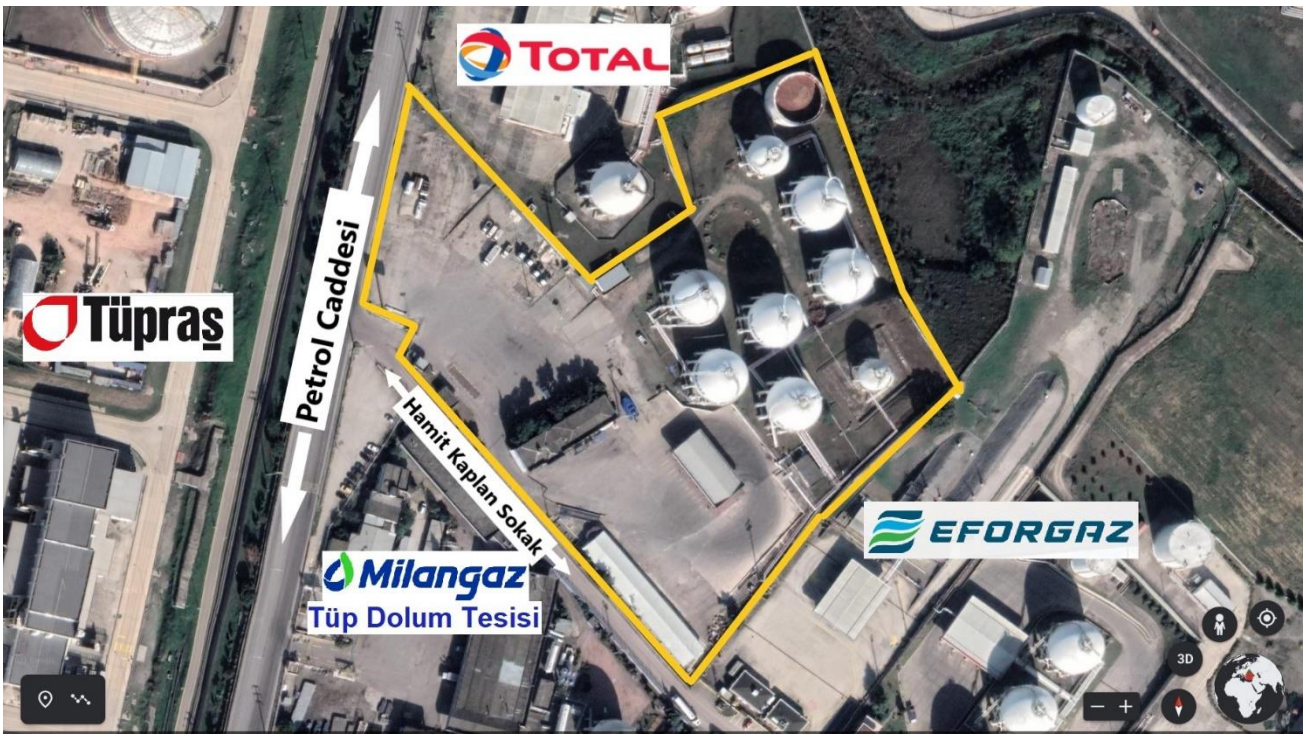
LİKİTGAZ DAĞITIM VE ENDÜSTRİ A.Ş.

KÖRFEZ 2 FILLING TERMINAL

DANGEROUS CARGO HANDLING GUIDE



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UGUR AVCI

SIGNATURE

SEAL

Contents

Revision Page

Sequence No.	Rev. No.	Content of the Revision	Revision date	Revision Responsible	
				Name and surname	Signature
1	01	New DGSA Appointment and Revision of DGCC Date	01.10.2023	Uğur AVCI	
2	02	New DGSA Appointment	07.03.2024	Uğur AVCI	
3					
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5					
6					
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9					
10					
11					
12					
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14					
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16					
17					
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19					
20					

1. INTRODUCTION

The facility started operating on 20.06.2020. It operates in a total area of 29.451 m2, 1793 m2 of which is closed. Hydrocarbon Gas Mixture - (UN 1965) final products are stored and filled at the terminal. As the terminal border neighbours, GUZEL ENERJİ AKARYAKIT A.Ş, EFOR FUEL DAG. A.Ş, LİKİT GAZ DAĞITIM VE ENDÜSTRİ A.Ş has facilities.

1.1. The entry and possession of dangerous goods in the Coastal Facility, the subsequent handling, the general safety and protection of the area, the protection of the loads, the safety of everyone at or near the coastal facility and the protection of the environment should be controlled.

1.2. Safety of life at sea is also related to the safety and protection of a ship, its cargoes and crew at the coastal facility, and the precautions taken regarding dangerous cargoes before they are directly loaded/discharged and during handling.

1.3. The recommendations in this guide are limited to dangerous goods in the port area as part of the transport chain.The recommendations in this guide do not apply to dangerous goods that are generally kept in the port area or used in the port area, but the Administration may wish to check whether the said use and storage procedures comply with legal national requirements.

1.4. Although land, port and sea elements are included in the general transport chain, it is very important that the persons responsible for the matters specified in previous articles take all kinds of precautions and that all relevant information is given to the persons involved in the transport chain, also on the final consignment.Consideration should be given to the possible different requirements for different modes of transport.

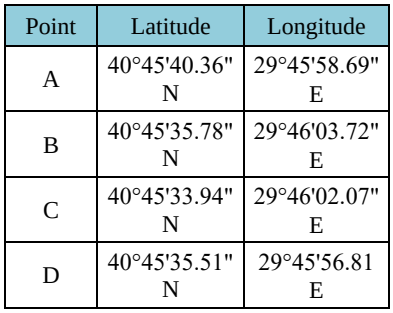
1.5. The safe transportation and loading of dangerous goods is based on the correct and precise application of the regulations for the transportation and loading of the cargo in question, and is subject to the judgment of everyone who knows the regulations fully and in detail and is aware of the current risks related to these issues.This can only be achieved through properly planned and executed training and retraining of the persons concerned.

1.6.Laws, regulations and related publications are under constant evaluation and are regularly revised.It is very important to use only current versions.The contents of these Laws, regulations and related publications are reproduced in the recommendations in this guide only to the extent necessary.

1.7. In the preparation of this guide, IMDG CODE MARPOL, IGC CODE and IMO 1216 CR. documents were consulted and information was used.

FACILITY INFORMATION FORM

1	Facility operator name/title	LIKITGAZ DAĞITIM VE ENDÜSTRİ A.Ş.		
2	Contact information of the facility operator (address, telephone, fax, e-mail and web page)	BARBAROS MAH. KARDELEN SOK.PALLADIUM TOWER 2/1 FLOOR 7-8 34746 ATASEHIR – İSTANBUL 0216 265 43 00 Ahmet.goktas@milangaz.com.tr		
3	Facility name	MİLANGAZ YARIMCA FILLING FACILITY		
4	City where the facility is located	KOCAELİ		
5	Contact information of the facility (address, telephone, fax, e-mail and web page)	BARBAROS MAH.PETROL CAD.NO:15 GULF / KOCAELİ Phone:0262 527 14 38 e-mail:Ugur.avci@milangaz.com.tr		
6	Geographical region of the facility	MARMARA REGION		
7	Port Authority and contact details of the facility	KOCAELİ REGIONAL PORT MANAGEMENT ATALAR MAH. SAHIL YOLU CAD. NO:26 YARIMCA GULF KOCAELİ Phone:0262 528 37 54		
8	Mayor's Office and contact details of the facility	KÖRFEZ MUNICIPALITY ARCHITECT SINAN MAH.ESREF BITLIS CAD. NO :369 GULF KOCAELİ Phone:0262 528 23 02		
9	Name of the Free Zone or Organized Industrial Zone where the facility is located	-		
10	Validity date of Coastal Facility Operation Permit/Temporary Operation Permit	31.12.2025		
11	Facility activity status	Own load and additional 3rd party (X)	Own load (…)	3rd Party (….)
12	Name and surname of the facility manager, contact details (phone, fax, e-mail)	UGUR AVCI Phone:0532 2254793 e-mail:Ugur.avci@milangaz.com.tr		

13	Name and surname, contact details (phone, fax, e-mail) of the dangerous goods operations officer of the facility	UGUR AVCI Phone:0532 2254793 e-mail:Ugur.avci@milangaz.com.tr
14	Name and surname of the Dangerous Goods Safety Advisor of the facility, contact details (phone, fax, e-mail)	MERAL SUNA Phone: 0505 888 16 67 e-mail: meralsunap34@gmail.com
15	Marine coordinates of the facility	
16	Types of dangerous goods handled at the facility (Loads within the scope of MARPOL Annex-I, IMDG Code, IBC Code, IGC Code, IMSBC Code, Grain Code, TDC Code, asphalt/bitumen and scrap loads)	(UN 1965 HYDROCARBON GAS MIXTURE) IGC CODE
17	Types of ships that can approach the facility	LIQUEFIED GAS VESSEL (LPG) SHIP)
18	Dangerous goods handled at the facility (loads other than IMDG Code, among the cargo types in Article 16, will be written separately. Additional cargo request will be sent to the port authority with Annex-1 form. It will be added to TYER when appropriate)	-
19	Classes for cargo handled, subject to IMDG Code	Class 2.1 Flammable Gases
20	Groups in characteristic table for handled cargo subject to IMSBC Code	-
21	Distance of the facility to the main road (kilometers)	1 KM
22	The distance of the facility to the railway (kilometers) or the railway connection (Yes/No)	3 KM –NO
23	Name of the nearest airport and its distance from the facility (kilometers)	CENGİZ TOPEL AIRPORT / 45KM
24	Load handling capacity of the facility (Ton/Year;TEU/Year;Vehicle/Year)	500.000 TONS / YEAR 25,000 VEHICLES / YEAR
25	Whether scrap handling is done at the facility	NO

Point	Latitude	Longitude
A	40°45'40.36" N	29°45'58.69" E
B	40°45'35.78" N	29°46'03.72" E
C	40°45'33.94" N	29°46'02.07" E
D	40°45'35.51" N	29°45'56.81 E

26	Is there a border gate? (Yes No)	NO
27	Is there a bonded area? (Yes No)	NO
28	Cargo handling equipment and capacities	3 PCS LPG PUMP Total 650 m3/hour
29	Storage tank capacity (m3)	32.100m3
30	Open storage area (m2)	-
31	Semi-closed storage area (m2)	-
32	Closed storage area (m2)	-
33	Determined fumigation and/or de-fumigation area (m2)	Not Available
34	Name/title contact details of pilotage and tugboat services provider	ANKAŞ ANATOLIAN PILOTAGE INC. Phone:0262 528 33 00 MARIN ROMÖRKOR AND KILAVUZLUK INC. Phone:0212 243 38 83
35	Has a Security Plan been created? (Yes No)	YES
36	Waste Reception Facility capacity (This section will be arranged separately according to the wastes accepted by the facility)	IZAYDAŞ
37	Dock/pier etc. properties of fields	

	Dock / Pier No	Height (meter)	Most (metre)	Maximum water depth (meters)	Minimum water depth (meters)	Largest Ship Tonnage and Length DWT/GRET/Meter
	Buoy			27 MT	3 MT	60000 DWT -227 MT

	Pipeline Name (If Available)	**Piece**	**Length (meter)**	**Diameter of Pipes**
1	SEA BOTTOM PIPELINE NO. 1	1	1.100 MT	14 inches
2	SEA BOTTOM PIPELINE NO 2	1	1,000 MT	10 in:

1.2 Loading/Unloading, Handling and Storage Procedures for Dangerous Cargoes Handled and Temporarily Stored at the Port Facility

1.2.1.1 Our facility handles class 2.1 Hydrocarbon gas mixture (UN1965) classified a dangerous cargo under

the IGC Code and IMDG Code

1.2.1.2 The following issues must be fulfilled for the safety of the coastal facility, employees, and ships in the coastal facility in matters such as the handling of dangerous cargoes coming to the port facility, their waiting at the coastal facility, stacking and sorting, and storage

1.2.1.2.1 With the participation of Operation, Field planning, HSE, DGSA and other related staff, a coordination meeting will be held at least 1 day before the acceptance of dangerous cargo to the Port facility. (The decision to held this meeting for the routinely handled dangerous cargoes accepted to the port can be made by the Operation or HSE / DGSA)

1.2.1.2.2 Following issues will be discussed during the coordination meeting with regard to the dangerous cargo (es) to be accepted to the port:

1. Risks arising from dangerous cargo
2. Interaction with Dangerous cargoes present in the Port facility,
3. Interaction with the cargoes planned to be accepted to the Port facility in the near future,
4. Storage, stacking conditions,
5. Material and equipment requirements in terms of Emergency Response
6. Adequacy of Emergency Response teams
7. Interaction with/from adjacent facilities

The issues mentioned herein above will be discussed within the scope of current IMDG CODE documents and a management decision for accepting/rejecting will be taken.

1.2.1.2.3 If a decision is made at the meeting to accept the dangerous cargo, the management, operation, storage, security, emergency response units are informed and the preparation and acceptance process is started.

1.2.1.2.4 In case of the need to inform the Port Authority in the acceptance of the cargo and the bringer to the port facility, the situation is notified to the Port Authority in writing, together with the reasons.

1.3 Operational Procedures for Safe Handling of Dangerous Liquid Bulk Cargoes

1.3.1 Application

1.3.1.1 Liquid bulk dangerous cargoes are handled with the help of buoys within our port facility.

1.3.1.2 The equipment, number of shifts and team are determined during the operations meeting held one day before. SDS of the cargo in ship notification is provided to HSE unit by the agency 3 days before.

1.3.1.3 After the ship is securely tied to the buoy with the support of the pilot and mooring, a safety inspection is carried out on the ship. If there is an unsafe situation exists, the situation shall be notified to the ship's staff and shall be ensured that they take the relevant measures. Unloading equipment and appropriate pipe selection are made by the staff of port facility. ISGOTT Ship/Shore Safety Checklist is mutually signed. A communication network is established between the ship and the Port Facility.

1.3.1.4 Employees are present next to the flexible hoses to be connected to the ship, and act together with the ship's personnel in connecting the liquid cargoes to the ship's entry/exit manifolds.

1.3.1.5 Appropriate pressure adjustment is made with the ship and measures are taken to prevent the tanks from overflowing. In case of danger, the ship's personnel is immediately informed and the line should be cut off.

1.3.2 Requirements

1.3.2.1 Gas detectors at the port facility will be kept ready being calibrated and made ready to use.

1.3.2.2 The vehicles coming to the loading or unloading platform at the port facility will be eliminated from static electricity, flame arrestor apparatus will be placed at their exhausts and their groundings shall be made during the loading or unloading at the port facility. Flame arrestor apparatus will be provided by the Ground Tanker Operations Unit. Ground tankers which don't have flame arrestors shall not be taken to the port facility. This will not be required for tankers having ADR standards (I.E. Euro Motor 5 & 6)

1.3.2.3 Required notices and warning signs shall be placed around the handling area. Related personnel will wear personal protective clothing and outfit in accordance with work health and safety requirements at dangerous places and under dangerous conditions. Personnel who don't have protective clothing and adequate equipment in line with their job descriptions and their working areas will not be employed.

1.3.2.4 Periodic repair/maintenance and calibration works of devices to be used will be made and certificates, journals or ledgers of records will be kept updated.

1.3.2.5 First aid equipment to be used during intervention will be placed at a place known by the personnel which is easily accessible in case of emergency or accidents.

1.3.2.6 Communication equipment to be used in the Port facility shall be of the type that can be used safely in flammable or explosive environments are used in the loading / unloading operations of dangerous liquid bulk cargoes.

1.3.2.7 Flexible hoses used in loading or unloading of liquid bulk dangerous cargoes should have a certificate specifying the approval of type as well as pipe type, maximum working pressure of the pipe and production month and year of the pipe. Repair and maintenance works and testing of the said pipes will be carried out as per the criteria stated in ISGOTT and relevant records shall be kept. Hoses to be used in loading or unloading operations which are not in service will be kept according to the criteria specified by ISGOTT.

1.3.2.8 Adequate number of electrical insulation flanges for the flexible hoses used in loading or unloading operations of liquid bulk dangerous cargoes.

1.3.2.9 Handling, loading/unloading and storage of dangerous liquid bulk cargoes are provided in a way to eliminate the possibility of dangerous reaction with other incompatible cargoes and materials.

1.3.2.10 The Shift Supervisor is responsible for the additional safety and security measures to be taken at the Port facility.

1.3.2.11 In our Port Facility, Operations Officer and Shift Supervisor are responsible for handling dangerous liquid bulk cargoes.

1.3.2.12 The master of a ship and the liquid cargo foreman, within their respective areas of responsibility, should have immediately make available the following information with respect to each liquid bulk cargo transported in cargo operations and emergency cases to the port authority and other involved parties

1.3.2.12.1 Information to be provided by the Ship Master;

1.3.2.12.1.1 Proper shipping name, UN number (if any) and description of its physical and chemical properties (including reactivity) of the dangerous cargo.

1.3.2.12.1.2 Procedures for cargo transfer, slop transfer, gas-freeing, inerting, ballasting, de-ballasting and tank cleaning.

1.3.2.12.2 Information to be provided by the Operations Manager;

1.3.2.12.2.1 Information on special equipment required for the safe handling and loading/unloading of certain loads, and emergency response procedures, including:

- What to do in case of spillage or leakage,
- Measures to be taken to prevent accidental contact of persons with dangerous cargoes within the scope of Occupational Health and Safety,
- Fire fighting procedures and appropriate communication systems to be used in case of fire.

1.3.2.13 1It should be ensured that, before and during handling and loading or unloading operations of liquid bulk dangerous cargoes at any area, appropriate warning notices, preferably pictograms, are placed at all entrances.

1.3.2.14 Continuous communication will be ensured during the handling and loading or unloading of dangerous liquid bulk cargos, through Sea Band Channel 16 and from the work channel specified in the protocol and effectiveness of communication will be ensured during the cargo operations.

1.3.3 Piping used for dangerous bulk liquid cargoes

1.3.3.1 Flexible hose:

- Flexible hoses will be used for cargo by considering the temperature and suitability and not be used for other than these cargoes.

- If they are prone to be damaged by impact they will be protected accordingly.

- The pipe will be electrically continuous except for the inclusion of an insulating flange or non-conductive spool piece when used for the transfer of a flammable liquid. The pipeline on the seaward side of the insulating section should be electrically continuous to the ship, and that on the landward side should be electrically continuous to the jetty earthing system. The insulating flange should be tested in accordance with chapter 17 of ISGOTT.

1.3.4 The Operations Officer should fulfill the following responsibilities:

1.3.4.1 He shall take adequate precautions are taken to prevent a short-circuit of the insulating section.

1.3.4.2 He shall inspect and test the insulating and earthing systems at appropriate intervals to ensure their effectiveness.

1.3.4.3 In the case of a flammable atmosphere, he shall ensure that other metallic connections between the berth and the ship are arranged or maintained in such a way that they do not allow sparks**.**

1.3.4.4 He shall take actions in accordance with appropriate checklists in the International Safety Guide for Oil Tankers and Terminals (ISGOTT).

1.3.5 Ignition sources

1.3.5.1 The Operations Officer shall ensure that that the master of a ship is notified of any conditions which may require precautions to be taken for avoidance of sources of ignition on the ship such as galley stoves or cooking appliances with non-immersed elements.

1.3.6 Containment of spills

1.3.6.1 In the event of an accident, all discharge holes and pipes and all kinds of drains at the interface where dangerous liquid bulk cargoes may leak are closed before the start of the loading / unloading operation of dangerous liquid bulk cargoes, and it is ensured that they are kept closed during the operation. In addition, in case of any cargo spillage, appropriate collection and disposal of the spilled cargo by the Port facility is also provided.

1.3.7 Handling

1.3.7 Handling

1.3.7.1 Flexible hoses

1.3.7.1.1 Within their respective areas of responsibility, the Ship's Master and Operations Officer must ensure that:

.1 No Flexible hose is used for cargoes other than those for which it is suitable, having regard to the temperature and compatibility of such cargoes, or at any working pressure for which it is unsuitable.

.2 Before being placed in service, each flexible hose should be hydrostatically tested in accordance with Administration requirements.

