

GÜBRETAŞ İSKENDERUN PORT

DANGEROUS CARGO HANDLING GUIDE



CREATED ON: 07.07.2022

(For revisions, please see Revision Page)

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FACILITY DIRECTOR

SIGNATURE

SEAL



REVISION HISTORY

Item	Revision No	Revision Contents	Revised on	Revised by	
				Name-Surname	Signature
1	1	Completed the Audit Omissions	21.12.2016	Fatih VARDAR	
2	2	Revised according to Dangerous Cargo Handling GUIDE Application Instruction No E-63137251- 010.07.01-281879 of 20.04.2022	01.12.2022	PINAR METİN	
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APPLICATION

This Guide and its content is related to the entry and stay of the ***dangerous cargo in the port areas***. It applies to all ***ships*** arriving at the port, regardless of its flag, however not applies to the ***ship materials*** and equipment or military transport ships.

DEFINITIONS

For the purposes of this Recommendations, following definitions apply.

Shore Facility means dock, breakwater, wharf, jetty, port, sea terminal or similar structures capable of mooring of a ship (floating or not). It also includes the facilities and building, other than ship, used for auxiliary or incidental purposes with respect to the loading or unloading of the dangerous cargo.

Shore Facility Operator means natural or legal person(s) which engage in day-to-day overseeing the operations at a dock.

Bulk cargo means to cargo planned to be carried without a direct packaging within a container and/or tank being a structural part of a ship, or permanently fixed in or on a ship.

Relevant Cargo Parties, consignor (shipper), carrier, freighter, consolidator, packaging center or such other persons, companies or organizations that have an involvement with respect to the activities specified herein. They are mainly involved in the identification, storage, packaging, marking, labelling, designation and certification, and inspection of the dangerous cargo transported through port or via sea vehicles.

Certificate of Compliance means the certificate, issued by or on behalf of Authority, pursuant to codes on construction and equipment of the ships, which certify that the construction and equipment of the ship meet the requirements for carrying certain dangerous cargo in and on that ship.

Dangerous cargo means the cargoes that can cause harm to humans, animals and the environment due to their nature or when they react with other substances, as packaged, in bulk containers, or in bulk, within the scope of the following documents:

- Oils falling within the scope of MARPOL 73/78 Schedule-I;
- Gases falling within the scope of Codes of the Construction and Equipment of the Ships Carrying Liquefied Gasses in Bulk;
- Dangerous liquids/chemicals falling within the scope of Codes of the Construction and Equipment of the Ships Carrying Dangerous Chemicals in Bulk, including waste, and MARPOL 73/78 Schedule-II;
- Solid bulk materials which possesses a chemical danger, and materials dangerous only in bulk (MHBs), falling with the scope of Group B Exhibits of Code of Safe Practice for Solid Bulk Cargoes (BC Code), including waste;
- Dangerous goods in packaged form (those falling within the scope of MARPOL 73/78 Schedule-III) and dangerous goods in the form of article or item (those within the scope of IMDG).

Contaminated Empty Package is classified as dangerous good, and should be treated in the same manner as the containers that are filled with dangerous materials.

IMDG Code is The International Maritime Dangerous Goods Code published by International Maritime Safety Unit of the UN.

Classification means the categorization of dangerous materials into different types (division into groups).

UN number, number assigned to each dangerous material. The list of UN numbers is available in the contents of IMDG Code.

Proper shipping name is the official name designated for labelling of dangerous goods for transport purposes and transportation of them. This name is also linked with relevant UN number.

Packing Group is package group allocated according to the danger of a cargo to be transported. It has 3 levels.

- Packing Group I is used for substances presenting high danger
- Packing Group II is used for substances presenting medium danger
- Packing Group III is used for substances presenting low danger.

Emergency Response Procedures are the procedures which comprehensively describe how certain dangerous goods will be handled and how the danger will be avoided in case of an accident that occurred within the ports where dangerous goods are handled, or ships carrying dangerous goods.

Medical First Aid Guide is a GUIDE which describe how to administer first aid to individuals who sustained injuries in the Accidents Caused by Dangerous Goods.

Document of Compliance is the document issued by or on behalf of Authority to a ship carrying dangerous goods in bulk, packaged form or solid form which certify that construction and equipment of said ship meet the requirements of SOLAS Regulation II-2/19.4.

