:

Step	Action
1	Go to the Emergency Control Centre.
2	Get information about the situation.
3	Establish who has been informed about the emergency: other facilities, Enemalta, Contractors, Local Authorities, Fire Fighting Brigade, Police? By whom: plant representative, media?
4	Populations have been alerted and instructed?

**Table 12: Immediate Actions - Communications Officer**

#### 5.2.4.4 Communications Sheets

The following sheets will help the Communications Officer for providing external information: **Information to the Local Authorities**, **Information to the Media** and **Information to the Public**.

All communications shall be validated by the Emergency Controller.

### Information to the Local Authorities

Date	Hour	Name

From	To

**Object:** Activation of the Internal Emergency Plan at the Delimara 4 and LNG Terminal

Type of accident	<input type="checkbox"/> Flammable Gas Release <input type="checkbox"/> Flammable Liquid Release <input type="checkbox"/> Fire <input type="checkbox"/> Explosion <input type="checkbox"/> Other: .....
Substance(s)	<input type="checkbox"/> Liquefied Natural Gas (LNG) <input type="checkbox"/> Boil-Off Gas (BOG) <input type="checkbox"/> Natural Gas (NG) <input type="checkbox"/> Lube Oil / Transformer Oil <input type="checkbox"/> Other: .....
Casualties	<input type="checkbox"/> None / Unknown <input type="checkbox"/> Number of death: ..... <input type="checkbox"/> Number of injured persons: ..... <input type="checkbox"/> Number of missing people: .....
Accident status	<input type="checkbox"/> Extension <input type="checkbox"/> Stagnation <input type="checkbox"/> Regression
Hazards to the environment	<input type="checkbox"/> Enemalta: ..... <input type="checkbox"/> Heritage: ..... <input type="checkbox"/> Residential Populations: ..... <input type="checkbox"/> Sensitive Buildings: ..... <input type="checkbox"/> Maritime area: ..... <input type="checkbox"/> Industry: ..... <input type="checkbox"/> Other: .....
Involved resources	..... ..... .....
Possible escalation scenario(s)	..... ..... .....

**Table 13: Information to the Local Authorities - Communications Officer**

**Information to the Media**

<b>Accident description</b>	<input type="checkbox"/> What? ..... ..... ..... .....
	<input type="checkbox"/> Where? ..... ..... ..... .....
	<input type="checkbox"/> When? ..... ..... ..... .....
	<input type="checkbox"/> How? ..... ..... ..... .....
<b>Substance(s)</b>	
<b>Consequences</b>	<input type="checkbox"/> Casualties? <input type="checkbox"/> Material damage? <input type="checkbox"/> Plant operations? <input type="checkbox"/> Hazards to the environment?
<b>Emergency response</b>	<input type="checkbox"/> Internal ..... ..... <input type="checkbox"/> External ..... ..... .....
<b>Advised authorities</b>	..... ..... .....
<b>Incident investigation</b>	..... ..... .....

**Table 14: Information to the Media - Communications Officer**

Message to be communicated through MEPA and OHSA

[illegible]

### Table 15: Information to the Public - Communications Officer



#### 5.2.4.5

[illegible]**Table 16: Emergency Log - Communications Officer**

**5.2.5 Support Teams****5.2.5.1 Assembly Leaders**

The Assembly Leaders perform the accountability function as well as direct personnel safely to assembly areas. Assembly Leaders will assume their designated roles when a plant evacuation is ordered by the Emergency Controller.

Refer to document [ENEM-AEC-E0-00-RP-SE-00014: Alert and Evacuation](#).

**5.2.5.2 First Aiders**

First Aiders are to assemble near the Casualty Clearing Area if safe, and report to the Emergency Controller.

Details of casualties are NOT to be communicated to relatives or third parties.

**5.2.5.3 Maintenance Personnel**

The Maintenance Personnel is responsible for supporting the Emergency Response Team in the emergency plan providing material resources or man power.

As soon as the Maintenance Personnel is informed about the emergency, they take on the following actions:

- Where personnel are working on critical plant, they are to ensure that all machinery has been made safe before leaving;
- If hot work was in progress, they advise the Emergency Controller;
- In case of any work relating to the fire protection systems, it is essential that operation is restored as a priority.

**5.2.5.4 Operations Personnel**

The Operations Personnel is responsible for continuity of operation in case of emergency and should remain available for supporting the Emergency Response Team.

They will carry out the following actions, as instructed by the Maintenance Personnel:

- Isolate any electrical supplies.
- Isolate any valves that have been opened.
- Isolate & make safe any hazardous equipment that might interfere with work.

It may be helpful to assign someone with coordination to other control rooms including Enemalta in order to safely shut-down the power station if requested by the Emergency Controller.

**5.2.6 Other Personnel**

Upon hearing the plant alarm, all personnel are to proceed to their Safe Assembly Point (SAP) or Area (SAA). They are to remain at this place until instructed to move by the Emergency Controller.

If the assembly points are endangered, an alternative place will be identified.

Refer to document [ENEM-AEC-E0-00-RP-SE-00014: Alert and Evacuation](#).

**5.2.7 Contractors and Visitors**

Third party and contractors working on site must be briefed on safety procedures before commencing works on Enemalta premises.

All visitors are to report to the closest Safe Assembly Point or Area and identify themselves to the Assembly Leader.

Refer to document [ENEM-AEC-E0-00-RP-SE-00014: Alert and Evacuation](#).

## **6 OFF-SITE EMERGENCY ORGANIZATIONS**

### **6.1 Coordination with Off-Site Organizations**

Certain emergency actions will require emergency response from off-site emergency organizations. Effective emergency response planning and response is therefore dependent on close, ongoing coordination between the Plant and those off-site emergency organizations.