.3 Before being placed in service, each Flexible hose supplied should be hydraulically tested in accordance with the requirements of the regulatory authority.

.4 Before being put into use on any day a Flexible hose is visually inspected. Flexible hoses should be inspected at frequent intervals during operations..

.5 Documents showing the type of hose, its specified maximum working pressure and its month and year of manufacture will be kept at the facility.

.6 It will be ensured that there are adequate electrical insulation flanges and the length of each Flexible hose is sufficient to satisfactorily operate within the defined operating envelope without overstressing the terminal connections.

.7 Procedures for leak-free separation from the flexible hose coupling are adequately implemented to protect the environment, personal safety, and equipment in the event of an emergency.

.8 A Flexible hose rigged for the handling of liquid bulk dangerous cargoes is kept under adequate supervision.

.9 It will be ensured that there are adequate procedures for the disconnection of the Flexible hose in the event of an emergency, to protect the environment, personnel safety and equipment.

1.3.8 Initial measures

1.3.8.1 Within their respective areas of responsibility, the Ship's Master and Operations Officer shall ensure that the cargo handling controls, measuring systems, emergency shutdown and alarm systems are tested and found to be satisfactory before starting the cargo transfer operation.

1.3.8.2 Before starting the dangerous liquid bulk cargo operation, the following requirements will be met.

1.3.8.2.1 The suitability of the number, diameter, flow rate and maximum working pressures of the pipelines and hoses that the ship and the terminal can allocate for unloading.
1.3.8.2.2 The presence of responsible persons during start up operations on board ship and ashore
1.3.8.2.3 In case of an emergency that may occur during handling operations, the steps to be taken and the signs to be used are reported.
1.3.8.2.4 Agree in writing the action to be taken and the signals to be used in the event of an emergency during handling operations; and
1.3.8.3 It will be ensured that appropriate safety precautions and clothing are used.
1.3.8.4 The Operations Officer shall ensure that the loading/unloading connections of the flexible hose are safely and securely blinded when not in use or in standby service.
1.3.8.5 “Ship/Shore Safety checklist” in International Safety Guide for Oil Tankers and Terminals (ISGOTT) shall be completed and signed according to “Guidelines for completing Ship/ Shore Safety checklist”.

1.3.9 Pumping

1.3.9.1 Within their respective areas of responsibility, the Ship's Master and Operations Officer shall ensure that:
1.3.9.1.1 Frequent checks are made to ensure that the agreed back-pressures and loading or unloading rates are not exceeded;
1.3.9.1. All reasonable care is taken to prevent all relevant pipelines, loading arms, Flexible hoses and associated equipment on board the ship and ashore from developing a leak, and that they are kept under adequate supervision during the handling of liquid bulk dangerous cargoes;
1.3.9.1.3 Effective communication is maintained between the ship and Port equipment during transfer operations;
1.3.9.1.4 A safety checklist is available for inspection during handling operations;
1.3.9.1.5 During the handling of dangerous liquid bulk cargoes, necessary arrangements have been made to measure the tankers to be discharged to ensure that the tanks are not overfilled;
1.3.9.1.6 Responsible persons are present during operations on board and on Port;

1.3.9.1.7 Appropriate safety equipment and clothing are used.

1.3.10 Preparation of pre-evacuation meetings with the ship, safety and checklists

After the ship's customs controls are completed;

1.3.10.1 The items in the form titled "Check List of Matters Related to Safety on the Ship and on the Beach" are checked and the missing parts are eliminated and signed by mutual agreement with the ship.

1.3.10.2 If the ship is at a security level higher than the security level of the facility under the ISPS Code, a Security declaration is drawn up between the ship and the facility and mutual signatures are signed. This situation is reported to the port authority.

1.3.10.3 Documents belonging to the cargo owner, if any, are taken from the ship and checked.
1.3.10.4 Original "Bill Of Lading", "AT.R1 Certificate" documents received from the ship are delivered to the Customs Broker in return for a report.
1.3.10.5 The preparatory letter issued by the ship is examined and signed by specifying the required notes.
1.3.10.6 No waste is received from ships.
1.3.10.7 The documents of the cargoes belonging to the port of loading are taken and the "Documentation of Documents Received from Ships" is filled and signed by the Captain.
1.3.10.8 The reports of the supervisors who control the ship are checked. It is checked by requesting the “Vessel Ullage Report”.
1.3.10.9 The official product quantity given in the Bill of Lading is compared with the product quantities measured in the ship tanks after loading. If abnormal differences are observed, the post-loading and pre-discharging values of the tank measurements are checked and the reason is investigated.
1.3.10.10 Dangerous Cargoes Handling Guide (DCHG) information is shared with the master of the ship for information about the Port and emergency departure procedures.

1.3.11 Connecting hoses to ships

The following operations are carried out by the ship:

1.3.11.1 Whether the ship's valve is the correct one before the hose connection is made between the ship's docked manifold valve and the ship's manifold valve. It is checked by looking at the "Ship Load Plan" together with the captain.
1.3.11.2 Labels showing the type of cargoes and tank numbers of the ship are attached to the ship lines by the ship.

1.3.12 Completion of the operation

1.3.12.1 The master of a ship and berth operator within their respective areas of responsibility should ensure that after the completion of every transfer of liquid bulk dangerous cargoes the valves of the discharging and receiving cargo spaces and tanks are closed and any residual pressure in the relevant pipelines and Flexible hoses is released. Moreover:;

1.3.12.2 It must be ensured that prior to the disconnection of the flexible pipelines from the ship it is drained of liquids and the pressure is relieved;

1.3.12.3 It must be ensured that all safety precautions are taken, including sealing the vessel manifold connections and Flexible hoses with a blind flange.

1.3.12.4 It must be ensured that appropriate safety equipment and clothing are used.

1.3.12.5 According to their responsibilities, the ship's master and the Port facility operator should carry out the unloading operation of low temperature liquefied gases only if the following conditions are met;

- All relevant tanks, pipelines and other pipelines on the ship and on the Port facility are to be cooled gradually and evenly to avoid thermal (thermal) stresses.

- Keeping all automatic controls, gas detectors and other related equipment in working order, Flexible hoses or pipes will be cleaned with a method suitable for the load by emptying the remaining loads after use. In cases where it is not possible or not to perform these operations, the free ends of the flexible pipes will be closed with a suitable equipment in order to prevent the steam or air inside from escaping.

2 RESPONSIBILITIES

All parties engaged in the transport of dangerous cargoes have to take all necessary measures to carry out the transportation in a safe, secure and environmentally friendly manner, to prevent accidents and to minimize the damage in case of an accident.
The EmS Guide which includes Emergency Response Methods and Emergency Schedules for Ships Carrying Dangerous Cargoes in emergencies such as fire, leakage, spillage that occur during the transportation of dangerous cargoes should be used. The Medical First Aid Guide (MFAG) in the IMDG Code annex is used in order to provide the necessary medical first aid for the people affected by the damages of dangerous cargoes and the health problems caused by the accidents involving these cargoes.

2.1 Responsibilities of The Relevant Person of Cargoes

Responsibilities of the Relevant Person of Cargoes are as follows:

2.1.1 To prepare and has all mandatory documents, information and documents related to dangerous cargoes prepared and ensures that these documents are present with the cargo during the transportation activity.

2.1.2 To provide classification, definition, packaging, marking, labeling and placarding of dangerous cargoes, in accordance with the legislation, if possible, according to their type.

2.1.3 To ensure that dangerous cargoes are safely loaded, stacked, securely fastened, transported and unloaded to the packaging and cargo transport unit, whichever is possible, in accordance with the approved and rules, according to the type of load.

2.2 Responsibilities of The Port Facility Operator

Responsibilities of the port facility operator are as follows:

2.2.1 Not to berth the ships carrying dangerous cargoes without the permission of the port authority.

2.2.2 To provide written information within the scope of facility rules, cargo handling rules and relevant legislation to the ship that will dock at its facility.

2.2.3 Not to handle dangerous cargoes for which it has not received a handling permit from the administration, and not to make the ships that will berth suffer by planning in this context.

2.2.4 To request mandatory documents, information and documents related to dangerous cargoes from the person concerned and ensures that they are included with the cargo. In case the relevant documents, information and documents cannot be provided by the cargo person, it is not obliged to accept or handle the dangerous cargo at its facility.

2.2.5 To carry out the loading or unloading operation according to the agreement to be reached by sharing all the data that may be required according to the characteristics of the cargo with the ship's person. The ship does not make any changes in the operation without the knowledge of the person concerned.

2.2.6 To determine the working limits by taking into account the safe working capacity of the facility and the weather forecasts, and takes the necessary measures to ensure that the ship is safely moored at the pier and handling.

2.2.7 To control the transport documents containing information that the dangerous cargoes coming to the facility are classified, packaged, marked, labeled, plated and loaded safely to the cargo transport unit.

2.2.8 To ensure that the personnel involved in the handling of dangerous cargoes and the planning of this handling are certified by receiving the necessary training, and does not assign the personnel without documents to these operations.

2.2.9 To ensure that the dangerous cargoes handling equipment in its facility is in working condition and that the relevant personnel are trained and documented on the use of these equipment.

2.2.10 To ensure that the personnel use personal protective equipment suitable for the physical and chemical properties of the dangerous cargo by taking occupational safety measures at the coastal facility.

2.2.11 To perform activities related to dangerous cargoes at piers, piers and warehouses established in accordance with these works.

2.2.12 To equip the piers and piers reserved for ships that will load or unload dangerous liquid bulk cargoes with appropriate installations and equipment for this work.

2.2.13 To keep the updated list of all dangerous cargoes in the closed and open areas of the ships berthed at its facility and gives this information to the relevant parties upon request.

2.2.14 To notify the port authority of the instant risk posed by the dangerous cargoes that it handles or temporarily stores in its facility and the measures it takes for it.

2.2.15 To notify the port authority of the accidents related to dangerous cargoes, including the accidents at the entrance to closed areas.

2.2.16 To provide the necessary support and cooperation in the controls and inspections carried out by the Administration and the port authority.

2.2.17 To ensure that Class 1 (except Class 1 Compatibility Group 1.4 S), Class 6.2 and Class 7 dangerous cargoes that are not allowed to be temporarily stored are transported out of the coastal facility as soon as possible, without waiting, and applies to the Administration for permission in cases where it is necessary to wait.

2.2.18 To take fire, environment and other safety measures in accordance with the class of dangerous cargo in the temporary warehouses and storage area in accordance with the separation and stacking rules of the cargo transport units where dangerous cargoes are transported. It keeps fire extinguishing systems and first aid units ready for use at any time in the areas where dangerous cargoes are handled and makes the necessary controls periodically.

2.2.19 To get permission from the port authority before the hot working works and operations to be carried out in the areas where dangerous cargoes are handled and temporarily stored.

2.2.20 To prepare an emergency evacuation plan for the evacuation of ships from coastal facilities in case of emergency and submits it to the port authority and informs the relevant people about the plan approved by the port authority.

2.2.21 To ensure the internal loading of the cargo transport units in accordance with the loading safety rules in its facility.

2.3 Responsibilities of The Ship's Contact Person

Responsibilities of ship owners are as follows:

2.3.1 To ensure that the cargo to be carried by the vessel is certified as suitable for transportation and that the cargo holds, cargo tanks and cargo handling equipment are suitable for cargo transportation.

2.3.2 To request all mandatory documents, information and documents related to dangerous cargoes from the cargo person and ensures that they are present with the cargo during the transportation activity.

2.3.3 To ensure that the documents, information and documents required to be found on the ship regarding dangerous cargoes within the scope of legislation and international conventions are appropriate and up-to-date.

2.3.4 To control the transport documents containing information that the cargo transport units loaded on the ship are appropriately marked, plated and loaded safely.

2.3.5 To inform the relevant ship personnel on the risks of dangerous cargoes, safety procedures, safety and emergency measures, response methods and similar issues.

2.3.6 To keep up-to-date lists of all dangerous cargoes on board and declares them to the relevant parties upon request.

2.3.7 To ensure that the loading program, if any, is approved and documented and kept in working condition.

2.3.8 To notify the port authority and the coastal facility about the instant risk posed by the dangerous cargoes on the ship berthing to the coastal facility and the measures taken for it.

2.3.9 In case of leakage in the dangerous cargo or if such a possibility exists, it does not accept the dangerous cargo to be carried.

2.3.10 To notify the port authority of the dangerous cargo accidents that occur on his ship while navigating or at the coastal facility.

2.3.11 To provide the necessary support and cooperation in the controls and inspections carried out by the Administration and the port authority.

2.3.12 To do not accept to carry dangerous cargoes that are not included in the ship certificates issued by the relevant institutions and organizations.

2.3.13 To ensure that the people of the ship involved in the handling of dangerous cargoes use personal protective equipment suitable for the physical and chemical properties of the cargo.

2.3.14 To provide the requirements regarding the loading safety of the loads on the ships.

2.4 Responsibilities of the Carrier

Responsibilities of The carrier are as follows:

2.4.1 To prepare and has the mandatory documents, information and documents related to dangerous cargoes prepared and ensures that these documents are present with the cargo during the transportation activity.
2.4.2 To provide classification, packaging, marking, labeling and placarding of dangerous cargoes in accordance with their type.
2.4.3 To ensure that dangerous cargoes are loaded, stacked and securely fastened to approved packaging and cargo transport units in accordance with the rules and safely.

2.5 Dangerous Goods Safety Advisor' Responsibilities

Responsibilities of DGSA are as follows:

2.5.1 To monitor compliance with the requirements for the transport of dangerous cargoes.

2.5.2 To provide suggestions to the coastal facility regarding the transportation of dangerous cargoes.

2.5.3 To prepare an annual report to the coastal facility on the activities of the coastal facility operator in the transport of dangerous cargoes.(Annual reports are kept for 5 years and submitted to the administration upon request.)

2.5.4 To control the following applications and methods;

- Control and control results that the dangerous cargoes arriving at the facility are properly identified, the correct shipping names are used, certified, packaged/packaged, labeled and declared, that they are safely loaded and transported in approved and legal packaging, container or cargo transport unit reporting procedures.
- Loading/discharging procedure for handled and temporarily stored dangerous cargoes,
- Whether the coastal facility takes into account the special requirements regarding the dangerous cargoes transported while purchasing the transport vehicles for the handled dangerous cargoes,
- Control methods of equipment used in the transport, loading and unloading of dangerous cargoes,
- Whether the shore facility employees have received appropriate training, including the changes made in the legislation, and whether these training records have been kept,
- The suitability of emergency methods to be applied in case of an accident or an event that will affect safety during the transportation, loading or unloading of dangerous cargoes,
- Compliance of reports prepared on serious accidents, incidents, or serious violations that occur during the transportation, loading or unloading of dangerous cargoes,

- Determination of the necessary measures against the reoccurrence of accidents, incidents, or serious violations and evaluation of the implementation,
- Subcontractors or 3.To what extent the rules regarding the selection of the parties and the transport of dangerous cargoes are taken into account,
- Determining whether the employees in the transport, handling, storage and loading/unloading of dangerous cargoes have detailed information about the operational procedures and instructions.
- Appropriateness of the measures taken to be prepared for risks during the transportation, handling, storage and loading/unloading of dangerous cargoes
- Procedures for all mandatory documents, information and documents related to dangerous cargoes.
- Procedures for the safe berthing, mooring, loading/discharging, sheltering or anchoring of ships carrying dangerous cargoes to the shore facility day and night.
- Procedures for additional measures to be taken according to seasonal conditions for the loading, unloading and limbo operations of dangerous cargoes.
- Procedures for fumigation, gas measurement and degassing operations. Procedures for keeping records and statistics of dangerous cargoes,
- The accuracy of the issues regarding the possibility, capability and capacity of the coastal facility to respond to emergencies,
- Appropriateness of the regulations for the first interventions to be made for the accidents involving dangerous cargoes,
- Procedures for handling and disposal of damaged dangerous cargoes and waste contaminated by dangerous cargoes,
- Information on personal protective clothing and procedures for using them.

2.5.5 In addition to the IMDG Code, within the scope of dangerous cargoes handled at the coastal facility,DGSA's should be informed about the IBC Code, IGC Code, IMSBC Code and MARPOL 73/78 applications and generally the dangerous cargoes activities of the coastal facility.The coastal facility operator notifies the coastal facility operator in writing, with the periods agreed between the coastal facility operator and the coastal facility operator, on the condition that it does not exceed 6 (six) months, about its evaluations on whether the dangerous cargoes handled at the coastal facility are handled in accordance with the rules.

2.5.6 DGSA's authorized within the scope of the IMDG Code prepare quarterly reports regarding the responsibilities determined in the Regulation on the Maritime Transport of Dangerous Cargoes and Loading Safety of the coastal facilities they serve, and notify this report to the Administration.

2.5.7 DGSA, with the exception of the coastal facilities that will receive Dangerous Cargo Conformity Certificate (TYUB) for the first time, is present at the coastal facility during TYUB inspections and actively participates in the inspections.

2.5.8 DGSA prepares the parts of the coastal facility's guide on dangerous cargo handling and/or temporary storage together with the coastal facility and checks its accuracy. DGSA's signature is also included in the sections of the guide on dangerous cargoes handling and/or temporary storage.

2.6 Responsibilities of the 3rd parties operating in the port facility, cargo/ship agency etc.

Responsibilities of the 3rd parties are as follows:

2.6.1. To have the personnel who will work at the Coastal Facility receive the training specified in the Administration's circular numbered 56617 dated 26 July 2019,

2.6.2 To act in accordance with the rules specified in the IMDG Code in the Coastal Facility,

2.6.3 To act in accordance with the Dangerous Cargoes Handling Guide and the procedures related to Dangerous Cargoes operated by the coastal facility,

2.6.4 To report any violation to the relevant authorities if any nonconformity in the handling, transportation and storage of dangerous cargoes in the Port Facility is detected.

A2.6.5 Submit the (SDS) Form, which constitutes an integral part of the operations for the elimination of the Occupational Health and Safety risks that may occur during the use and storage of dangerous substances and prepared to inform the users accurately and adequately, to the port facility and Port Authority

3. RULES AND MEASURES TO BE FOLLOWED / APPLIED BY THE PORT FACILITY

The rules and precautions outlined in this section are the same as in the relevant chapters of this guide. Chapters, Dangerous Cargo Emergency Plan and Accident Prevention Policy are detailed. Infrastructural requirements are provided by our Port Facility.

3.1 The precautions and rules to be followed and applied in the port facility are given below

3.1.1 Berthing

3.1.1.1 Port facility operations officers ensure that:

3.1.1.2 Provides adequate and safe access between the ship and shore

3.1.2 Examination

3.1.2.1 The port operator should ensure that areas where cargo ships or cargo transport units are properly kept supervised and packages or cargo transport units are regularly inspected for leakage or damage. Any leaking package or cargo transport units should only be handled under the supervision of a responsible person.

3.1.2.2 The port operator should ensure that no person, without reasonable cause, opens or otherwise interferes with any freight container, tank-container, portable tank or vehicle containing dangerous cargoes. When a freight container, tank-container, portable tank or vehicle is opened by a person authorized to examine its contents, the port operator should ensure that the person concerned is aware of the possible hazards arising from the presence of the dangerous cargoes.

3.1.2.3 Any equipment which is used for handling processes and driven with/without power shall be checked and inspected to ensure that it is manufactured in accordance with the manufacturer's instructions and exists in good operating conditions and in compliance with proper standards.

3.1.3 Identification, packaging, marking, labeling and documentation

3.1.3.1 The port operator should ensure that dangerous cargoes entering his premises have been duly certified or declared by the cargo interests as being properly identified, packed, marked, labelled or placarded so as to comply with the appropriate provisions of the IMDG Code or, alternatively, with appropriate national or international legal requirements applicable to the relevant mode of transport.

3.1.4 Safe loading and parsing

3.1.4.1 The port operator should appoint at least one responsible person who has a role in transporting or handling dangerous cargoes and has adequate knowledge of the national or international legal requirements concerning the transport and handling of dangerous cargoes.