Flexible hose, means a flexible hose and its end fittings, which may include means of sealing the ends, used for the purpose of transferring dangerous cargoes.

Handling means the operation of loading or unloading of a ship, railway wagon, vehicle, freight container or other means of transport, transfer to, from or within a warehouse or terminal area or within a ship or transshipment between ships or other modes of transport and includes temporary storage, i.e. the temporary storage of dangerous cargoes in the port area during their transport from the point of origin to their destination for the purpose of changing the modes or means of transport and movement within the port which is part of the transport supply chain for those cargoes.

Hot work means the use of open fires and flames, power tools or hot rivets, grinding, soldering, burning, cutting, welding or any other repair work involving heat or creating sparks which may lead to a hazard because of the presence or proximity of dangerous cargoes.

Loading arm means an articulated rigid pipe system and its associated equipment, which may include quick release couplings, emergency release systems or hydraulic power pack, used for the purpose of transferring dangerous cargoes. (includes articulated pipes and rigid arms).

Master means the person having command of a ship (does not include pilots, watchman)

Packing means the packing, loading or filling of dangerous cargoes into receptacles, intermediate bulk containers (IBCs), freight containers, tank containers, portable tanks, railway wagons, bulk containers, vehicles, ship borne barges or other cargo transport units.

Pipeline means all pipes, connections, valves and other ancillary plant, apparatus and appliances in a port provided or used for, or in connection with, the handling of dangerous cargoes, but does not include a flexible pipe, loading arm or any part of a ship's pipes, apparatus or equipment other than the termination of those parts of the ship's pipes, apparatus or equipment to which a flexible pipe is connected.

Port area means the land and sea area established by legislation.

Port authority means **UDHB** and its local units, as well as any person or body of persons empowered to exercise effective control in a port area, including .

Regulatory authority means **Directorate General of Dangerous Goods and Combined Transport Regulation of UDHB**, the national, regional or local authority empowered to make legal requirements in respect of a port area and having powers to enforce the legal requirements.

Responsible person (TMGD) means a person appointed by a shore side employer or by the master of a ship who is empowered to take all decisions relating to a specific task, having the necessary current knowledge and experience for that purpose and, where required, is suitably certified or otherwise recognized by the regulatory authority.

Ship means any seagoing or non-seagoing water craft, including those used on inland waters, used for the transport of dangerous cargoes.

Skilled person means any person having the current knowledge, experience and competence to perform a certain duty.

Stowage means the positioning of packages, intermediate bulk containers (IBCs), freight containers, tank containers, portable tanks, bulk containers, vehicles, ship borne barges, other cargo transport units and bulk cargoes on board ships, in warehouses, sheds or other areas.

Transport means the movement by one or more modes of transport in port areas

Unstable substance means a substance which, by nature of its chemical make-up, tends to polymerize or otherwise react in a dangerous manner under certain conditions of temperature or in contact with a catalyst. Mitigation of this tendency can be carried out by special transport conditions or by introducing adequate amounts of chemical inhibitors or stabilizers into the product.

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	III - APPLICATION, DEFINITIONS AND ABBREVIATIONS

ABBREVIATIONS

ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road

AFAD : Disaster and Emergency Management Presidency

CTU: Cargo Transport Unit

EmS: Emergency Response Procedures for Ships Carrying Dangerous Goods GBF/SDS : Safety Data Sheet

IBC Code : Code of the Construction and Equipment of the Ships Carrying Dangerous Chemicals in Bulk,

IGC Code: Code of the Construction and Equipment of the Ships Carrying Liquefied Gas Chemicals in Bulk,

IMDG Code: The International Maritime Dangerous Goods (IMDG) Code

IMO: United Nations International Maritime Organization

IMSBC Code: International Maritime Solid Bulk Cargo Code

IOPP Cert.: International Oil Pollution Prevention Certificate

ISPS Code : International Ship and Port Facility Security Code

MARPOL : International Convention for the Prevention of Pollution from Ships

MFAG : Medical First Aid Guide for Use in Accidents Involving Dangerous Goods

OCIMF : Vessel Inspection Questionnaire for Oil Tankers, Combination Carriers, Commercial Tankers, Chemical Tankers and Gas Tankers, Barges, Tugboats Used for Towing Barges, and Vessels Carrying Packed Cargo