To assure effective coordination is maintained, there will be periodic meetings, drills and familiarization tours conducted for these organizations, ideally on at least an annual basis. In addition, the off-site emergency organizations will be encouraged to send new members to the Plant for familiarization tours.

Refer to document [ENEM-AEC-E0-00-RP-SE-00017: Emergency Drills](#).

### **6.2 Civil Protection Department (CPD)**

CPD is responsible for fire fighting and rescue operations, emergency planning and handling of major accidents. CPD is overall in charge at major incidents with potential external effects.

Refer to document [ENEM-AEC-E0-00-RP-SE-00015: Containment, Detection, ESD and Firefighting](#).

### **6.3 Transport Malta (TM)**

Transport Malta is responsible for regulating safety and security issues along the shoreline and in ports. The Authority through the Vehicle Transit System (VTS) Control Room, must be informed of any issues that may endanger the port or port users, or affect the marine environment. Transport Malta has a leading role on marine pollution preparedness and response as per National Marine Pollution Contingency Plan (NMPCP).

Refer to document [ENEM-AEC-E0-00-RP-SE-00015: Containment, Detection, ESD and Firefighting](#).

### **6.4 Occupational Health & Safety Authority (OHSA)**

OHSA is the Local Authority responsible for all Health & Safety matters including COMAH. OHSA must be alerted to any serious incident at COMAH sites and injuries to workers.

### **6.5 Malta Environment & Planning Authority (MEPA)**

MEPA is responsible for general environmental issues. MEPA must be informed of any environmental incidents, including spills, air, marine or land pollution.

### **6.6 Environmental Health Directorate**

The Environmental Health Directorate is responsible for public health. It is to be informed in case of air pollution or marine pollution, where the public health may be affected, e.g. swimming water quality.

### **6.7 Emergency Services**

The Emergency Services include Civil Protection Department, Ambulance and Police.

Additional resources may be called up through them to assist, for instance, Armed Forces of Malta (AFM), voluntary societies, etc.

## **7 INCIDENT REPORTING REQUIREMENTS**

### **7.1 Purpose and Scope**

Completion of an incident report form is the first step in the incident reporting process. Incident reporting includes near miss events. The reporting of near miss events or situations leads directly to accident prevention in a number of ways. In many instances, near miss reports uncover potential problems that need to be corrected and communicated to others. At times, near miss reports reveal misunderstandings or misconceptions that have the potential to eventually lead to undesirable consequences if left undiscovered. Whatever the situation or circumstance, near miss reporting continues to play a key role in accident prevention at all levels.

### **7.2 Incident Investigations**

Employees who witness an incident will complete and forward an incident report to their supervisor. After reviewing, the supervisor will determine if the investigation can be completed by the supervisor and the reporting employee, or if a formal team investigation is warranted. If the supervisor and employee complete the investigation, the supervisor will forward a typed report to the HSE Manager and also the Operations Manager.

If the supervisor investigating the incident determines that a formal investigation is required, the investigation will comprise a group appointed by the Plant Manager or designee. The appointed group will include, as a minimum, the HSE Manager and the Operations & Maintenance Manager. Others may be appointed at the discretion of the group, including outside personnel.

Any incident that includes an injury related to equipment failures, equipment damage or failures, a hazardous material release, an activation of a gas, spill and/or fire system; or a "near miss" requires a formal, team investigation. The investigation must be initiated promptly and not later than 48 hours after the incident.

In some cases, regulatory bodies may conduct their own investigations. The site of the incident will be maintained intact and undisturbed to the extent practical. The Plant Manager and HSE Manager will coordinate responses to such investigations.

### **7.3 Investigation Reports**

At the conclusion of formal investigations, a report will be prepared and submitted to the Plant Manager. As a minimum, the report will include the following information:

- Summary of the entire incident including time, date, weather conditions, etc.
- Description of the incident;
- Date investigation began;
- Description of all damage, including off-site damage;
- Cause and contributing factors;
- Equipment failures;
- Procedural errors;
- Improper emergency action;
- Intentional tampering;
- Deficiencies in established procedures;

- Photographic documentation;
- Written statements from persons who were first to the scene of the emergency and other witnesses;
- Copy of printouts from the Control Room equipment;
- Summary of emergency response and actions;
- List of all persons on the site;
- List of organizations responding to the emergency;
- List of all injured people and extent of their injuries;
- Conclusions of the investigative group;
- Recommendations resulting from the investigation;
- Critique of all response and follow-up activities.

The report of the investigation will be maintained on file for at least five years.

When the initial investigation has been completed, clean-up procedures will begin, necessary repairs will be made and equipment will be checked and returned to service according to procedures in the Operations & Maintenance Manuals.

## 7.4 Regulatory Notifications and Reports

It will be the responsibility of the Plant Manager, Health, the HSE Manager and the Operations Manager to ensure all regulatory notifications and incident reporting are initiated and completed.

Authority	Category of Incident			
	Fire/Explosion	Spill/Release	Death/Injury	Property damage
Civil Protection Department (CPD)	X	X		
Transport Malta (TM)	X <sup>(1)</sup>	X <sup>(1)</sup>		X <sup>(3)</sup>
Occupational Health & Safety Authority (OHSA)	X	X	X	
Malta Environment & Planning Authority (MEPA)	X	X	X	
Environmental Health Directorate	X <sup>(2)</sup>	X <sup>(2)</sup>		
Police			X	

(1) In the case of any fire or spill which can affect the sea

(2) If the sea may be affected (for bathing quality) or serious air pollution

(3) If the damage are related to the FSU

**Table 17: Regulatory Notifications and Reports - Distribution Matrix**