3.1.4.2 While the ships coming to the port for unloading dangerous cargoes are evacuated, the unloading personnel should always be informed in advance for safe evacuation. Thus, unloading preparations will be allowed, minimizing the risk of accidents. Personnel are also provided with information about dangerous cargoes in transit. This information is repeated before each operation and shift change.

3.1.4.3 The captain and the port operator at the terminal will make sure that their personnel in their area of responsibility are safe and have protective equipment.

3.1.4.4 The captain and the work leader at the terminal will make sure that the personnel are not under the influence of alcohol and drugs while handling dangerous cargoes in their areas of responsibility.

3.1.4.5 The evacuation of dangerous cargoes will be started as soon as possible after the arrival of the ship. dangerous cargoes will be transported from the port in a short time unless there is a special permit for storage at the port.

3.1.4.6 As long as dangerous cargoes are handled, both land and ship access routes will be unobstructed by other activities or objects and free of dirt and materials.

3.1.4.7 Vehicles and transport units shall not hinder the entrances to the points where emergency response vehicles will enter, near the hatches and to the side pier.

3.1.4.8 The terminal responsible and the Captain will make sure that the areas where dangerous cargoes are handled are adequately illuminated.

3.1.4.9 The captain will mark the presence and handling of dangerous cargo on his ship in a way that can be easily seen and in accordance with national/international legislation.

3.1.4.10 When dangerous cargo or other cargoes are handled, necessary measures will be taken to prevent dangerous cargo leakage immediately, and emergency response procedures will be carried out by contacting the terminal officer.

3.1.4.11 Documents related to dangerous cargoes must be accessible during evacuation. If these documents are also available in electronic media for vehicles, they do not need to be kept as printed documents.

3.1.5 Emergency Precautions

Port Operators;

3.1.5.1 Ensures that appropriate emergency arrangements are made and notified to the relevant parties. These regulations include:

3.1.5.1.1 The provision of appropriate emergency alarm operating points,

3.1.5.1.2 Procedures for notification of an incident or emergency to the appropriate emergency services within and outside the port area ,

3.1.5.1.3 Procedures for notification of an incident or emergency to the port authority and port area users both on land and water,

3.1.5.1.4 The provision of emergency equipments suitable for the hazards of the dangerous cargoes to be handled;

3.1.5.1.5 Co-ordinated arrangements for the departure of a ship in the event of an emergency; and;

3.1.5.1.6 Arrangements to ensure adequate access/exit at all times.

3.1.5.2 The port operator should consider the necessity of arrangements for a safe and quick emergency escape, taking into account the nature of the dangerous cargoes and any special conditions.

3.1.5.2.1 The "Medical First Aid Guide (MFAG)" in the IMDG Code annex shall be used in order to provide the necessary medical first aid for the people affected by the damages caused by the dangerous cargoes and the health problems caused by the accidents involving such cargoes.

3.1.5.2.2 "Emergency Response Procedures (EmS)" annexed to IMDG Code annex shall be used for any emergency situations involving dangerous cargoes.

3.1.5.2.3 In case of any emergencies or accidents, the first aid material to be used for response shall be kept in easily accessible locations known to personnel.

3.1.6 Emergency Information

Port facility Operators;

3.1.6.1 Should ensure that a list of all dangerous cargoes in the warehouses, sheds or other areas, including the quantities, and if appropriate Proper Shipping Names, correct technical names (if applicable), UN numbers, classes or, when assigned, the division of the goods, subsidiary hazard classes (if assigned), packing group (where assigned) and exact location is held readily available for the emergency services.

3.1.6.2 Should ensure that the person responsible for the handling of hazardous chemical liquid and gaseous materials is aware of the occupancy status of dangerous cargoes in his area and keeps the information ready for use in case of emergency.

3.1.6.3 Should ensure that the person responsible for cargo handling operations involving dangerous cargoes has the necessary information on measures to be taken to deal with incidents involving dangerous cargoes and that it is available for use in emergencies.

3.1.6.4 Electronic or other automated information processing or transmission techniques are used to provide access to information.

3.1.6.5 Should ensure that the MSDS forms of all stored products are available at the handling points and they are also accessed electronically.

3.1.6.6 Should ensure that port or dock emergency response procedures and port emergency telephone numbers are placed at prominent locations within or at warehouses, sheds or areas where dangerous cargoes are transported or handled.

3.6.7 The port operator

3.1.6.7 Should ensure that fire-fighting and pollution-fighting equipment and installations are clearly marked as such and notices drawing attention to them are clearly visible at all appropriate locations.

3.1.6.8 Should inform the master of any ship carrying or handling dangerous cargoes the emergency procedures in force and the services available at the port.

3.1.7 Fire precautions

3.1.7.1 The Port Operator Should Ensure That:

3.1.7.1.1 All parts of the port and any ship moored to it are at all times accessible to emergency services;

3.1.7.1.2 Audible or visual alarms for emergency use are installed in the area or other means of rapid communication with emergency services are available,

3.1.7.1.3 Areas used for the handling of dangerous cargoes kept clean and tidy,

3.1.7.1.4 Before dangerous cargoes are handled, the master of the ship is informed of the location of the nearest means of summoning emergency services; and

3.1.7.1.5 The lighting and other electrical equipment in areas where dangerous cargoes are present on the port is of a type safe for use in a flammable or explosive atmosphere.

3.1.7.1.6 The places where smoking is prohibited are designated, and

3.1.7.1.7 The signs prohibiting smoking are visible at all points, and smoking areas are kept safe from dangerous places.

3.1.7.8 Equipment used in an area or space where a flammable or explosive atmosphere may exist or develop, is of a type safe for use in a flammable or explosive atmosphere and used in such a manner that no fire or explosion can be caused.

3.1.7.9 Only portable electrical equipment of a type safe for use in a flammable atmosphere is used in an area or space in which a flammable atmosphere may occur.

3.1.7.10 Ex-proof electrical equipment by the zoning code of the area is used.

3.1.7.11 Considering the fire and explosion hazards that may occur as a result of the transportation of dangerous cargoes, it should be known that the cargo transport units that are kept empty may still contain residues and flammable vapors and may pose a hazard.

3.1.8 Fire fighting

3.1.8.1 The port operator should ensure that adequate and properly tested fire-fighting equipment and facilities are provided and readily available in accordance with the requirements of the regulatory authority in areas where dangerous cargoes are transported or handled.

3.1.8.2 The port operator should ensure that personnel involved in the handling or transport of dangerous cargoes are trained and practised in the use of fire-fighting equipment in accordance with the requirements of the regulatory authority.

3.1.9 Environmental precautions

3.1.9.1.1 The port operator should ensure that dangerous cargoes are only handled in areas which comply with the requirements of the regulatory authority.

3.1.9.1.2 The port operator should ensure that any damaged package, unit load or cargo transport unit containing dangerous cargoes is dealt with in accordance with the requirements of the regulatory authority and is not transported or handled unless the dangerous cargoes have been properly repacked and are in all respects fit and safe for further transport and handling.

3.1.9.1.3 The port operator should ensure that, if necessary, any damaged package, unit load or cargo transport unit containing dangerous cargoes is removed to a designated area for such cargoes sweeping or flushing. The said loads shall not be allowed to move into sea by rainwater.

3.1.9.1.4 During the loading and unloading of bulk cargo to and from the vessel, necessary actions shall be taken to prevent the dumping of any load from the vessel or the dock into sea. In addition, these actions shall be taken for transshipment operations.

3.1.9.1.5 Necessary actions shall be taken so that soil, water or areas of water discharge is/are not contaminated with any hazardous materials handled at onshore facilities. Additionally, these actions shall be applied for the piping line used during the handling of hazardous materials and for areas with conveyor system.

3.1.9.1.6 The capability to remove any contaminated bilge water, dirty ballast, sludge, slope and load waste from the vessel shall be provided.

3.1.10 Pollution Measures

3.1.10.1 The port operator should ensure that adequate equipment is available to minimize the damage in case of a spillage of dangerous cargoes.

3.1.10.2 A contract has been signed with Most Denizcilik on Emergency Response within the scope of the Law and Implementation Legislation on the Principles of Responding to Emergency Situations and Regulation of Damages in Pollution of the Marine Environment with Petroleum and Other Harmful Substances (Law No. 5312)

3.1.10.3 Equipment includes oil spill fences, condensate caps, absorbent and neutralizing agents, as well as cleaning supplies and portable collection basins.

3.1.10.4 The port operator should ensure that personnel involved in the transport and handling of dangerous cargoes are trained and practised in the use of pollution combating equipment and facilities in accordance with the requirements of the regulatory authority.

3.1.11Reporting of Incidents

3.1.11.1 The port operator, within his area of responsibility, should ensure that, if an incident occurs during the handling of dangerous cargoes which may endanger the safety or security of persons, of ships within the port, of the port or of any other property, or the environment, the person having charge of the handling immediately causes the operation to be stopped, if it is safe to do so, and prevents it being resumed until appropriate safety measures have been taken. The port operator should require every member of his personnel to report, to the person having charge of the operation, any such incident they see to occur during the handling of dangerous cargoes.

3.1.11.2 For the purposes of responding quickly and effectively; the short and proper description of the event should be communicated to the emergency center as soon as possible to treat the injured personnel and mitigate any potential damage.

3.1.11.3 The port operator should ensure that any incident involving dangerous cargoes which may endanger the safety or security of persons, or of ships within the port or of the port or of any other property or the environment is reported immediately to the port authority.

3.1.11.4 The port operator should ensure that any damaged or leaking package, unit load or cargo transport unit containing dangerous cargoes is reported immediately to the port authority and that suitable remedial action is taken.

3.1.12 Inspections

3.1.12.1 The Port Operator, where appropriate, should:

3.1.12.1.1 Control the documents and certificates concerning the safe transportation, loading, unloading, packaging and stacking of dangerous cargoes upon arrival at the port.

3.1.12.1.2 Confirm that the dangerous cargoes are marked, labeled or placarded in accordance with the provisions of the IMDG Code and the mode of transport, applicable national and international legal requirements, and that unnecessary labels, banners and signs are removed, and that the IMO/ILO regarding the Packaging of Cargo Transport Units (CTUs) of cargo transport units Inspects packages, unit loads and cargo transport units containing dangerous goods to verify that they are loaded, packed and secured in accordance with /UN guidelines.

3.1.12.1.3 Check freight containers, tank-containers, portable tanks and vehicles containing dangerous cargoes to ensure that they have a current safety approval plate in accordance with the International Convention for Safe Containers (CSC), 1972, as amended, when applicable, or have been approved in accordance with the relevant provisions of the IMDG Code or by a certification or approval system of an appropriate authority; and

3.1.12.1.4 Check, by external examination, the physical condition of each freight container, tank-container, portable tank or vehicle containing dangerous cargoes for obvious damage affecting its strength or packaging integrity and for the presence of any sign of leakage of contents.

3.1.12.2 The port operator should make such checks regularly to ensure implementation of the safety precautions in the port area and the safety of transport

3.1.12.3 If any of the checks mentioned above reveal deficiencies which may affect the safe transport or handling of dangerous cargoes the port operator should immediately advise all parties concerned and request them to rectify all deficiencies prior to any further transport or handling of dangerous cargoes.

3.1.12.4 The port operator should ensure that every necessary support will be given to the port authority or any other person or institution entitled to carry out inspections when they intend to carry out an inspection of dangerous cargoes.

3.1.13 Hot work and other repair or maintenance work

3.1.13.1 Hot work is not allowed on the buoys during the ship unloading/loading. The ship has to keep the main engine and auxiliary navigation devices ready at any time.

3.1.14 Alcohol and drug abuse

3.1.14.1 The port operator, within his area of responsibility, should ensure that no person under the influence of alcohol or drugs is allowed to participate in any operation involving the handling of dangerous cargoes.

3.1.14.2 Any such persons should always be kept clear of the immediate areas where dangerous cargoes are being transported or handled.

3.1.15 Protective equipment

3.1.15.1 All personnel involved in the handling of dangerous cargoes within their area of responsibility are provided with adequate protective equipment when necessary.

3.1.16 Weather conditions

3.1.16.1 The port operator, within his area of responsibility, should not permit dangerous cargoes to be handled in weather conditions which may seriously increase the risk.

3.1.16.2 Dangerous liquid bulk cargoes should not be transported in thunder, stormy and rainy weather.

3.1.17 Lighting

3.1.17.1 The port operator, within his area of responsibility, should ensure that areas where dangerous cargoes are handled or where preparations are being made to handle dangerous cargoes and access to such areas are adequately illuminated.

3.1.18 Handling Equipment

3.1.18.1 The port operator, within his area of responsibility, should ensure that all equipment used in the handling of dangerous cargoes is suitable for such use and used only by skilled persons.

3.1.18.2 The port operator, within his area of responsibility, should ensure that all cargo handling equipment is of an approved type where appropriate, properly maintained and tested in accordance with national and international legal requirements.

3.1.19 Communication

3.1.19.1 The port authority should ensure that every ship engaged in the transport of dangerous cargoes can maintain effective communications with the port authority. When appropriate and practicable such communications should be carried out by VHF in accordance with the provisions of SOLAS regulation IV/7 and complying with the performance standards set out in IMO Assembly resolution A.609(15) and the requirements of the regulatory authority.

3.1.21 Training

The trainings specified in the Directive on IMDG CODE Training Seminars published with the Minister's Approval dated 26.07.2019 and numbered 56617 had started to be given to the relevant personnel. Within the scope of the Regulation on the Transport of Dangerous Cargoes by Road, ADR trainings were given and documented by DGSA.

It will be ensured that the personnel who are in charge of actions and operations for the loading/unloading of hazardous materials at the onshore facility shall be provided with training on emergencies (fire, explosion, leakage etc.) and response, occupational health and safety, ISPS code security awareness and safety in line with their job descriptions and fields of work.

4. CLASSIFICATION OF DANGEROUS CARGOES, TRANSPORTATION, LOADING/UNLOADING, HANDLING, SEGREGATION, STACKING AND STORAGE

4.1. Classes of dangerous goods.

Liquefied petroleum gas with hazard class 2.1 is stored in the terminal.

Liquefied petroleum gas with IMO Danger Class 2.1 is stored in the terminal.

Trade Name: LPG (Liquefied Petroleum Gas)

CAS No: 68476-85-7

EINECS No: 270-704-2

Definition: Hydrocarbons derived from petroleum or natural gas, liquefied under pressure, essentially such as propane, propene, butane, butene and their isomers, or mixtures thereof.

Appearance: Gas (15 ˚C and 1 atm) (Liquid under pressure)

Color: Colorless

Odor: Different and unpleasant. It is scented.

Recognizable at 20% of the lower glare limit.

Upper / Lower-Flash Limits: Upper flammability limit of air-gas mixtures: 9.6%

Hand Protection:

Neoprene, rubber or leather gloves with heat insulation should be used to protect from cold burns.

Gloves should be checked before use.

Dispose of contaminated gloves after use in accordance with applicable law and good laboratory practice.

Wash and dry your hands.

The selected protective gloves must meet the EU Directive 89/686/EEC and EN 374 standard.

Body Protection:

Use protective clothing that is resistant to frostbite.

Use chemical and cold resistant gloves / armrests, boots and aprons

Use respirators and parts that have been tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Requirements for ETHYL MERCAPTAN

It is used as an additive to gases (propane and natural gas), with a foul-smelling chemical in order to detect gas leakage. Situations where odorant cannot be detected in a gas made to smell by adding chemicals:

• The odor intensity may be reduced or eliminated due to various physical and chemical reasons, as a result of sticking/absorbing to pipes or devices, including the oxidation of rusted pipes.

• In case of underground leaks, if it comes into contact with the soil, the odor-causing chemical can be separated from the gas and its smell can go away.

• Some people may experience atrophy in their sense of smell over time or due to various factors. The factors that affect an individual's sense of smell are age, gender, health status, consumption of alcohol and tobacco products.

• Some people may experience atrophy in their sense of smell over time or due to various factors. The factors that affect an individual's sense of smell are age, gender, health status, consumption of alcohol and tobacco products.

• While asleep, the chemically scented gas may not wake the individual.

• It can suppress or hide other odors.

• Exposure to this scented gas, even for a short time, can cause nasal congestion.

Precautions for safe handling

Aerosol formation should be avoided and vapors/dust should not be inhaled. Eating, smoking or drinking should be prohibited in work areas. Preventive measures should be taken against static discharge. Adequate air exchange and/or exhaust should be provided to work areas. The packaging or tanks should be opened carefully as the contents may be under pressure. Washing water should be disposed of according to national regulations. It should not be sprayed on open flame or any other incandescent material. Necessary precautions should be taken to avoid static electricity discharge (which may cause ignition of organic vapors). Only explosion-proof equipment should be used. Keep away from open flames, hot surfaces and sources of ignition.

Storage Conditions:

Smoking should not be allowed in the areas where it is stored. Containers should be kept in tightly closed, dry and well-ventilated areas. Containers that have been opened should be carefully resealed and kept upright to prevent leakage. Electrical installations / working materials must comply with technological safety standards.

Technical measures:

Adequate ventilation should be provided to keep airborne concentrations below exposure limits. The hazards of the substance, applicable exposure limits, work activities and other substances in the work area should be considered when planning engineering controls and selecting personal protective equipment. If engineering controls or work practices are not sufficient to prevent exposure to harmful levels, the personal protective equipment listed below is recommended. Users must read and understand all instructions and restrictions provided by protective equipment under certain conditions or for a limited period of time.

Respiratory protective measures:
Where ventilation or other engineering controls are not sufficient to maintain a minimum oxygen content of 19.5% by volume at normal atmospheric pressure, an air-supplied, approved respirator should be used. If exposure to harmful levels of airborne substances occurs when working with this material, protectants such as an air-purifying respirator for organic vapors should be used. If there is potential for uncontrolled release, exposure levels are unknown, or if in other circumstances air-purifying respirators do not provide adequate protection, a positive-pressure-supplied respirator should be used.

Hand protection:
The suitability of protective gloves for a particular workplace should be decided with the manufacturer. The instructions on permeability and break-through time given by the glove manufacturer must be followed. In all conditions in which the substance is used, features such as cutting, abrasion and contact time should be considered. If the glove shows signs of deterioration or chemical wear, it should be discarded and replaced.

Eye protection:
Pure aqueous eyewash can be used. Eye protection equipment must be used. Face shield and protective clothing should be worn for unusual handling problems.

Skin and body protection:
Body protection should be selected according to the type, concentration, amount and specific working area of the harmful substance. Appropriate protective clothing should be worn. Wash contaminated clothing before reuse. In case of contact, the skin should be washed. Remove contaminated clothing and wash before reuse. Non-flammable protective clothing. Employees should wear antistatic shoes.

Hygiene measures:
Wash your hands immediately after handling the product and before breaks.

Fire Extinguishers

- Suitable extinguishers: Alcohol resistant foam. Carbon dioxide (CO2). Dry chemical.
- Unsuitable extinguishers: High volume water jet.
- Special hazards arising from the substance or mixture
- Hazardous decomposition products: Carbon oxides. Sulfur oxides.
- Prevent fire extinguishing water from entering drains or waterways.

Use self-contained breathing apparatus when fighting fire if necessary. In case of fire, the boxes should be stored separately in a closed place for safety reasons. Use water spray to cool unopened containers. Collect contaminated fire extinguishing water separately. Do not discharge into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with national regulations.

Do not spray on open flame or any other incandescent material. Take necessary precautions to avoid static electricity discharge (which may cause ignition of organic vapours). Only use explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition.

Environmental Measures:

Prevent product from entering drains. Prevent further leaks and spills if safe to do so. Notify authorities if product contaminates drains.

Contain and collect spillages with non-combustible, absorbent materials (sand, earth, diatomaceous earth, vermiculite) and place in suitable containers for disposal according to national regulations

Class 1:explosives

Class 1.1:Substances and articles with a mass explosion hazard

Class 1.2:Substances and articles with a blast hazard but not a mass explosion hazard

Class 1.3 Substances and articles with a fire hazard or a minor explosion hazard or a minor blast hazard or both, but not a mass explosion hazard

Class 1.4:Substances and articles with a low explosion hazard

Class 1.5:Insensitive substances which present a mass explosion hazard but which, under normal conditions of transport, have a very low probability of initiation or transition from combustion to detonation.