ISGOTT: International Safety Guide for Oil Tankers and Terminals

SOLAS : International Convention for the Safety of Life at Sea (SOLAS)

TMGD : Dangerous Goods Safety Advisor

TMGDK : Dangerous Goods Safety Consulting Organization

VHF : Marine Radio

	GÜBRETAŞ İSKENDERUN FACILITIES DANGEROUS CARGO HANDLING GUIDE (TYER)
	1. INTRODUCTION

1. INTRODUCTION

1.1 FACILITY INFORMATION SHEET

		GÜBRETAŞ İSKENDERUN FACILITIES DANGEROUS CARGO HANDLING GUIDE (TYER)		
		1. INTRODUCTION (FACILITY INFORMATION SHEET)		
1	Name/Title of the Facility Operator	GÜBRE FABRİKALARI TÜRK ANONİM ŞİRKETİ		
2	Contact Details of Facility Operator (Address, Phone, Fax, E-Mail And Website)	Nida Kule Merdivenköy Mah. Bora Sok. No: 1 Floor: 12-30-31 Kadıköy / İstanbul +90 216 468 50 50 Fax: +90 216 407 10 11 gubretas@gubretas.com.tr www.gubretas.com.tr		
3	Facility Name	GÜBRE FABRİKALARI T.A.Ş. İSKENDERUN FACILITIES		
4	Province of the Facility	HATAY		
5	Contact Details of Facility Operator (Address, Phone, Fax, E-Mail And Website)	12 Eylül Caddesi E 5 Karayolu Altı Sarıseki İskenderun/HATAY +90 326 656 22 88 Fax: +90 326 6562280 gubretas@gubretas.com.tr www.gubretas.com.tr		
6	Geographical Region of Facility	EAST MEDITERRANEAN REGION		
7	Port Authority Contact:	İSKENDERUN PORT AUTHORITY +90 326 614 11 92 Fax: +90 326 614 02 26		
8	Municipality Contact:	İSKENDERUN MUNICIPALITY 444 19 39 Fax:		
9	Free Zone or Organized Industrial Zone, if any	-		
10	Shore Facility Operation License / Temporary Operation License valid until:	13.04.2023		
11	Operational Status of Facility	Own Cargo and Additional 3rd Party Cargo	Own Cargo	3rd Party
		(X)	(...)	(...)
12	Name and Surname, Contact Details of Facility Responsible (Phone, Fax, E-Mail)	Mustafa DOĞAN/ Facility Manager Phone Fax e-mail +90 326 6562288 +90 326 6562280 aaslan@gubretas.com.tr		
13	Name and Surname, Contact Details of Facility Officer for Dangerous Cargo Operations (Phone, Fax, E-Mail)	Osman ÇELİK / Logistics Operations Manager Phone Fax e-mail +90 549 7929338 ocelik@gubretas.com.tr		
14	Name and Surname, Contact Details of Dangerous Goods Safety Advisor of Facility (Phone, Fax, E-Mail)	Pınar METİN / TMGD Phone e-mail +90 232 520 26 61 pinar.metin@entegretmgd.com.tr		
15	Sea Coordinates of Facility	36° 39' 54'' N - 36° 12' 16'' E		
16	Types of Dangerous Goods Handled at the Facility (Cargoes within the scope of MARPOL Annex-I, IMDG Code, IBC Code, IGC Code, IMSBC Code, Grain Code, TDC Code, Asphalt / Bitumen and Scrap Cargoes)	UN 1824 SODIUM HYDROXIDE SOLUTION		
17	Types of Dangerous Goods Handled at the Facility (To be indicated for each cargo among the Cargo Types in Article 16, other than IMDG Code. Additional Cargo Request will be submitted to the Relevant Port Authority with the SCHEDULE-1 Form. If approved, to be added to TYER.)	-		
18	Classes for Cargoes being Handled subject to IMDG Code	Class 8		
19	Groups in the Characteristics Table for Cargoes being Handled subject to IMSBC Code			

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		1. INTRODUCTION (FACILITY INFORMATION SHEET)