Class 1.6:Extremely low sensitivity objects that do not have a mass explosion hazard.

Class 2 : Gases

Class 2.1 Flammable Gases : gases at a standard pressure of 101.3 kPa and 20 °C with: (a) Gases with a low flammability or combustible in a mixture of 13% or less by volume with air..

Class 2.2 Non-flammable, non-toxic gases

Non-oxidizing, non-flammable and non-toxic gases that dilute or replace the oxygen normally present in the atmosphere).

Class 2.3 Toxic Gases

(a) Known to be toxic or corrosive to such an extent that it is dangerous to human health, or

(b) Gases presumed to be toxic or corrosive to humans because, when tested in accordance with 2.2.61.1, the LC50 for acute toxicity is 5 000 ml/m3 (ppm) or less.

Class 3 :flammable liquids

Class 3 flammable liquids include substances and articles containing:

- has a vapor pressure of not more than 300 kPa (3 bar) at 50 °C and is not completely gaseous at 20 °C and standard pressure of 101.3 kPa;

- Flash points are not more than 60 °C.

Class 4 :Combustible Solids

Class 4.1 Flammable solids, self-reactive substances, polymerizing agents and solid desensitized explosives.

Class 4.2 Substances liable to spontaneous combustion

Class 4.3 Substances which, in contact with water, emit flammable gases

Class 5 :Oxidizing Agents and Organic Peroxides

Class 5. 1 Oxidizing (oxidizing) substances

Class 5.2 Organic Peroxides

Class 6:Toxic and Infectious Substances

Class 6.1 Toxic substances

Class 6.2 Infectious substances

Class 7:radioactive material

Class 8:Corrosive (Corrosive) Substances

Class 9:Miscellaneous dangerous substances and objects

4.2. Packages and packages of dangerous goods

Shoulder labels are made for hazardous materials in the terminal in accordance with ADR legislation.

4.3. Placards, plates, brands and labels for dangerous goods.

4.3.1. Tank Marking

Hazardous materials at the terminal are stored in tanks.There are labels on the dangerous substance stored on the tank surface where everyone can see it.

Health (Blue)		**Flammability (Red)**	
0	There is no health hazard. No precautions are required. (Ex. Water)	**0**	Fireproof. (Ex. Carbon Dioxide)
1	Slight irritation on contact. (Ex. Acetone)	**1**	It can burn if heated.[Note 1] (eg mineral oil)
2	Temporary incapacitation (insufficiency) in intense or continuous contact or possible residual diseases. (Ex. Diethyl ether)	**2**	It can burn if partially heated or subjected to relatively high pressure.[Note 2] (Ex. Diesel).
3	Severe persistent or moderate residual disease in short contact. (Ex. Chlorine)	**3**	Solid and liquid substances that can burn under almost all pressure conditions.[Note. 3] (Ex. Gasoline).
4	Death or heavy residue on very short contact diseases. (Ex. Phosphine, sarin, carbon monoxide)	**4**	It can evaporate rapidly or completely under normal atmospheric pressure and temperature, or dispersed in air and burns.[Note 4] (Ex. Propane, hydrogen).
Instability / Reactivity (Yellow)		**Custom (White)**	
0	Even if it is exposed to fire, it does not enter into a chemical reaction. It does not react in contact with water. (Ex. Helium)		The white "special note" field can contain many different characters or symbols.The following symbols are specified in the NFPA 704 standard.
1	It is stable under normal conditions and can react at high temperature and pressure. (Ex. Propane)		
2	It undergoes a drastic chemical change at high temperature and pressure.Reacts violently with water or forms an explosive mixture.(Ex.White phosphorus, potassium, sodium)	**OX**	The substance is an oxidant. (Ex. potassium perchlorate, ammonium nitrate, hydrogen peroxide)
3	It may explode as a result of high temperature and may decompose with explosion.Explosion occurs as a result of reaction with water or shaking.(Ex. Ammonium nitrate)	**W**	The substance reacts with water. (Ex. Sodium, sulfuric acid)
4	May explode under normal temperature and pressure and can be explosively dissolved. (Ex. Nitroglycerin.	**SA**	The substance is an asphyxiant gas that will cause asphyxia.[Note 5]

4.3.2. Vehicle Marking and Placards

The signs, labels and/or plaques on the products are all communication channels for the user.

These communication channels tell the user about the shipment or product features.The IMDG Code provides clear procedures for prior notification, markings, labels and documentation (manuals, electronic computing or electronic information exchange techniques, and placarding), as well as authorizing shipments.

The Code clearly states that no person may carry out dangerous goods unless the goods are properly marked, labeled, plated and certified.Carriers of dangerous goods must clearly indicate the UN Number and proper shipping name on the cargo.In the case of the presence of marine pollutants, the word "marine pollutant" must be included in the document accompanying the shipment.This requirement is particularly important in the event of an accident involving these goods in order to determine the necessary emergency procedures to deal with the situation appropriately.In the case of the presence of marine pollutants, the master of the ship must comply with the requirements of MARPOL 73/78.

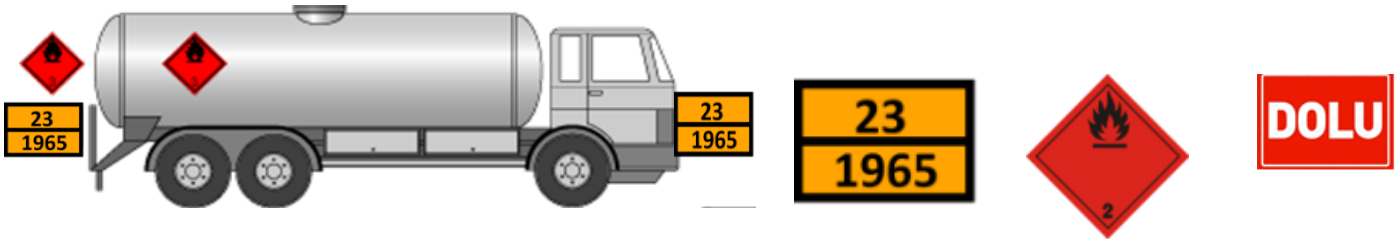
The IMDG Code states that all "cargo handling units" containing dangerous goods must be placarded.In this context, freight transport units are containers, containers for liquids, tank vehicles, land goods transport vehicles, railway wagons with water tanks, goods tanks shipped for intermodal transport.The banners have the same shape, color and symbols as labels, but their dimensions are 25 x 25 cm.Containers carrying dangerous goods over 4000 kilograms and all liquid and gas tanks must have a "United Nations number".The UN number is a four-digit number assigned by the United Nations for all goods identified and classified as dangerous.

Containers carrying dangerous goods must have at least one plaque on each side and one at each end of the unit (that is, on all four sides).

Rail cars must be plated on at least both sides.

Freight containers, trailers and portable tanks must be plated on all four sides

Road Vehicles must have appropriate plaques on both the rear and both sides.



Tankers Carrying Dangerous Goods

4.4 Signs and packing groups of dangerous goods.

Packing Groups, Classification Criteria

The risks presented by dangerous goods in maritime transport are associated with their packaging, so the packaging must be safe, well designed, manufactured and in good condition.Injuries are unlikely due to this load, but if the load is damaged it is possible to release hazardous materials or their vapors.

Packages/containers must comply with the following requirements:

It should not be affected by the load it carries.

It must be strong enough to withstand the rough handling and risks associated with sea shipping.

It must be able to withstand rain, wind and sea water.

It should be usable and sufficient for the loads they carry.

It must be in good condition.

It must be properly branded, labeled and marked.

For packaging purposes, dangerous goods belonging to all classes except classes 1, 2, 6.2 and 7 are divided into three "packaging groups" (PG) according to the degree of danger they represent:

Packing Group I – High level of danger

Packing Group II – Medium hazard level

Packing Group III – Low hazard level

UN Packaging and Approval Mark

Most packages are also required to bear the UN packaging approval mark, confirming that the packaging has been tested and certified in accordance with relevant United Nations performance standards.

4.5. Segregation tables on the ship and in the port according to the classes of dangerous goods.

One of the most important aspects of the transport of dangerous goods is the stacking and separate storage of the cargo.It should not be stored together with substances that may interact with dangerous cargoes and cause danger.Incompatible dangerous goods should be placed separately from each other during transportation and storage.Improper stacking of dangerous goods can cause toxic smoke, fire, spillage and deterioration of product quality.For this reason, IMDG Code;He outlined the rules on stowing and segregated storage in Chapter 7 of Volume 1 entitled 'Rules for Handling Operations'.

The table below shows the separation table according to other dangerous goods.

CLASS	1.1 1.2 1.5	1.3 1.6															
Explosives 1.1, 1.2, 1.5	*	*	*	4	2	2	4	4	4	4	4	4	2	4	2	4	x
Explosives 1.3, 1.6	*	*	*	4	2	2	4	3	3	4	4	4	2	4	2	2	x
Explosives 1.4	*	*	*	2	1	1	2	2	2	2	2	2	x	4	2	2	x
Combustible gases 2.1	**4**	**4**	**2**	**x**	**x**	**x**	**2**	**1**	**2**	**x**	**2**	**2**	**x**	**4**	**2**	**1**	**x**
Non-Toxic non-flammable gases 2.2	2	2	1	x	x	x	1	x	1	x	x	1	x	2	1	x	x
Toxic gases 2.3	2	2	1	x	x	x	2	x	2	x	x	2	x	2	1	x	x
flammable liquids 3	4	4	2	2	1	2	x	x	2	1	2	2	x	3	2	x	x
4.1 flammable solids (Self-reactive substances and desensitized solids)	4	3	2	1	x	x	x	x	1	x	1	2	x	3	2	1	x
4.2 Substances prone to sudden explosion	4	3	2	2	1	2	2	1	x	1	2	2	1	3	2	1	x
4.3 Substances which, in contact with water, emit flammable gases	4	4	2	x	x	x	1	x	1	x	2	2	x	2	2	1	x
5.1 Substances that cause oxidation	4	4	2	2	x	x	2	1	2	2	x	2	1	3	1	2	x
5.2 Organic peroxides	4	4	2	2	1	2	2	2	2	2	2	x	1	3	2	2	x
6.1 Toxic substances	2	2	x	x	x	x	x	x	1	x	1	1	x	1	x	x	x
6.2 Infectious substances	4	4	4	4	2	2	3	3	3	2	3	3	1	x	3	3	x
7 radioactive materials	2	2	2	2	1	1	2	2	2	2	1	2	x	3	x	2	x
8 Corrosive substances	4	2	2	1	x	x	x	1	1	1	2	2	x	3	2	x	x
9 Miscellaneous dangerous cargoes	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

The numbers and symbols in the table have the following meanings:

1 “Keep away”

2 “Must be seperated”;

3 “Separated by an entire compartment or partition”

4 “It must be separated longitudinally by means of a compartment or partition that passes through”

X – The Dangerous Cargoes List should be consulted to verify whether there are special segregation provisions.

Considering the compatibility of dangerous cargoes with other cargo types, the IMDG Code provides a method by which they can be safely stacked and possible damage can be prevented in case of an accident.

How the dangerous cargoes are safely stowed on the ship is the sole responsibility of the Ship Planner. Port Terminals are not responsible for the plan to stow dangerous cargoes on board. It is not related to the planning of stowage of dangerous cargoes on board; is only responsible for stowing the cargo in the position specified in the ship plan provided by the Cargo Line through the relevant authorities.

4.6. Segregation distances and separation terms of dangerous goods in warehouse storage

Hazardous Substances are not stored in the warehouse, since the product handled in the facility is of one type, segregation is not carried out and necessary precautions are taken within the scope of the ATEX directive.

5. HANDBOOK ON DANGEROUS LOADS HANDLED ON THE PORT FACILITY

The Coastal Facility, which carries out dangerous cargo loading/unloading, handling and temporary storage activities, in order to contribute to the safe fulfillment of these activities;

- Hazardous substance classes,
- packages of dangerous goods,
- packaging,
- tags,
- marks and packing groups,
- Separation tables on the ship and in the port according to the classes of dangerous goods,
- Dangerous loads emergency response action flow chart
- emergency contact information
- emergency equipment locations and operating instructions
- There is a Dangerous Goods Handbook in pocket size, which includes coastal establishment rules.

6. PROCEDURES FOR OPERATION

6.1 Procedures for safe berthing, mooring, loading/discharging, sheltering or anchoring of ships carrying dangerous cargoes day and night

6.1.1 Guiding a ship that has any dangerous cargo on board, where and when to anchor, moor, berth and stay in the port area, taking into account the nature and amount of dangerous cargoes, environment, population and weather conditions. is the responsibility of the presidency.

6.1.2 In an emergency, directing the transportation of a ship with any dangerous cargo on board in the port area or its removal in the port area for the safety of the ship and crew can be made with the approval of the ship's captain, the decision of the port operator and the port authority.

6.1.3 It is the responsibility of the port authority to determine any additional requirements in accordance with the local conditions and the amount and nature of the dangerous cargoes exposed.

6.1.4 Port facility operators should ensure that:

- Ensuring adequate and secure mooring facilities and
- Ensuring adequate and safe access between the ship and the shore

For all other operational matters, Technical Information Booklet shall be reviewed.

6.2 Procedures for additional measures to be taken according to seasonal conditions for loading and unloading of dangerous cargoes.

Dangerous cargoes can be affected by high temperature (in summer) and rain, strong wind (all year) events, depending on the seasons.Daily weather reports are shared by the relevant unit and meteorological conditions are constantly followed as the port operator.Pre-emergency weather conditions are also shared with all parties along with the measures to be taken.

Operations may be interrupted in lightning storms and severe swells at the discretion of the Ship's Captain, Loading Master and Terminal Manager. In addition, the wind criteria are as follows.

- 25 Knots: Unloading is stopped
- 30 Knots: Hose is removed
- 35 Knots: The ship must be ready to leave the buoy area immediately

- In case of severe storm warnings, port foreman, technicians and tethered ships are informed.
- According to the severity of the storm to come, it is ensured that the ship machinery is always ready for action in the fastest way.
- In heavy rainy weather, filling / unloading activities are suspended, taking into account personnel safety.
- Loading and unloading operations are suspended in case of storms, sudden strong winds and lightning strikes.

- In case of snow and icing, port machinery and transfer vehicles are not allowed to operate until the slippery environment is eliminated. When the environment is safe, the vehicles operate at the safest speed.
- The relevant procedures are specified in the ship-shore checklist.
- In the event that the ship under operation leaves the pier for compelling reasons before the operation is completed, both the Port Authority and the Customs Directorate are informed.

6.3. Procedures on keeping any inflammable, combustible and explosive materials away from operations which cause or are likely to cause sparking and abstaining from operating any tools, apparatus or device which cause or are likely to cause sparking in areas where hazardous materials are handled, stowed and stored.

6.3.1 Before performing a hot work at our facility, the responsible company officer who will perform the hot work shall have a written authorization issued by the port administration to perform this hot work.Such authorization will include details of the hot workplace as well as the safety measures to be followed.

6.3.2 In addition to the security measures required to be taken by the port administration, additional security measures required by the ship and/or interface will be taken, together with the ship and/or interface responsible(s) responsible for the hot work, before starting the hot work.

6.3.3 These additional security measures will include:

6.3.3.1 Frequency of inspection and re-inspection of local areas and adjacent areas, including testing by approved testing organizations to ensure that areas will remain free and free of flammable and/or explosive atmospheres and that there is no oxygen deficiency;

6.3.3.2 Removal of dangerous cargoes and other combustible materials from work areas and adjacent areas.Substances to be removed from the said areas;including lime, sludge, sediment and other potentially flammable materials.

6.3.3.3 Combustible building materials (eg;beams, wooden partitions, floors, doors, wall and ceiling coverings) against accidental ignition.

6.3.3.4 In order to prevent the spread of flames, sparks and hot particles from work areas to adjacent or other areas;sealing and sealing open pipes, pipe passages, valves, joints, cavities and open parts.

6.3.4 A copy of the hot work authorization and safety precautions will be posted at the entrance to each work area, as well as in the area adjacent to the work area.Authorization and security measures to be taken will be posted in a place where all employees who will take part in the hot work can see it, and this will be clearly understood by the employees.

6.3.5 When performing hot work,

6.3.5.1 Checks will be made to ensure that conditions have not changed;and

6.3.5.2 At least one suitable fire extinguisher or other suitable fire extinguishing equipment shall be available for immediate use in the hot workplace.

6.3.6 Upon completion of this work during hot work and for a sufficient period of time after completion, effective fire control shall be carried out in the hot work area as well as in adjacent areas where a hazard from heat transfer may occur.

6.3.7 For additional more detailed information and procedures regarding hot works and processes, the document "International Safety Guidelines for Oil Tankers and Terminals (ISGOTT)" shall be consulted.Permission will be granted for the works to be carried out on the facility and dock in accordance with ISGOTT and the Work Permit Procedure.

6.3.8 The Port Facility Occupational Safety Procedure will also be implemented.Heat treatment is not allowed on the ships berthed to the buoy and during the discharge/loading of these ships.

Ex-proof equipment in accordance with the "Zone Map" specified in the "Explosion Protection Document" prepared for our operation is used at the buoys and all other locations in our facility.

7. DOCUMENTATION, CONTROL AND REGISTRATION

7.1 Procedures regarding the supply and control of all mandatory documents, information, and control of dangerous cargoes by the relevant persons

Documents related to dangerous goods are recorded at the facility according to the Ship Berthing Procedure.The documents are checked by the authorities and revised when there is a change related to the relevant process.

The current program is kept up-to-date and controls are made by making use of elements such as the control reminder mechanism, internal audits, and external audits.In particular, material safety data sheets for all dangerous substances kept in the terminal are also registered on this system.

7.2 Procedures for keeping up-to-date list and other relevant information of all dangerous cargoes in the coastal facility site regularly and completely

UN 1965 HYDROCARBON GAS MIXTURE (LPG), which is in the dangerous product group at the terminal, is stored in pressurized tanks.Only the registered product group is stored in these tanks, which are registered in our Storage License approved by the Energy Market Supervision Board.

Tank stock movements, transfer transactions and other tank operation processes are followed manually.Apart from this, the tanks that are opened for sale are tracked and recorded via the SAP program for the transfer processes.

7.3 Procedures for checking that the dangerous goods arriving at the facility are properly identified, the correct shipping names are used, certified, packed/packaged, labeled and declared, loaded and transported safely in approved and legal packaging, container or cargo transport unit, and reporting the control results

Systematic records of dangerous substances, which constitute our main field of activity, are tracked through the SAP program at the terminal.

The SAP system is a program that is created not only by the terminal but also by the chain data group that is entered by the relevant units as soon as the dangerous cargo is taken from the exit area.All details such as which product it is, how much it is, which method of shipment it comes with, its receipt in tanks, purchase quantities, transfer quantities, the analysis report of the product on which day it is sold, and what specific values it has are available in the system.

7.4 Procedures for obtaining and maintaining a safety data sheet (SDS).

As of January 1, 2014, it is obligatory to have a Safety Data Sheet (SDS) containing the following information together with the dangerous goods to be transported in all modes of transport (by Road, Railroad, Airway and Seaway) by the laws of our country.

- UN Number,
- PSN name (Proper Shipping Name,) (Required for sea freight)
- Class, (with sub-hazards)
- Packing Group (Class 3, 4.1, 4.2, 4.3, 5.1, 6.1, 8, 9)
- Whether it is a Marine Pollutant,
- Tunnel Restriction Code (Required for road transport.)

This scope Safety data sheets are provided and recorded as appropriate.These safety information forms are stored in digital or physical media for one year.

7.5 Procedures for keeping records and statistics of dangerous cargoes.

In the terminal, the registration of the UN 1965 LPG cargo in the dangerous product group is made through the SAP software.Reports and statistical data can be obtained as computer data via SAP at any time.

7.6 Information About the Quality Management System

As Likitgaz Dağıtım Ve Endüstri A.Ş., all of the activities in line with our continuous improvement goals are carried out in an integrated manner with management systems. Our company has ISO 9001, management systems certificate obtained from the relevant authorized certification bodies. The documents mentioned in this guide are numbered and recorded and made available to the relevant persons within the company. Within the scope of these documents, we are subject to internal and external audits at least once a year, and our activities aiming to continuously increase the importance we attach to human and environmental health and our stakeholder satisfaction are continued.

8. EMERGENCIES, EMERGENCY PREPAREDNESS AND RESPONSE

8.1 Response procedures for dangerous cargoes that pose/may create risks to life, property and/or the environment and dangerous situations involving dangerous cargoes

To decide;

The preventive action options for a given situation depend on a number of factors. In some cases, evacuation may be the best option. In other cases, shelter in place may be the best option. Sometimes, these two actions can be used together. In any emergency, authorities need to quickly issue instructions to the victims. Subjects will need to constantly hear information and instructions while being protected at the scene or being evacuated.

Proper evacuation in the following elements will determine the degree of effectiveness of evacuation or on-scene protection. The degree of importance of these factors may vary depending on the emergency conditions. In emergencies, other factors may need to be identified and considered. This list shows what information might be needed to make the initial decision.

Dangerous cargoes

Degree of harm

Chemical and physical properties

Amount involved

Containment/control of release

Rate of vapor movement

Population Exposed to Threat

Locations

Number of People

Time available to evacuate or shelter in-place

Ability to control evacuation or shelter in-place

Building types and availability

Special institutions or populations, e.g., nursing homes, hospitals, prisons

Weather conditions

Effect on vapor and cloud movement

Potential for change

Effect on evacuation or shelter in-place

Protective Actions and Response

Protective Actions are those steps taken to preserve the health and safety of emergency responders and the public during an incident involving releases of dangerous goods and Appendix-5 produced according to specified hazardous substances in the feature act according to the Emergency Response Table.

Isolate Hazard Area and Deny Entry means to keep everybody away from the area if they are not directly involved in emergency response operations. Unprotected emergency responders should not be allowed to enter the isolation zone.

Evacuation

"Evacuation" means to move all people from a threatened area to a safer place. To perform an evacuation, there must be enough time for people to be warned, to get ready, and to leave an area. If there is enough time, evacuation is the best protective action.

Begin evacuating people near by and those outdoors in direct view of the scene. When additional help arrives, expand the area to be evacuated downwind and crosswind to at least the extent recommended in measures specified in the Emergency Response Table referred to in Annex-5. Even after people move to the distances recommended, they may not be completely safe from harm.

They should not be permitted to congregate at such distances. Send evacuees to a definite place, by a specific route, far enough away so they will not have to be moved again if the wind shifts.

In the case of an emergency, the areas to which the persons are to be assembled in the Terminal are identified and marked as "Emergency Assemble Points".

Shelter In-place

Shelter In-Place means people should seek shelter inside a building and remain inside until the danger passes. Sheltering in-place isused when evacuating the public would cause greater risk than staying where they are, or when an evacuation cannot be performed. Direct the people inside to close all doors and windows and to shut off all ventilating, heating and cooling systems.

In-Place protection measures should be taken into account in the following situations;

- In case the vapors are combustible,
- In case it takes a long time to degas the area,
- In case the buildings cannot be firmly closed.

It is vital to maintain communication with competent people inside the building so that we can advise on changing conditions. Persons under guard in situ should be warned to stay away from windows, as in the event of a fire and/or explosion there is a danger of being struck by glass or metal fragments. Every event related to dangerous cargoes differs from each other. Each of these has separate problems and concerns. The form of action to protect people must be chosen carefully.

BLEVE(Explosion of Steam from Boiling Liquid)

Background information on BLEVEs is provided, and safety information is provided below, including what to do in the event of incidents involving liquefied petroleum gas (LPG), UN1075 type substances.LPGs contain the following flammable gases:Butane, UN1011;Butylene, UN1012, Isobutylene, UN1055, Profilen, UN2077, Isobutane, UN1969 and Propane, UN1979.

What Are the Major Hazards from a BLEVE Condition?

The main hazards involved in a propane or LPG based BLEVE event are:

- fire

- Thermal radiation from fire

- Explosion

- Piece splash

BLEVE – SAFETY PRECAUTIONS

Use it carefully.The table below provides summary information on tank characteristics, critical distances, and coolant water flow rates for various tank sizes.This chart is provided as some guidance to responders, but the information contained herein should be used with caution.The dimensions of the tank are approximate and

may vary depending on the design and application of the tank.The minimum time to exhaustion is based on severe torch light impact in the vapor cavity of a good tank and is approximate.Tanks fail sooner when damaged or corroded.Tanks may also fail minutes or hours after the minimum time specified here, depending on these conditions.It is assumed here that these tanks are not equipped with thermal barriers or a water spray cooling system.

The minimum time to discharge is based on a fire swallow with an appropriately sized pressure relief valve.If the tank is only partially swallowed, then the time required to empty is increased.(for example, if the tank is 50 percent swallowed, then it takes twice as long to empty the tank)

Once again, it is assumed that the tank is not equipped with a thermal barrier or water spray.Tanks equipped with thermal barriers or water spray coolers significantly increase the time required to empty and the time required to empty.A thermal barrier can reduce heat input to a tank by a factor of ten or more.This means that it can take ten times longer to empty the tank with the Pressure Relief Valve (PRV).Fireball Radius and emergency response distance are based on Mathematical equations and are approximate.They assume a round fireball, and that may not always be the case.Two safety distances for public evacuation.

The minimum distance is based on tanks placed at a small elevation angle (ie several degrees above horizontal).This is most common in horizontal cylinders.The preferred evacuation distance has a greater margin of safety, as they assume tanks are placed at a 45 degree angle to the horizontal.This is more convenient if you have a vertical cylinder.

It is understood that these distances are extremely wide and cannot be useful in an environment with a large number of people.However, it is important to understand that the closer you get to the BLEVE zone, the faster the risks increase.

Note that those that reach the furthest from the broken pieces correspond to the 45-degree area of each end of the tank.

The water flow rate is based on the equation::5√capacity (US gal) =US gal/minute time required to cool the tank metal.Warning:The data given here are approximate and should only be used with the utmost care.

For example, where times are given for the end of a tank or for the tank to be emptied from the pressure relief valve, these times are typical, but they may vary from case to case.Therefore, do not risk your life based on these deadlines.

BLEVE

(BE CAREFUL WHEN USING)

Capacity		Diameter		Length		Propane Mass		Maximum time required for severe fever to end	Approximate time of discharge for fever swallowing	Fireball radius		Emergency response distance		Minimum evacuation distance		Preferred evacuation distance		Coolant water flow rate	
Liter (Gallon)		meters (feet)		meters (feet)		Kilogram(Lb)		Minute	Minute	Meter(feet)		meters (feet)		meters (feet)		meters (feet)		liter/min.	gal/min.
100	(38.6)	0.3	(1)	1.5	(4.9)	40	(88)	4	8	10	(33)	90	(295)	154	(505)	307	(1007)	94.6	25
400	(154.4)	0.61	(2)	1.5	(4.9)	160	(353)	4	12	16	(53)	90	(295)	244	(801)	488	(1601)	189.3	50
2000	(772)	0.96	(3.2)	3	(9.8)	800	(1764)	5	18	28	(92)	111	(364)	417	(1368)	834	(2736)	424	112
4000	(1544)	1	(3.3)	4.9	(16.1)	1600	(3527)	5	20	35	(115)	140	(459)	525	(1722)	1050	(3445)	598	158
8000	(3088)	1.25	(4.1)	6.5	(21.3)	3200	(7055)	6	22	44	(144)	176	(577)	661	(2169)	1323	(4341)	848	224
22000	(8492)	2.1	(6.9)	6.7	(22)	8800	(19400)	7	28	62	(203)	247	(810)	926	(3038)	1852	(6076)	1404	371
42000	(16212)	2.1	(6.9)	11.8	(38.7)	16800	(37037)	7	32	77	(253)	306	(1004)	1149	(3770)	2200	(7218)	1938	512
82000	(31652)	2.75	(9)	13.7	(45)	32800	(72310)	8	40	96	(315)	383	(1257)	1435	(4708)	2200	(7218)	2710	716
140000	(54040)	3.3	(10.8)	17.2	(56.4)	56000	(123457)	9	45	114	(374)	457	(1499)	1715	(5627)	2200	(7218)	3539	935

8.2 Information on the ability, capability and capacity of the port facility to respond to emergencies

The terminal has a security mechanism that is always ready for emergency response.The terminal has Emergency Instruction and Fire Fighting Instruction prepared for an emergency.Scenario-based studies were carried out in these instructions and the distribution of personnel was determined.

There is a 3500 M3 fire water tank in the terminal against a possible fire hazard.The fire pumps in the terminal have 4 electric and 2 diesel as backups of each other.Electric line goes to the electric pumps independently from the generator.The fire pipeline is located throughout the terminal.There are hydrants connected to the fire pipeline throughout the terminal and fire cabinets (included in the necessary equipment) next to these

hydrants.There are fire extinguishers suitable for the exit point and response method of the fire in the terminal.Fire extinguishers are checked periodically.In a possible tank fire, foam injection into the tank and cooling in other tanks can be done.

There is a fire detection and alarm system in the terminal.With the detectors (Gas Detector) in this system, a possible fire situation is detected in advance and the intervention time is reduced to the lowest level.This system gives an audible warning after detection.There are also fire alarm buttons integrated into the above system throughout the terminal.Periodic control and maintenance of this system are carried out by the authorized company.

Fire drills are held at least twice a year.

SEAGULL MARTI ÇEVRE HİZMETLERİ LTD ŞTİ provides 1. 2. 3rd level service to response to chemical spill events. In partnership with the company, drills are held twice a year under the supervision of the Kocaeli Regional Port Authority.Every year, trainings within the scope of ISPS code, inspection by the port authority and exercises are carried out under the supervision of Kocaeli Regional Port Authority.

The emergency team lists are given below.The emergency telephone in the terminal is 0262 527 14 38.

NUMBERS TO CALL IN TERMINAL AND OUT OF THE FACILITY

Terminal Manager	Ugur Avci
Kocaeli Regional Port Authority	0262 528 37 54
Kocaeli Governorship Directorate of Environment, Urbanization and Climate Change Provincial Directorate	0262 312 13 12
Kocaeli Directorate of Environmental Protection	0262 331 83 91
Körfez District Police Department	0262 528 15 82
Kocaeli Governorship	0262 300 50 00
Kocaeli Korfez Petrochemical Customs Directorate	0262 528 44 72
Tugboat and Pilotage Services	……
Marine Cleaning Company	Seagull Marti Environment Services Ltd. 0212 243 48 32
Emergency (Fire/Ambulance)	112

8.3 Regulations regarding the first response to the accidents involving dangerous cargoes (first aid procedures, first aid possibilities and capabilities, etc.)

Facility Emergency Instruction is available.Emergency response team lists are given in the emergency plan.In order for the teams to be constantly ready for emergencies, at least 1 ISPS Code exercise, 2 times a sea rash exercise, 1 time a land rash exercise, 1 earthquake drill and 2 fire drills are held.In addition, all trainings required for the teams to gain skills such as "emergency response level 1 and 2, emergency equipment usage training, fire safety training, first aid training, ISPS code training, Seveso and Process safety training and TMGD training" are taken by authorized institutions and certifications are given. is kept up to date.

The "Medical First Aid Guide (MFAG)" in the IMDG Code appendix and Emergency Plans (EmS) in the IMDG Code appendix are used for emergency situations involving dangerous cargoes.

8.4 Notifications to be made inside and outside the facility in case of emergency

In case of emergency, action is taken according to Emergency Procedure, Emergency Instruction, Fire Fighting Instruction.

8.5 Procedures for reporting accidents

In case of any work accident, the necessary forms are filled according to the nature of the accident.

8.6 Coordination, support and cooperation method with official authorities

In any emergency, the response is carried out in coordination with the official authorities.In case of a fire, the local fire department is informed and the fire crew intervenes until the fire crews arrive.In emergencies arising from sabotage and terrorist activities, coordination with local security units is ensured.In cases such as natural disasters, the fire department is contacted if necessary, and coordination with AFAD is provided if necessary.In case of spillage at sea, coordination is ensured by contacting the Main Search and Rescue Coordination Center.In case of work accidents, notifications are made to the Ministry of Labor and Social Security.In case of a possible explosion, fire or emergency in the adjacent facility;First of all, measures will be taken at the facility, and teams will be prepared to assist the neighboring facility.

8.7 Emergency evacuation plan for dispersion of ships and vessels from port facility

The emergency evacuation plan is as follows.

Emergency Conditions

The terms that require the emergency departure of ships connected to the port facility maritime systems are stated below.

- Adverse Weather Conditions
- Fire or conditions requiring emergency on board
- Fire or conditions requiring emergency at the port facility area
- Other Reasons
- Fire on the facility or ship located in other facilities
- Acts of Terrorism
- Warfare
- Natural Disasters
- Situations considered necessary by officials
- Pollution
- Disturbance of ship position
- Ship damages
- Medical problems

Adverse Weather Conditions

- 25 Knot: Unloading is stopped.
- 30 Knot: Hose is unmounted.
- 35 Knot: The ship must be ready to leave the buoy area immediately.

Fire or Emergency Conditions on Board

Fire situations that may occur in ships connected to the buoy system and that can grow out of control even if it is fought, are situations that require the operation to be stopped immediately and the ship to leave the buoy area.

In addition, in cases where there is an unavoidable leak/spill into the atmosphere in cases of breakage or splitting that may occur in any ship's tank or pipeline, the ship connected to the marine systems should be immediately removed from the buoy system in order not to damage the port facility and its surroundings.

Fire or Emergency Conditions on Terminal

The ship is immediately removed from the buoy area in order to ensure the safety of the ship and the environment, in conditions that require emergency situations such as fire or uncontrollable leaks that may occur in the port facility. Leaks and fires that can be easily extinguished without affecting the operation at the port facility will be evaluated by the emergency terminal management, and the ship on the buoy will be decided to disperse.

Communication

In the event of the above-mentioned emergencies, a fast, secure and uninterrupted communication between the port facility, the ship and the relevant authorities will be ensured by the communication tools specified below.

- VHF Radio
- Mobile phone
- Land phone

Emergency Dispersion Preparation Process

• All emergencies are reported to the Port Authority by VHF and telephone.

• If it is decided to leave the ship urgently, the ship is taken to anchor area 5 under controlled conditions.

• The ship's captain and the port facility will initiate the emergency dispersion process by mutual agreement in cases where emergency dispersion is required and will notify the Port Authority as soon as possible.

• All loading and unloading operations must be stopped, the hose must be disconnected and the ship must be ready for dispersion.

• The ship will activate its own emergency plans against the risk of fire. (Must be discussed at the Safety meeting)

• It will be ensured that there are no sources that may cause sparks, as fast drainage will be made in the hose disconnection process.

• In all emergencies, if the required response exceeds the port facility capabilities, it should be immediately reported to the local guide organization, coast guard and port authorities**.**

The decision about dispersion the ship under control is based on the principle of life safety and will involve the following conditions.

1. Sufficiency of tugboats
2. The ability of the ship to lift under its own power
3. Availability of safe places to proceed or tow a ship in an emergency
4. Qualification of firefighting equipment
5. Proximity of other ships

Emergency Dispersion

If all relevant preparations are examined and deemed appropriate, the immediate dispersion of the ship will begin. Emergency separation will be provided by following the steps below in order.

Close coordination and cooperation are required between the Port Facility, Maritime & Port Authority at each stage.

1. Giving an alarm
2. Giving information about the emergency via telephone and VHF
3. Making the initial situation assessment between the Captain and the Port Facility Officer
4. Stopping the operation
5. Implementation of the port facility and ship emergency plan precautions
6. Deterioration of the current situation and the existence of the above-mentioned emergency dispersion conditions
7. Evaluation of the situation between the Captain, Port Facility Officer, Port Authority or Port Master, and Maritime Pilot
8. Deciding to immediate dispersion
9. Informing neighboring facilities and other vessels
10. Deploying of the tugboats emergency departure around the ship, completing their preparations, and indicating readiness
11. The captain completes the arrangement of the ship and implies readiness
12. Confirmation of the opening of the release hooks by the Loading Master
13. Emergency dispersion will be applied as a last resort and dispersion hooks will not be released until all precautions are taken and the above conditions are met.

CAUTION !

THE SHIP EMERGENCY LEAVING PROCESS MUST BE CONSIDERED TO BE APPLIED AS A LAST REMEDY AND THE HOOKS MUST NOT BE RELEASED UNTIL ALL PRECAUTIONS ARE TAKEN AND THE ABOVE CONDITIONS ARE FOLLOWED

Post Emergency Dispersion

1. Towing the ship after the departure process and declaring the place where the ship will be taken
2. Transfer of the ship to the allocated area accompanied by tugboats or with its own machine
3. Detection of possible damage or deficiency by analyzing the Port Facility
4. Evaluation of the time when the Ship and Port Facility will be ready for cargo handling again

5. Sharing the problems, if any, that occurred during the emergency dispersion
6. Agreement between the pilotage regarding fire, explosion, and similar emergencies that may occur during loading/unloading, towage agency, and the Port facility authorities.

According to the commitment given to the Port Authority for tugboat and pilotage services authorized by the Ministry of Transport and Infrastructure, in order to quickly disperse the ship away from the facility and tow it to a safe point, with tugboats equipped to fight fires according to the weather and sea conditions

8.8 Procedures for the handling and disposal of damaged dangerous cargoes and waste contaminated by dangerous cargoes

8.8.1 Waste Collection and Transport

8.8.1.1 According to the types of wastes generated, they are collected separately in waste bins, transported, and stored appropriately. Wastes generated as a result of maintenance activities are also considered within this scope.

8.8.1.2 If an additional waste class is determined to the existing waste classification, it will be integrated into the system

8.8.1.3 Waste containers and storage areas should be appropriate for hazardous cargo wastes. The waste storage area should be surrounded, and the floor should be made up of concrete. There should be wastewater collection raceways inside the waste storage area.

8.8.2 Waste Disposal

8.8.2.1 According to whether the collected wastes are non-hazardous or hazardous wastes, the wastes are sold and removed from the facility with contracted organizations in accordance with legal recovery/disposal methods.

8.8.2.2 The possibilities of all contractors and carriers within the scope of waste management to transport and/or dispose of wastes with appropriate methods are examined.

8.8.2.3 It is evaluated in terms of whether they fulfill their legal obligations and the methods of performing waste recycling and disposal processes without harming the environment, if contracting services are received for the transportation, sale, and/or disposal/recycling of wastes.

8.8.2.4 It is mandatory to keep all records of waste disposal.

8.8.3 Contaminated Packages;

8.8.3.1 These wastes are empty barrels. When it is generated, it is left in the contaminated packaging area at the landfill, and the Environmental Consulting Firm and the Environmental Management System Officer contact the contracted and licensed firm, and it is sent via the Mobile Waste Tracking System (MoTaT) within

the time specified in the legislation. DGSA should be contacted, and a "Transport Document" should be prepared and delivered to the transporter for hazardous waste shipments. The vehicle must also be subject to vehicle control

8.8.3.2 Contaminated Waste; These wastes are those that do not harm the environment but can be dangerous as a result of the combination of different materials or goods. When it is generated, it is collected in the barrel under the name of the waste at the exit of the production & warehouse and taken to the waste area. The Environmental Consulting Firm and the Environmental Management System Officer contact the contracted and licensed firm, and it is sent via the Mobile Waste Tracking System (MoTaT) within the time specified in the legislation. DGSA should be contacted, and a "Transport Document" should be prepared and delivered to the transporter for hazardous waste shipments. The vehicle must also be subject to vehicle control

8.9 Emergency drills and their records.

Drills are scheduled annually. The records of the exercises are kept with the Training Participation Form.

8.10 Information on fire protection systems

Fire Fighting System Material List is kept up to date.Detailed information on fire protection systems is given in the emergency plan.

8.11 Procedures for approval, inspection, testing, maintenance and availability of fire protection systems

Our terminal has a fire department report approved by the fire department.

8.11.1 Fire Water Tanks and Fire Water

8.11.1.1 In order to prevent algae and sludge formed at the bottom or sides of the tank from creating a hazard during a fire, it should be emptied and cleaned at least once a year.During the emptying of the pools, the intake valve, check valve and filters are maintained.

8.11.1.2 In case of rapid drops in the water level, the leak location should be investigated and the malfunction, if any, should be corrected due to the possibility of leakage.

8.11.1.3 As a result of the annual checks to be made, if necessary, internal cleaning and maintenance should be carried out in closed warehouses.

8.11.2 Fire Water Pumps

8.11.2.1 In addition to the planned maintenance, the issues to be considered regarding the operation of fire pumps and the elimination of possible malfunctions are listed below.

8.11.2.1.1 It should be checked that the thrust bolts of the shaft seal bearings of the pumps are mutually tight so that the pump can be easily turned by hand.It is normal for water to drip from the packing bearings during the operation of the pump.In order to prevent this water from flowing to the floor, it should be connected to the drainage with a thin pipe from the threaded mouth under the bearing console.

8.11.2.1.2 Fire water pumps are operated for at least 1 hour a week and recorded.

8.11.2.1.3 It must be ensured that the pump and the suction pipe are completely filled with water.If this is suspected, water should be filled by opening the water filling plug and the air intake taps, until the water overflows from the air intake taps, and the plug should be tightened when the water stops at the plug level.

8.11.2.1.4 Pump motors will draw more than normal current due to inrush current at the first moment of operation.When all pumps start working at the same time, due to the high current to be drawn, disjunctors may trip or major malfunctions may occur in the diesel generator.For this reason, the time relays that regulate the transition from star to delta in the protective switches that drive the pump motors should be adjusted according to the number of pumps and the amount of pumps to be activated at the same time, according to different and appropriate time intervals, and the pumps should be activated sequentially.

8.11.2.1.5 After the above preparation and controls are done, the pumps are started by pressing the drive switches.During operation, the electric motor voltage and the amperage it draws should be checked from time to time.If the amp draw is high in normal operation, the causes should be investigated and rectified.There may be a fault or mechanical stress in the pump or motor.Voltages below normal can pose a danger to the motor.

8.11.2.1.6 Manometers should be kept under constant control and one or more of the pumps should be stopped in case of excessive pressure rises.

8.11.2.1.7 The discharge pipes of the pumps must be equipped with a valve first and a check valve after the valve.

8.11.2.1.8 Check valve in the discharge pipe of the pump that does not work;If the materials such as paper, garbage, stone pieces, moss and slime are jammed and prevent the check valve from closing completely, some of the water pumped by the other pumps is pumped back into the pool while passing through these inoperative pumps and suction pipes.This fault, which restricts the required water flow in the event of a fire, must be eliminated.If a rotation is observed in the couplings of some of the non-operating pumps during the operation of some pumps, it should be considered as an indication of the presence of the above-described fault in these pumps.

8.11.2.1.9 It must be ensured that the pump and motor rotate in the right direction during operation.For this reason, the direction of rotation must be drawn on the couplings and the control must be done accordingly.

8.11.2.1.10 During the operation of the pumps, the temperature of the pump and motor bearings can be hot enough to withstand the hand.If the temperature is high, it may be due to internal mechanical stress or coupling misalignment.In such cases, the pump must be stopped immediately and the fault must be corrected.

8.11.2.1.11 In pumps driven by a diesel engine, the engine must be started in accordance with the special instructions.

8.11.2.1.12 If any deficiencies or malfunctions are detected as a result of the control, they are corrected by the responsible persons.

8.11.3 Sprinkler Installation

8.11.3.1 The most important point to be considered and the maintenance to be done in the sprinkler installation is to prevent the sprinkler heads from clogging.To ensure this, the sprinkler must be operated in

accordance with the standards/legislation and it must be ensured that it is in working order.Sufficient sprinkler heads should be kept as spares in each facility, and in case of a failure, they should be replaced with new ones and the defective ones should be repaired and backed up.

8.11.4 Fire Hydrant Installation

8.11.4.1 Rain water should be prevented from entering the fire hydrant hose cabinets, the hoses should be intact, strong and tightened enough.At least one of the hoses should always be kept connected to the fire valve.

8.11.4.2 Fire valves must be fault-free and leak-proof.Defective nozzles, valves, hoses will be promptly replaced with new ones, and faults should be repaired and backed up.For this reason, a sufficient amount of hoses, nozzles, fire valves, clamps, couplings and spare materials should be available in each facility.In the fire installation, it is not allowed to wait for the fault for any reason.

8.11.4.3 While the malfunctions detected following the drills are eliminated, the working fire hoses should not be placed in the cabinets when they are wet and contain water.Facilities should provide suitable hose hanger assemblies for the water in the hoses to drain and dry completely and should not put them back in place without making sure that the hose is thoroughly dried.If sea water has been pumped with hoses, they must first be washed with fresh water and dried in a cool-windy place.

8.11.4.4 All pipes of the fire hydrant and sprinkler installation should be inspected every three months, rusted parts must be painted, rotten parts must be replaced with new ones, valves and check valves must be checked and faults must be fixed.

8.11.4.5 If any deficiencies or malfunctions are detected as a result of the inspection of all fire hydrants, hoses and nozzles, they are corrected by the relevant responsible persons.

8.11.5 Portable Fire Extinguishers

8.11.5.1 Sufficient spare devices should always be available in plant warehouses for malfunction, control or maintenance.For the above-mentioned purposes, spares should be put in place of the extinguishers taken from their place in order.

8.11.5.2 All fire extinguishers are eye-examined and checked on a monthly basis.After the control, the extinguishers are marked.During the control, especially dry powder extinguishers are turned upside down and tapped lightly on the base, thus allowing the powder in the tube to move.Otherwise, the powder inside the extinguishers, which remain in the same position for a long time, may settle to the bottom and solidify.If any deficiencies or malfunctions are detected as a result of the control, they are corrected by the relevant responsible persons.

8.11.5.3 Fire extinguishers TS ISO 11602-2 Fire Protection:According to the Portable and Wheeled Fire Extinguishers standard, a general control is passed by the seller company once a year.Fire extinguishers are tested by the relevant company at intervals not exceeding 10 years, and chemical powder is 4.checked at the end of the year.

8.11.6 Frost Protection

8.11.6.1 Protection of Generators

8.11.6.1.1 When the outside temperature drops below +4C in winter, the water may start to freeze.For this reason, the radiators of generators with water-cooled engines should be secured with antifreeze.

8.11.6.2 Protection of Fire Water Pumps

8.11.6.2.1 Fire water pumps and suction pipes are always filled with water.Therefore, the ambient temperature should not fall below +4C.

8.11.6.3 Protection of Fire Water Distribution Pipes

8.11.6.3.1 The exposed main and branch pipes must be protected against freezing up to the hydrant taps.Therefore, the lines are protected against freezing either by means of insulation or by laying them underground.

8.12 Precautions to be taken in cases where fire protection systems do not work

Fire protection equipment is critical equipment in the terminal.First of all, if such equipment is out of order for some reason, necessary action is taken.Within the scope of the Process Safety Procedure, critical equipment deactivation forms are used and this form is shared with the relevant people.In the daily shift reports, it is stated that such equipment is disabled and how precautions are taken, and it is ensured that the entire facility is aware of the situation.If the equipment to be deactivated is very critical and there is a dangerous situation that may be encountered in the operational process, the operations can be stopped, if necessary, by obtaining the approval of the Terminal Operations Department.

If an equipment change is made, it is submitted to the approval mechanism of the relevant authorities.If accepted, that change will be made.

8.13 Other risk control equipment

Risk analyzes are made for the management of risks at the terminal. Risk analyzes are prepared by the Terminal Manager, HSSE Operations Manager, Maintenance Supervisor, Shift Supervisor, OHS specialist, on-site doctor, and employees in the region/operation where the risk analysis is made. It is updated when necessary

9. OCCUPATIONAL HEALTH AND SAFETY

9.1 Occupational health and safety measures

Occupational health and safety issues are given priority in the terminal.All kinds of work carried out in the terminal area are evaluated and carried out within the scope of risk assessments, work safety analyzes and work permit procedures, provided that certain procedures and instructions are followed.Before the work, all personnel who will work in the relevant work are given trainings on safety precautions, and orientation is made on what to do in case of an emergency.It is obligatory to use personal protective equipment in the terminal area and in all work areas related to the terminal.

9.2. Information on Personal Protective Clothing

Personal protective equipment;all tools, tools, equipment and devices that protect the employee against one or more risks arising from the work carried out, affecting health and safety, worn, worn or held by the employee, designed for this purpose, in order to protect the person against one or more risks. A device, tool or material made up of a whole by the manufacturer, a detachable or non-separable protective device, tool or material that is used with equipment that is carried or worn without a protective purpose to perform a

specific activity, for the comfortable and functional operation of personal protective equipment. means replaceable parts that are required and used only with such equipment.

- PPE should provide adequate protection against all risks encountered during its intended use.

- PPE designed and manufactured in such a way as to protect the user at the highest possible level during use in foreseeable conditions and in the intended direction, while carrying out hazardous work will be used.

- The most appropriate level of protection to be considered during design is the point at which the effectiveness of PPE begins to decline when exposed to risk from the use of PPE or during normal business conduct.PPE suitable for this design will be used.

- In the design of PPE, appropriate protection classifications will be taken into account in cases where the foreseeable conditions of use differ, such as different levels of the same risk factor can be distinguished.

- PPE that is designed and manufactured in such a way that it will not cause hazards and other disturbing factors that may arise from its structure during use in foreseeable conditions will be used.

- PPE material and parts, including substances resulting from deterioration, must not adversely affect the health and hygiene of the user.

- Any PPE element that comes into contact with the user or is likely to come into contact with the wearer should not be hard enough to cause irritation or injury, and should not have sharp edges or protrusions.

- Restrictions caused by PPE on posture and movement of the body and loss of sensitivity in sensory organs should be minimized, and PPE should not cause dangerous movements for the user or other persons.

- PPE's will be used, which are designed and produced in such a way as to ensure that the user can easily stand in the correct position by taking into account the movements to be made during the work and the postures of the body, and to remain in place for the foreseen usage period.For this purpose, it should be ensured that PPE can be used most effectively with the help of adjustable and addable systems or by producing it in different body sizes, ensuring that it is suitable for the body structure of the user.

- PPE which is manufactured as light as possible without reducing its durability and functionality should be used.

- If the same manufacturer has introduced PPE models of different types and classes to ensure simultaneous protection of adjacent parts of the body against these risks when there is more than one risk at the same time, they must be used in harmony with each other.

All PPE used in the terminal are kept and used in accordance with the provisions of the “personal protective equipment regulation” and “the regulation on the use of personal protective equipment in workplaces”.

9.3 Closed Space Entry Permit Precautions and Procedures.

Closed Space Entry Permit Precautions and Procedures SEÇ-PRS-001 work permit procedures are also explained.In addition, during indoor entrances, SEC-FRM-005 Indoor Area Entry Permit Form (B) is used to ensure that the indoor area is entered and exited in a controlled manner.Relevant records are kept for at least three years.Personnel who have been working at the coastal facility for less than six months are not allowed to enter closed areas.

10. OTHER MATTERS

10.1 Validity of Dangerous Goods Conformity Certificate

TYUB was set by the TR Ministry of Transport and Infrastructure, General Directorate of Transport and Maritime Affairs, until the end of the coastal facility operation permit on 31.12.2025.

10.2 Tasks defined for Dangerous Goods Safety Advisor

As in section 2.4

10.3 Issues for those carrying dangerous goods that will arrive/leave the coastal facility by road (documents required to be kept by road vehicles carrying dangerous goods at the entrance/exit of the port or coastal facility area, equipment and equipment that these vehicles must have;speed limits in the port area, etc. matters)

Dangerous goods entry and exit to our terminal by road are made with the forms prepared within the scope of ADR.Vehicles within the facility will not exceed 20 KM/Hour.

10.4. Issues for those carrying dangerous goods that will arrive/leave the coastal facility by sea

- At least twenty-four hours before the ship and vessels carrying dangerous goods enter the port administrative area;Ships and marine vessels with a cruise time of less than twenty-four hours until they enter the port area submit a notification document containing detailed information about their cargo to the port authority in writing, right after their departure from the coastal facility.

- Transportation should be carried out in a safe, secure and environmentally friendly manner, and all necessary precautions should be taken to prevent accidents and to minimize the damage when an accident occurs.

- It is ensured that dangerous goods are safely loaded, stacked, secured, transported and unloaded in approved and legal packaging, container and cargo transport unit.

- All relevant personnel are trained on the risks of dangerous goods transported by sea, safety precautions, safe working, emergency measures, security and similar issues, and training records are kept.

- It is ensured that the necessary safety measures are taken for dangerous substances that do not comply with the rules, are unsafe or pose a risk to people or the environment.

- In case of emergency or accident, necessary information and support is provided to those concerned.

- Dangerous goods accidents occurring in the area of responsibility are reported to the administration.

- It ensures that the ship's equipment and devices are suitable for dangerous cargo transportation.

- All mandatory documents, information and documents related to dangerous goods are obtained from the coastal facility and the cargo

requests from the person concerned and ensures that they accompany the dangerous cargo.

- Ensures that the safety measures regarding loading, stacking, separation, handling, transportation and unloading of dangerous goods on board are fully implemented and maintained, and performs the necessary inspections and controls.

- Controls that the dangerous goods entering the ship are defined, classified, certified, packaged, marked, labeled, declared in accordance with the procedure, and that they are safely loaded and transported to the approved and legal packaging, container and cargo transport unit.

- It ensures that all ship personnel are informed and trained about the risks of transported, loaded and unloaded dangerous goods, safety precautions, safe working, emergency measures and similar issues.

- It ensures that people who are qualified and trained in the loading, transportation, unloading and handling of dangerous goods work in a way that takes occupational safety precautions.

- He cannot go out of the area allocated to him, cannot anchor, cannot approach buoys and docks without the permission of the port authority.

- Navigation, maneuvering, anchoring, berthing for the ship to carry the dangerous cargo safely

and applies all rules and precautions during departures. - Provides safe entry-exit between the ship and the dock.

- Informs its personnel about the practices, safety procedures, emergency measures and response methods related to dangerous goods on board.

- Keeps the current lists of all dangerous goods on board and declares them to the relevant parties.

- Takes the necessary safety measures for dangerous goods that do not comply with the rules, are unsafe, pose a risk to the ship, people or the environment, and report the situation to the port authority.

- Notifies the port authority of the dangerous cargo accidents that occur on the ship.

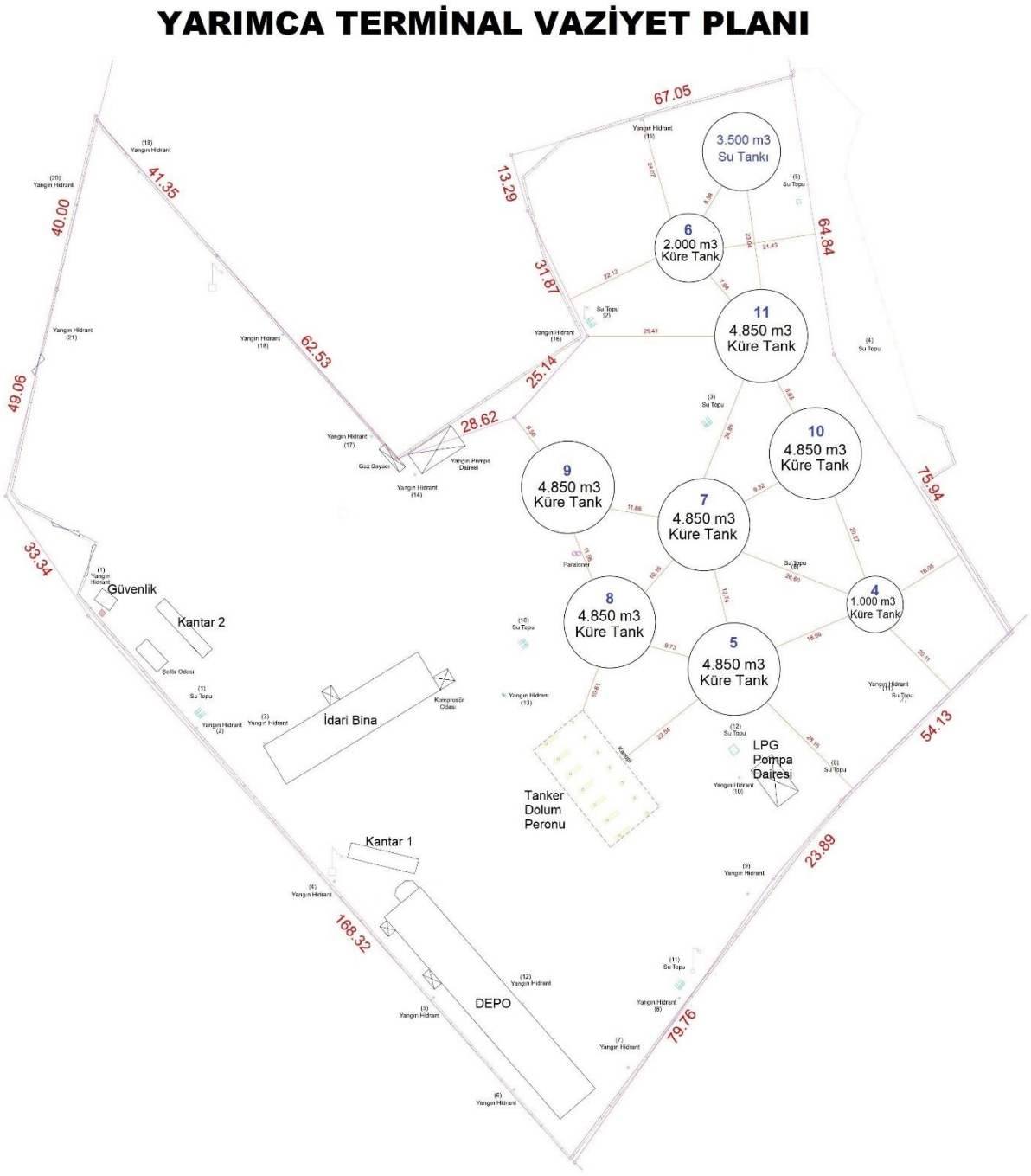
- Provides the necessary support and cooperation in on-board controls by official authorities.

10.5 Additional matters to be added by the port facility.

N/A

ATTACHMENTS

1- General site plan of the coastal facility



2- General view photos of the coastal facility


MİLANGAZ
MİLANGAZ
MİLANGAZ


Milangaz

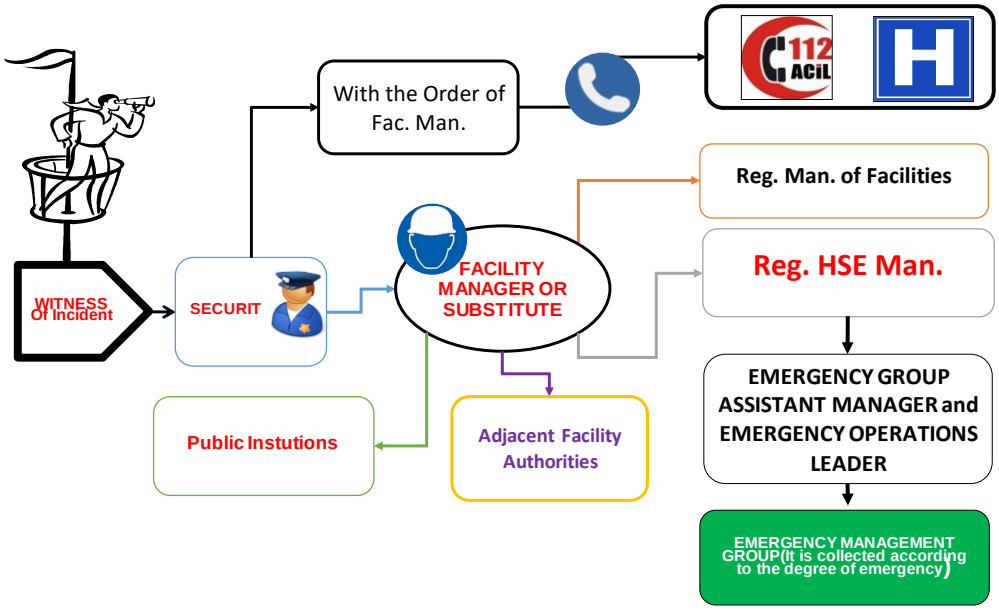
3- Emergency Contact Points and Contact Information

EMERGENCY COMMUNICATION CHAIN AND CONTACT LIST
SEÇ-PLN-E05
HSE DIRECTORATE

ACİL DURUM SINIFLANDIRMA		
LEVEL	Acil durum Tanımı	Aktive Edilecek Birimler
Green (Level 1)	Small fires, minor injuries that can be extinguished with a fire extinguisher.	Regional HSE Officer, Occupational Safety Specialist, Facility Manager and Emergency Response Team
Yellow (Level 2)	Serious fires, serious injuries, Prolonged power outages, Prolonged production shutdown	Emergency Management Group, Regional HSE Officer, Occupational Safety Specialist, Facility Manager and Emergency Response Team, 110 Fire Brigade and 112 Emergency Assistance
Red (Level 3)	Fatal accident, major fires and natural disasters that can cause great damage, Long-term power outages, Long-term production stoppage	Emergency Management Group, Regional HSE Officer, Occupational Safety Specialist, Facility Manager and Emergency Response Team, 110 Fire Brigade and 112 Emergency Assistance (Ambulance)

EMERGENCY NUMBERS

114	177	156
Zehir Danışma Hattı	Orman Yangını	Jandarma

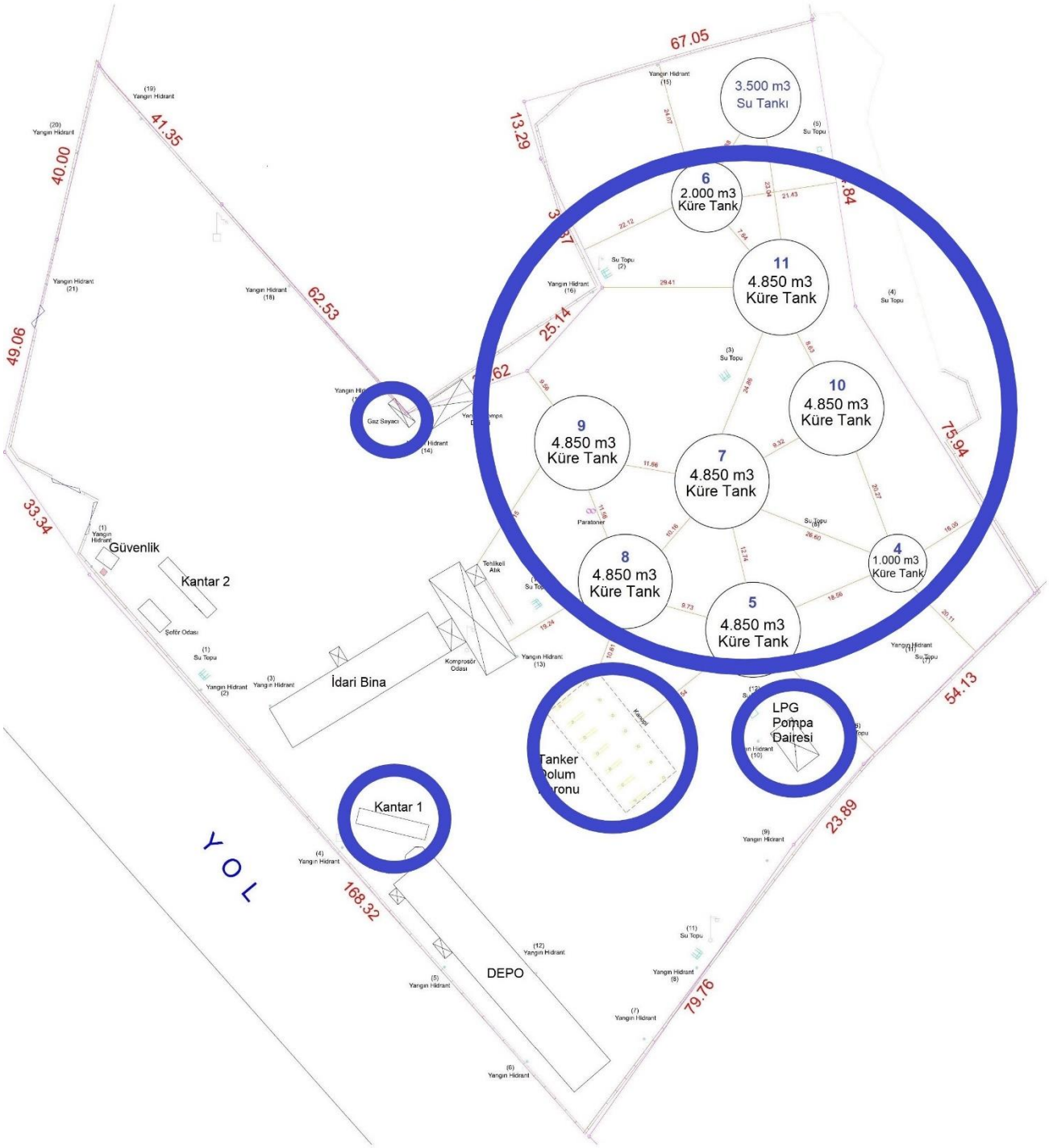


INTERNAL COMMUNICATION LIST	
UNIT/ PERSONNEL	Tel No
Can Toydemir Op. and Project Director	(0532) 704 06 66
Levent AKIN *HSE Man.*	(0532) 478 55 85
Yasin Çelenk *Regional HSE Resp.*	(0531) 344 12 48
Hasan Yılmaz Bölge Tesisler Müdürü	(0553) 519 76 22
Uğur Avcı *Terminal Man.*	(0532) 225 47 93
Mehmet Ali KILIÇ *Adm. Affairs & Fac. Service.*	(0533) 385 74 56
Şahin Aslanol Security Chief	(0505) 235 31 75
CUSTOMERS AND ADJACNET COMPANIES	
Yarımca Recepticle Filling Plant	(0262) 527 20 40
Total Filling Plant	(0262) 527 13 83
Yurtgaz Filling Plant	(0262) 527 35 61

IMPORTANT PHONE NUMBERS	
Instution	Phone.No
Emergency Call Center	112
Regional Fire Dep.	(0262) 335 21 24
Police Station / Gendarmerie	112
Traffic Warning	112
Nearest Hospital	(0262) 317 80 00
Nearest Burn Center	(0262) 317 80 00
Poison Info. Center	0 800 314 79 00
Water Breakdown	185
Electrical Breakdown	186
AFAD	(0262) 321 10 29
Provincial Directorate of Environment and Urbanization	(0262) 312 11 41

4- General Layout of Areas where Dangerous Goods are Handled

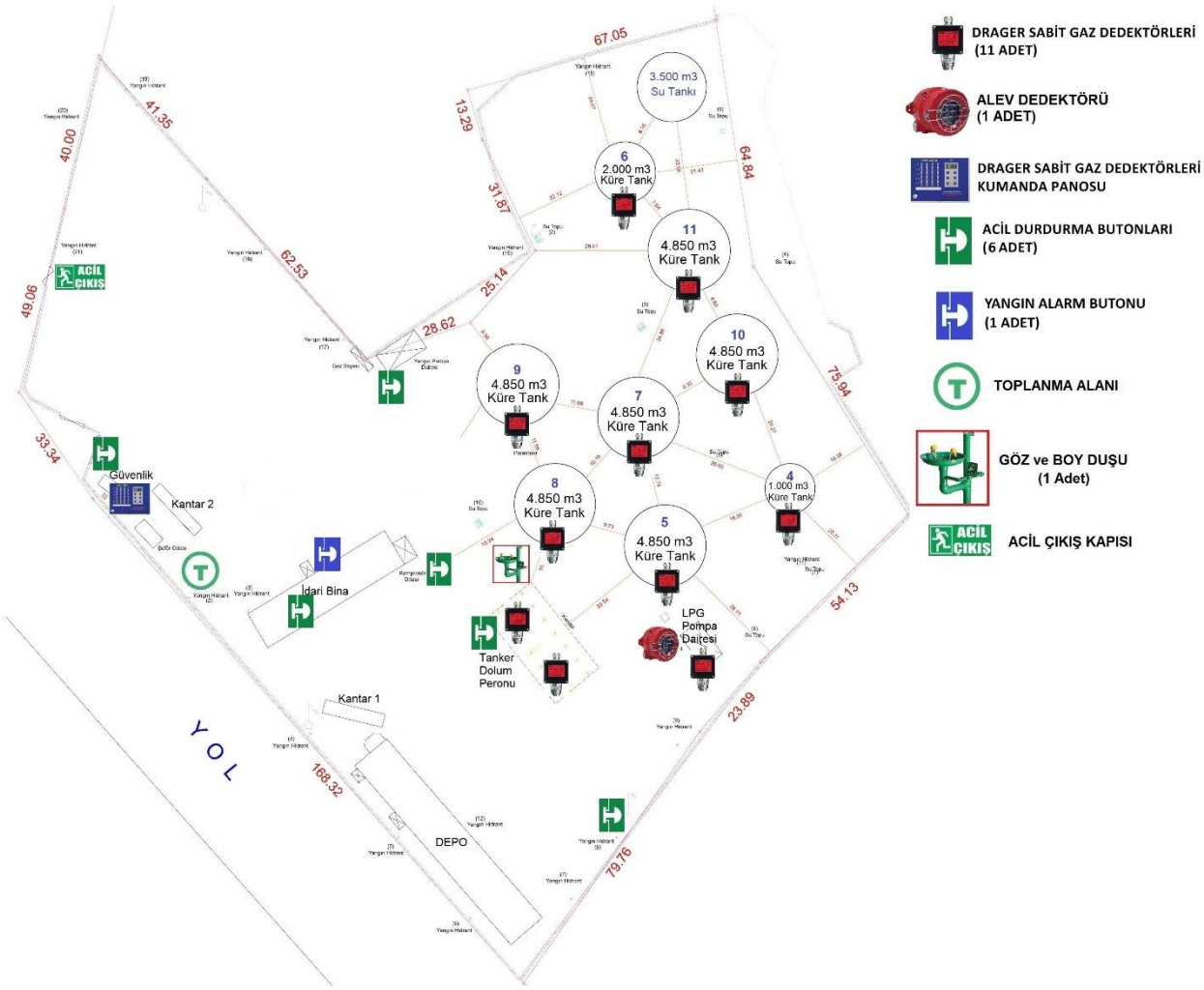
YARIMCA DOLUM TESİSİ YÜKÜN ELLEÇLENDİĞİ ALANLAR KROKİSİ



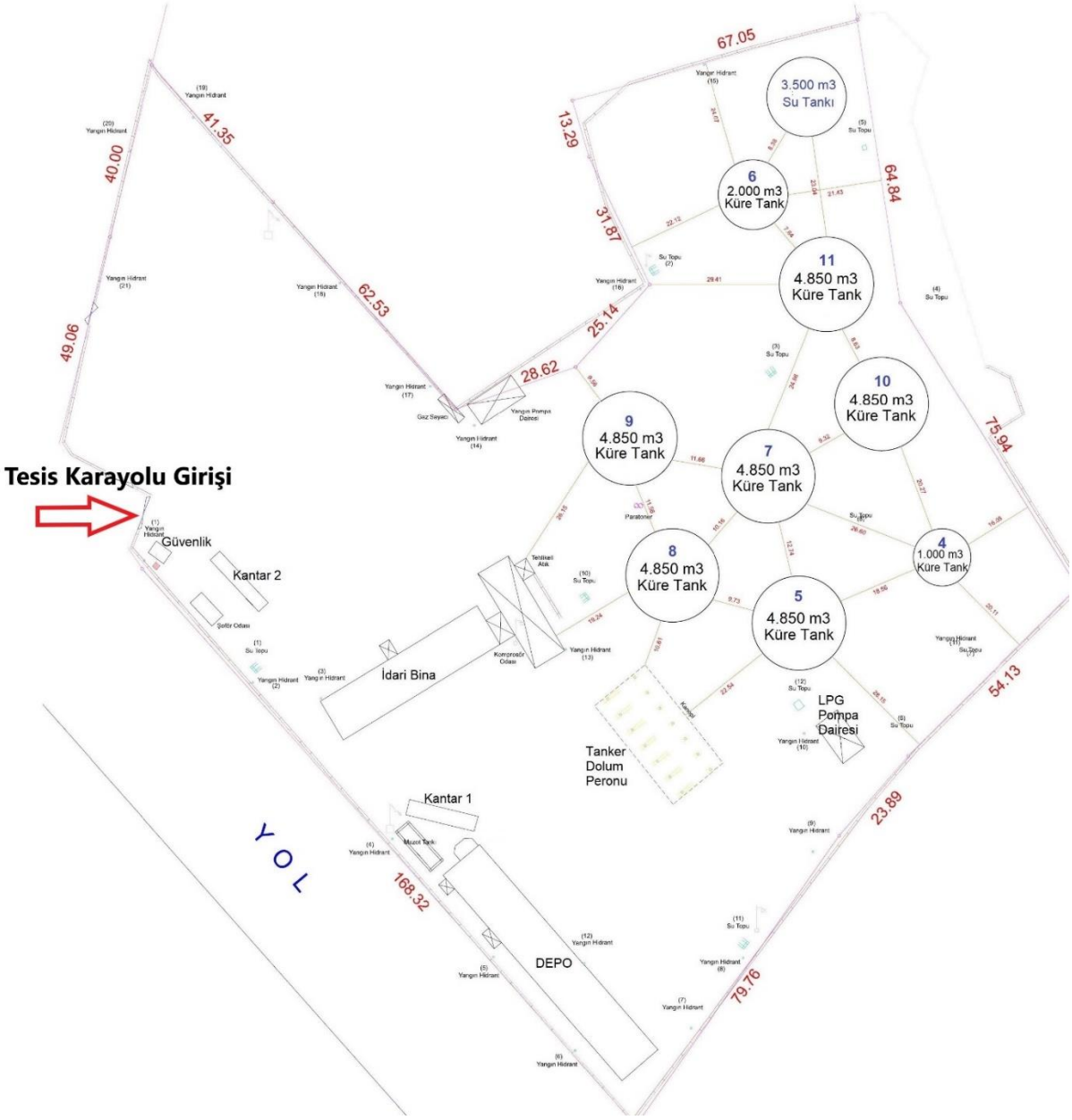
5- General Fire Plan of the Facility

6- Emergency Plan

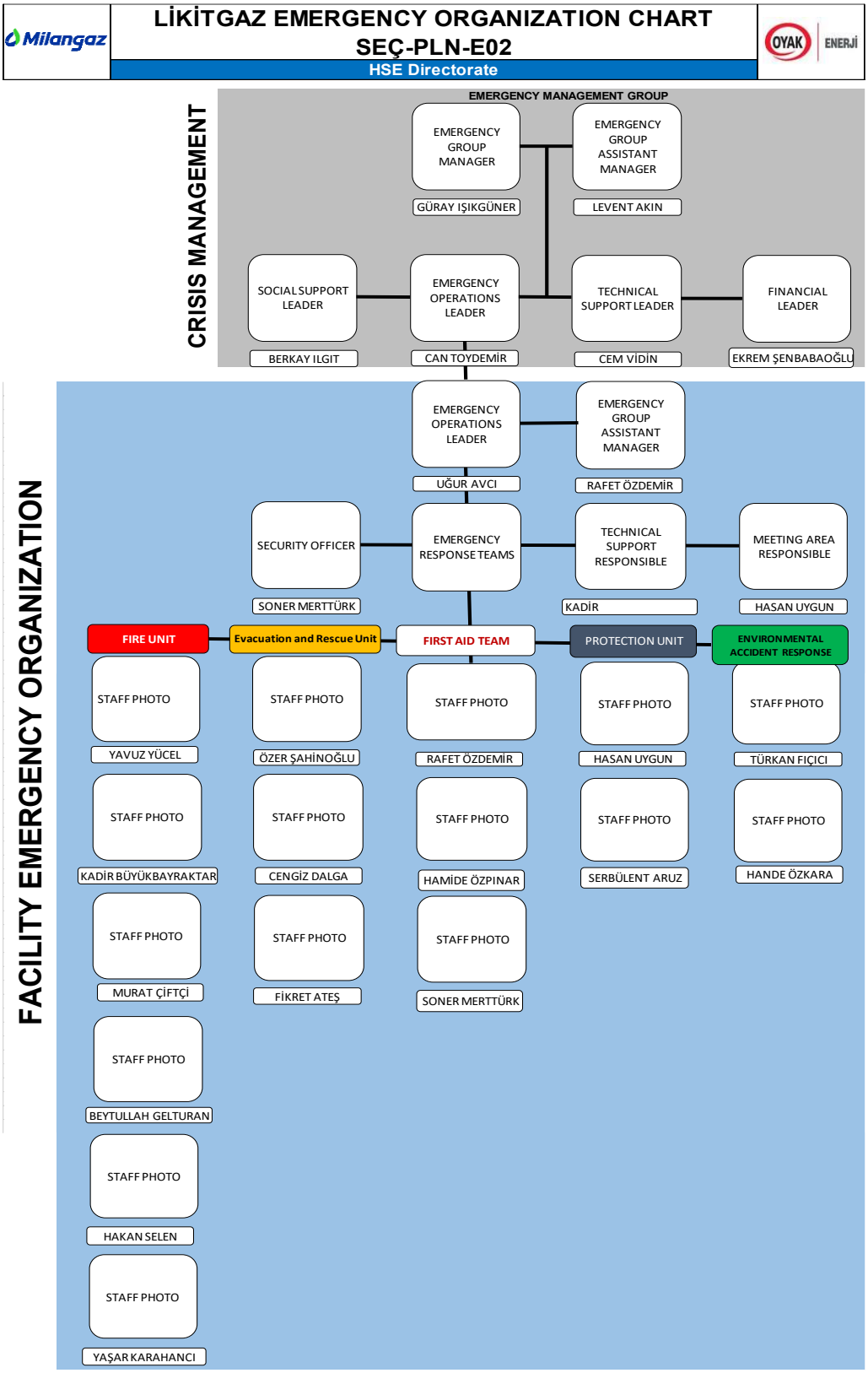
YARIMCA TERMİNAL ACİL DURDURMA SİSTEMİ



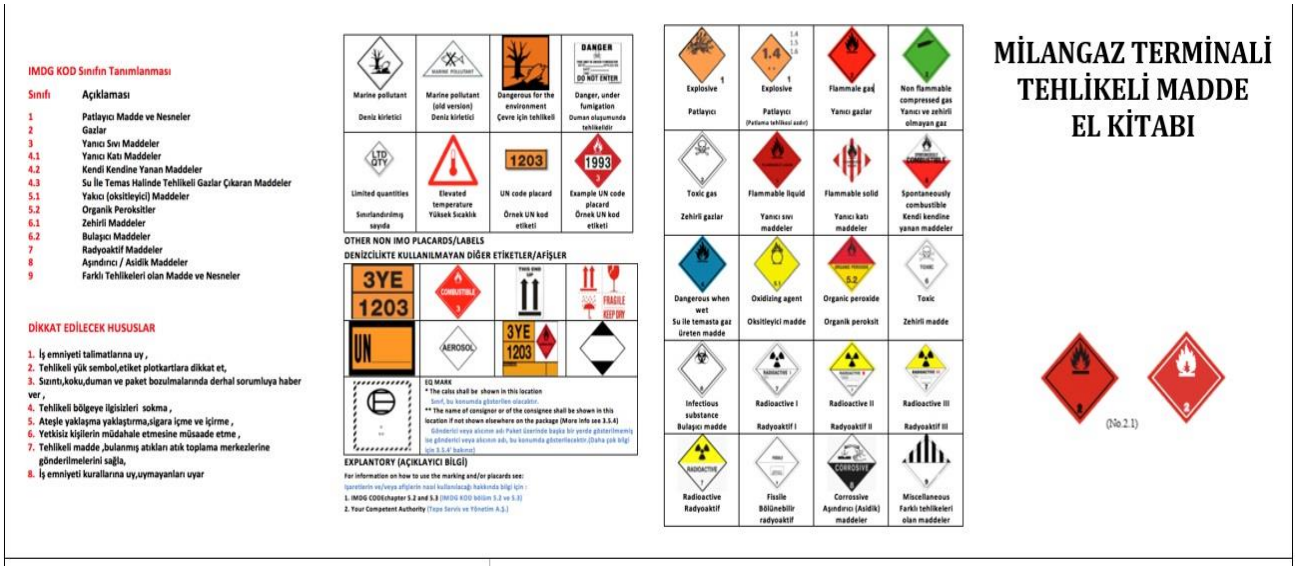
7- Emergency Assembly Places Plan

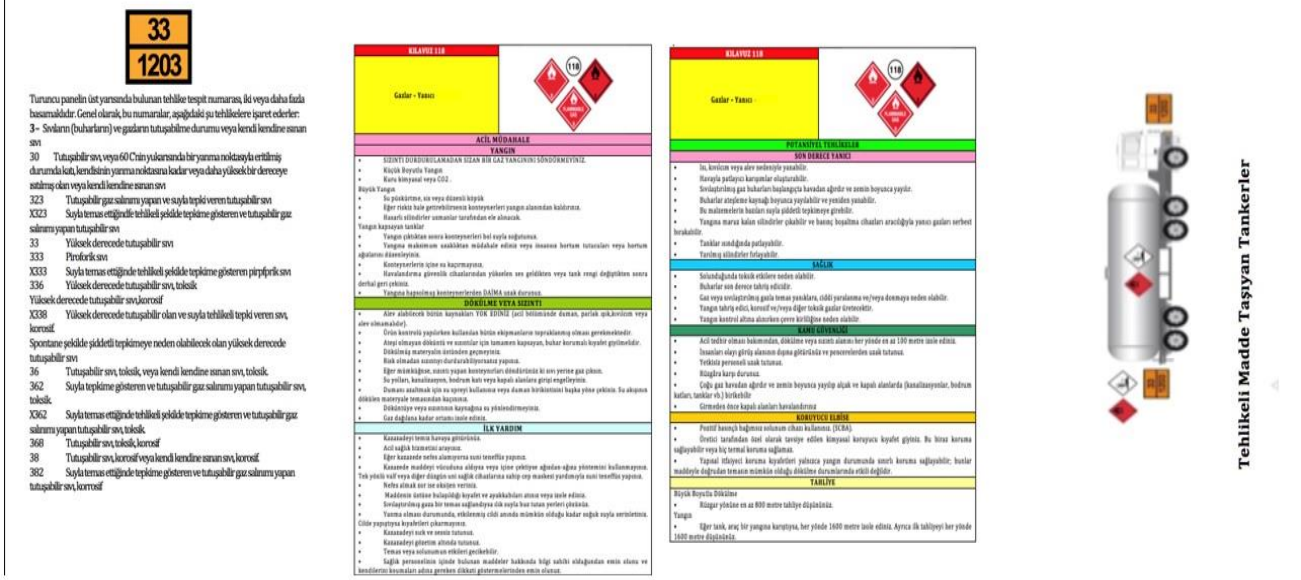


8- Emergency Management Chart



10- Dangerous Goods Handbook





11- Leakage areas and equipment for CTU and Packages, entrance/exit drawings

Not applicable

12- Inventory of Port Service Ships

There is one vessel in the inventory of Milangaz.

13- Sea coordinates of the administrative borders of the Port Authority, anchorage areas and the pilot's disembarkation/embarkation points

A) Port administrative area border The port administrative area of Kocaeli Port Authority is the sea and coastal area within the line formed by the following coordinates.

a) 40° 45' 24" N – 029° 21' 15" E (Yelkenkaya Cape)
b) 40° 43' 00" N – 029° 21' 18" Dc) 40° 43' 00" N – 029° 23' 24" D

d) 40° 44' 57" N – 029° 30' 57" D
e) 40° 44' 48" N – 029° 32' 30" D
f) 40° 41' 12" K – 029° 33' 36" D

B) Anchorage areasa) Izmit anchorage area:The anchorage area of ships that do not carry dangerous goods is the sea area formed by the following coordinates.

1) 40° 45' 00" N – 029° 52' 48" D
2) 40° 44' 00" K – 029° 52' 48" D3) 40° 44' 00" K – 029° 55' 00" D4) 40° 45' 00" K – 029° 55' 00" D

b) Yarimca anchorage area:Ships carrying dangerous goods, nuclear powered military ships and the quarantine anchorage area are the sea area formed by the following coordinates.
1) 40° 46' 24" K – 029° 41' 00" D2) 40° 45' 09" K – 029° 41' 00" D3) 40° 44' 54" K – 029° 43' 00" D4) 40° 46' 18" K – 029° 43' 00" D

c) Hereke anchorage area:The anchorage area of ships that do not carry dangerous goods is the sea area formed by the following coordinates.
1) 40° 46' 36" K – 029° 38' 09" D2) 40° 45' 24" K – 029° 38' 09" D3) 40° 45' 12" K – 029° 40' 30" D4) 40° 46' 27" K – 029° 40' 30" D

d) Eskihisar anchorage area:The anchorage area of ships not carrying dangerous goods is the sea area between the line connecting the coordinates below and the coastline to the north of this line.In this area, anchoring cannot be done within 2.5 gomino distance from the shore.
1) 40° 45' 12" N – 029° 23' 27" E (Darıca Cape)
2) 40° 46' 00" N – 029° 30' 57" E (Rough Toe)

C) Pilot pick-up and drop-off place
a) The pilotage point of the ships entering the bay is the point indicated below.
40° 43' 24" K – 029° 21' 25" D
b) Pilotage point for ships leaving the Gulf is the point indicated below.
40° 44' 23" N – 029° 21' 25" D

14- Emergency response equipment against marine pollution in the port facility

	Type of Equipment/Material (1)	Properties	The amount determined for Level 1 in the Approved Emergency Response Plan	The part that is available in the facility and is its own property	The part that is available in the facility and belongs to the Emergency Response Firm	The location of the equipment in the facility	Is there a facility where the equipment is shared (2)
BARRIER							
1	Cylindrical Section Foam Fill (Solid)	fribord: 45 cm, draft: 65 cm., Made of TPU material, Flame retardant fabric, resistant to sunlight and salt water, astm-z type connecting knife. 25 m each unit. pulling force 47.000 N, Lift Force/Weight Ratio: 12/1. SEAGULL brand	750 m	0	300	Warehouse in DP World port	DP World Yarımca Port, 500 m
2	Fence Type	fribord: 40 cm, draft: 70 cm., Made of PVC double woven material, resistant to sun rays and salt water, flame retardant fabric, astm-z type connection blade.25 m each unit. pulling forcei 25.000 N, Lift Force/Weight Ratio:: 6/1. SEAGULL brand.		0	450 m	Pipeline land connection station of the plant, 4 on the classical lute	No
3							
ABSORBENT MATERIAL (SORBENT)							
1	Sorbent Barrier	diameter: 20 cm, Size:3 m. Can be attached to each other with hooks at the end, hydrophobic, oleophilic. Suction capacity of at least 10 times its weightDoes not sink even when fully saturated. Made of 100% polypropylene materiall, SEAGULL brand.	50 piece (150 m)	0	150 m	Pipeline land connection station of the plant	No
2	Sorbent Pad	40 cm x 50 cm dimensions. hydrophobic, oleophilic, Made of 100% polypropylene materiall,, SEAGULL brand	500 piece	0	500 piece	Pipeline land connection station of the plant	No
OIL WATER SCRAPER (SKIMMER)							
1	Disc/Brush Type Skimmer	Kanallı Drum Tip. Dizel Hydraulic, power pack, with pump and hose unit. ELASTEC brand.	1 piece (13 m3/h)	0	1 piece (36 m3/h)	In the main warehouse of the company in Sultangazi-Istanbul	other contracted facilities of the company in the region
2							
PRESSURE WASHING MACHINE							
1	water jet	180-200 psi	2 piece	0	2 piece (220 bar, hot cold wash)	In the main warehouse of the company in Sultangazi-Istanbul	other contracted facilities of the company in the region
2							

15- Personal protective equipment (PPE) usage map

The use of PPE is mandatory in the entire port area. Antistatic shoes, hard hat, goggles and fireproof overalls are mandatory.

16- Dangerous Goods incidents notification form

Dangerous Goods Incidents Notification Form

Issue number- Date			
Company / Institution			
Sender		CONTACT INFORMATION	
as required			

PORT FACILITY “DANGEROUS GOODS EVENT NOTIFICATION” DATE:
1. When the accident occurred,
2. If the accident is known, how it occurred and the reason,
3. The place where the accident occurred (coastal facility and/or ship), its position and area of influence, ç) Information (name, flag, IMO number, owner, operator, cargo, if any) of the ship involved in the accident. and amount, captain's name and similar information),
4. Meteorological conditions,
5. UN number of the dangerous substance, proper transport name (based on the legislation specified in the definition of dangerous substance) and amount, Hazard class of the dangerous substance or sub-hazard division, if any,

Packing group of the dangerous substance, if any, Additional risks of the dangerous substance, such as marine pollutants, if any, Sign and label details of the dangerous substance, The characteristics and number of the package, cargo transport unit and tanker in which the dangerous substance is transported, Manufacturer, sender, carrier and receiver of dangerous goods
6. The extent of the damage/pollution,,
7. Number of dead and injured in the accident (if any),
8. How the accident was intervened,
9. From which organizations help is requested,
10. Other ships or neighboring facilities that may be affected by the accident,
FORM PREPARED BY: Name and surname : Mission: Signature :

17- Control results notification form for dangerous cargo transport units (CTUs)

Control Results Notification Form for Dangerous Goods Transport Units (CTUs)

The form containing the CTU control results requested by the Administration to be sent quarterly to the port authorities is below.Containers are not handled at the facility.

YEAR/PERIOD	...../.....	NUMBER	PERCENTAGE
CONTROLLED PACKAGES:			
DEFECTIVE PACKAGES: • TOTAL • FILLED DOMESTIC • FILLED ABROAD			
DEFECTS :			
DOCUMENTATION : • DANGEROUS LOAD DECLARATION • CYLINDRICAL TANK/VEHICLE PACKAGING CERTIFICATE			
PLATING AND MARKING			
CYLINDRICAL TANK SAFETY AGREEMENT APPROVAL SHEET			
SERIOUS STRUCTURAL DEFECTS			
LAND TANKER MOUNTING ADD-ONS			
PORTABLE TANK OR LAND TANKER (IMPROPER OR DAMAGED)			
LABELING (FOR PACKAGES)			
PACKAGING (IMPROPER OR DAMAGED)			
LOAD SEGREGATION			
STACKING/CONNECTING THE INSIDE OF THE PACKAGE			

18- Other required annexes

Risk Assessment

Location of hot work:

Area / Location: .....

Special access restrictions (due to the task involving a specific welding type or the location being a hazardous area, confined space, etc): .....

Reason for hot work:

Work activity description: .....

Likely ignition source type(s): ☐ Flame (welding, soldering, brazing, etc) ☐ Spark or slag (grinding, cutting, friction tools, welding, etc) ☐ Hot Object (metal surface, plate, etc) ☐ Other: .....

Hazard identification, risk analysis and control measure selection: *Add an additional page if the space below is insufficient.*

Specific Hot Work Issues: (tick appropriate)	☐	The hot work is to be solely undertaken by a contracted party personnel and a detailed work method statement / risk assessment has been previously prepared, reviewed by is attached to this Form.	Attach documentation & proceed to Section 2 on the following page.
	☐	The hot work is to be solely undertaken by personnel as per the specific hot work issues detailed below.	Complete the Risk Assessment below.

Risk Assessment Guide

Step 1 – Consider Consequences

What are the consequences of this hazard occurring? Consider what is the most probable consequence (below) with respect to this work hazard.

Extreme	Multiple fatalities or permanent injuries
Critical	Single fatality or permanent injury
Major	Medical treatment or lost time injury
Minor	First aid treatment
Insignificant	Incident or near miss – no treatment

Step 2 – Consider Likelihood

What is the likelihood (below) of the hazard consequence in Step 1 occurring.

Almost Certain	Is expected to occur in most circumstances
Likely	Will probably occur at least once
Possible	Event might occur at some time
Unlikely / Rare	Event not expected to occur or only in exceptional circumstances

Step 3 – Calculate Risk

1. Take Step 1 rating and select the correct column.
2. Take Step 2 rating and select the correct line.
3. Use the risk score where the two ratings cross on the matrix below.

H = High, S = Serious, M = Medium, L = Low

Likelihood	Consequences: Ins	Min	Maj	Crit	Ext
Almost Certain	M	S	H	H	H
Likely	M	M	S	H	H
Possible	L	M	M	S	S
Unlikely / Rare	L	L	M	M	S

Likelihood	Consequences: Ins	Min	Maj	Crit	Ext
Almost Certain					
Likely					
Possible					
Unlikely / Rare					

Hazard (List the hazards relating to the work)	Controls (List the controls to manage each of the hazards)	Personal Protective Wears	Responsible Party (List the role, contractor, competency &/or prescribed occupation responsible for implementing the controls)	Risk Assessment (With controls in place: High, Serious, Medium or Low)

Risk Assessment Personnel:

Risk Assessment Completed by:

Name: ..... Employer: ..... Date: .....

Name: ..... Employer: ..... Date: .....

Section 2 – Hot Work Permit

As per the method of hot work and location described in *Section 1*, identify control requirements in the relevant parts below.

General Hot Work / Ignition Controls

Identify those general hot work and ignition controls required to be undertaken as part of the hot work: (identify as yes or not applicable)	Yes	NA	Control
	☐	☐	Fire extinguishers supplied by the workgroup / contractor are to be located immediately adjacent to the hot work area and within 10m (building / fixed location fire extinguishers are not to be relied upon)
	☐	☐	Catch mats or boards are to be positioned over grid-mesh, flooring, grates to catch sparks or slag
	☐	☐	Combustible and flammable materials or fuel sources are required to be cleared from the area (consider a 15m area around the hot work where practicable and include surfaces below & above the work area)
	☐	☐	Drains, cable racks, electrical cables and other heat/fire sensitive items are to be covered (consider a 15m area and use fireproof blankets, catch boards and approved covers as applicable)
	☐	☐	A water hose is to be run to the job location and primed ready for use (where appropriate for work locations outdoors and in areas clear of electrical equipment)
	☐	☐	A Fire Watcher is required to watch the area during and/or post work to monitor fire risk, sparks, slag, hot objects (consider for work that is arc welding, oxy-cutting or likely to present an ignition hazard post work, and for work in hazardous areas, in confined spaces, outdoors, in windy conditions): ☐ During Work, and/or ☐ Post Work for a time period of _____ minutes

Specific Hot Work / Ignition Controls	Yes	NA	If Yes, Include Additional Control Details to be Used:
The hot work is to be undertaken on or adjacent to plant that will require an isolation (such as services, pipes, tanks, pressure vessels)	☐	☐	
A fixed fire protection or detection system will need to be taken out of service (approval is required for the impairment and the Fire System Log Book is to be filled in – see also *BAC Authorisation* below; approval contacts include:	☐	☐	
The work area will require specific cleaning, purging, ventilating or pre-work atmospheric monitoring (due to flammable/explosive vapours, dusts, liquids or solid residues in the work area / location)	☐	☐	
The work area will require pre-work cleaning, stripping, surface preparation, or atmospheric monitoring during works (as a result of surfaces / coatings that may create harmful emissions when heated or cut)	☐	☐	
The nature of the work requires specific respiratory protection to be worn	☐	☐	
The nature of the work requires specific controls to be implemented to protect gas leads or other sensitive plant items involved in the work	☐	☐	
The hot work involves arc-welding whereby specific controls relating to ensuring electrical safety will be required	☐	☐	

Additional Hot Work Controls within Confined Spaces

☐ NA (Not Applicable)

Controls:	Yes	NA
Locate equipment outside the space where practicable (such as gas cylinders, hoses, etc unless involved with respiratory devices)	☐	☐
Extraction fan inlet is to be located as close as practicable to the contamination source	☐	☐
Contaminants are to be expelled from the space (so that they cannot be recirculated and will not harm other workers)	☐	☐
As arc-welding activities are to be suspended for substantial periods, power sources will need to be de-energised, electrodes removed from holders and holders placed so that accidental contact or arcing cannot occur	☐	☐
As gas welding/cutting activities are to be suspended for substantial periods, torch and cylinder valves are to be closed with the torch and hose connections removed from the space and depressurised	☐	☐

Completion Hot Work

☐ NA (Not Applicable)

Controls:	Yes	N/A
After the end of the job is controlled area for at least half an hour.	☐	☐
Field is checked for at least eight hours and one hour intervals.	☐	☐
There is no need to do control after hot working.	☐	☐

Permit Request:

Name: _____ Signature: _____ Date: _____ Time: _____

Approved

Name: Signature: Date: Time:

Dangerous Liquid Bulk Cargo Safe Handling Operation Procedure Checklist

S.NO	Action	HSE	OP. RESP.	SHIFT RESP.
HANDLING				
1.	Discharge Equipment and pipe selection suitable for the load is made by the operation manager.ISGOTT Ship/Shore Safety Checklist is mutually signed.A communication network is established between the ship and the port facility.	x	x	x
2.	Employees are present next to the flexible hoses to be connected to the tanker and the ship.It acts together with the ship's personnel in connecting the liquid cargoes to the ship's inlet and outlet manifolds.	x	x	x
3.	Appropriate pressure adjustment is made with the vessel.Overflow of tankers is prevented and in case of danger, the ship's personnel is informed and the line is cut off.	x	x	x
4.	During the loading/discharging operation at the coastal facility, all kinds of vehicles coming to the filling/discharging platform in the facility will be completely free of static electricity, flame arrester apparatuses will be installed on their exhausts and grounded.Flame arresters will be provided by the Land Tanker operator.Land Tankers that are not flame-retardant will not be admitted to the port facility.This feature will not be sought for tankers in ADR standards.	x	x	x
5.	It is checked that the communication equipment used in the operation area is exprof.	x	x	x
6.	Flexible hoses used for loading/discharging dangerous liquid bulk cargoes;type-approved and a certificate showing the pipe type, the maximum working pressure of the pipe, the month and year of manufacture will be checked.		x	x
7.	A sufficient number of electrical insulation flanges will be available for flexible hoses used in the discharge/loading of dangerous liquid bulk cargoes.		x	x

8.	Before starting the dangerous liquid bulk cargo operation, the Ship's Captain and the Operations Officer will agree in writing the transportation times including the maximum loading or unloading speeds and the following items. 1. Capacity and maximum allowable pressure of Ship's load lines and Flexible hose; 2. Steam ventilation system layout and maximum loading or unloading speeds; 3. Possible pressure increases according to emergency shutdown procedures; 4. Possible accumulation of electrostatic charge;and 5. Ensure the presence of responsible persons on board and during launch operations on shore.		x	x
9.	In case of an emergency that may occur during handling operations, the steps to be taken and the signs to be used will be accepted in writing.		x	x
10.	All necessary care will be taken to prevent leakage of all relevant pipes, flexible hoses and connected equipment on board and on shore, and adequate supervision will be made during the transfer of dangerous bulk liquid cargoes.		x	x

S.NO	**Action**	**HSE**	**OP. RESP.**	**SHIFT RESP.**
HANDLING				
11.	Effective communication between the ship and shore equipment will be maintained during transfer operations.		x	x
12.			x	x

	Necessary arrangements will be made for measuring tankers to be discharged to ensure that the tanker is not overfilled.			
Liquid load foreman/Shift Supervisor				
1.	Adequate measures will be taken to prevent short-circuiting in the insulation section.			
2.	Ensure that insulation and grounding systems are inspected and tested at appropriate intervals to ensure their effectiveness			
3.	shall ensure that other metallic connections between the interface and the shore are protected or regulated to ensure that there is no possibility of an initiating sparking where a flammable atmosphere may occur.			
4.	It will act according to the appropriate checklists in the International Safety Manual for Fuel Tankers and Terminals (ISGOTT).			
5.	It shall ensure that the ship's master is informed of conditions that may necessitate taking precautions regarding ignition sources such as ship's furnaces or cooking utensils.			

6.	The ship will ensure that all safety precautions are taken, including sealing the manifold connections and flexible hoses with a blind flange.			