20	Types of ships that can berth to the facility	Bulk General Cargo Chemical Tanker Petroleum Products Tanker
21	Distance of facility to main public roads (kilometer)	0.05 km (50 meter)
22	Distance of facility to railways (kilometer) or railway connection (yes/no)	0.005 (5 m) Yes it has a railway connection
23	Name of the nearest airport and distance (kilometer)	60 km Hatay Airport 120 km Adana Şakir Paşa Airport
24	Cargo handling capacity of facility (Ton/Year; TEU/Year; Vehicle/Year)	1250,000 / ton / year
25	If scrap handled in the facility	No
26	Border gate available? (Yes / No)	No
27	Bonded warehouse available? (Yes / No)	Yes
28	Cargo handling equipment and capacities	Shore Cranes Mobile Gantry Crane Pipeline
29	Storage tank capacity (m3)	23.000 m3
30	Outdoor storage area (m2)	20.000 m2
31	Semi-indoor storage area (m2)	No
32	Indoor storage area (m2)	12.000 m2
33	Designated fumigation and/or de-gassing area (m2)	No
34	Name, title, contact details of pilotage and towage service provider	ANADOLU KILAVUZLUK A.Ş. ISKENDERUN
35	Is Safety Plan in place? (Yes/No)	Yes

36	Waste receiving facility (this section will be filled separately for each waste received.)	Type of Waste		Capacity (m3)		
		Dirty Ballast (75 m3), Sludge (57 m3), Bilge Water (28 m3), Waste Water (18 m3), Garbage (6 m3)				
37	Specifications of Wharf/Dock, etc.					
Wharf/Dock No		Length (meter)	Width (meter)	Maximum water depth (meter)	Minimum water depth (meter)	The largest ship tonnage and length approachable (DWT-GT/Meter)
DOCK NO 1		813	17.50	18.50	5	60.000 DWT
WHARF NO 1-6		160	17.50	17	13	60.000 DWT
WHARF NO 2-5		103.75	17.50	11	8	10.000 DWT
WHARF NO 3-4		82.25	10.50	7	5	3.000 DWT

		Number (piece)	Length (meter)	Diameter (inch)
1	pipeline on the dock no 1	1	550	8" Drawn Steel
2	pipeline on the dock no 1	1	550	12" Drawn Steel (with insulation)
3	pipeline on the dock no 1	1	550	6" PVC
4	pipeline on the dock no 1	1	400	12" Drawn Steel (with insulation)

	GÜBRETAS İSKENDERUN FACILITIES DANGEROUS CARGO HANDLING GUIDE (TYER)
	1. INTRODUCTION

1.1. Loading, Unloading, Handling and Storage Procedures for Dangerous Goods Handled and/or Temporarily Stored at the Shore Facility

Dangerous goods handled at GÜBRETAS İskenderun Port are listed below:

- UN 1824 SODIUM HYDROXIDE SOLUTION

Procedures related to the cargoes handled are provided the appendix of the guide.

- PR.ISM.15 Safe Handling of Hazardous Liquid Bulk Cargo Operation Procedure
- PR.ISM.17 Hot Works Operation Procedure
- TL.ISM.105 Flexible Hose Operation Manual

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	2. RESPONSIBILITIES

2. RESPONSIBILITIES

2.1 RESPONSIBILITY OF SHORE FACILITY OPERATORS

The Shore Facility Operator has the primary responsibility for the **transportation** and **handling** of the cargoes in a way that protects health and safety of employees and other persons who may be affected by the works, including the general public.

The Shore Facility Operator should consider the risks associated with such activities in **port areas** and should take these issues into account when designing safe operation procedures. Procedures should comply with relevant legal requirements.

The Shore Facility Operator should provide its employees with the necessary information, instructions, training and audit them to ensure that safe operation procedures are followed in practice. This audit should include procedures to verify that **dangerous cargoes** comply with relevant legal requirements and can be accepted for **carriage**;

- To establish a clear policy for health and safety, where appropriate, that fully complies with the minimum standards set out by the national and local legal requirements;
- To develop realistic and safe operating procedures and standards;
- To organize personnel so as to ensure implementation of procedures;
- To check routinely actual practices against procedures, and
- To carry out periodic audits and reviews on the arrangements as a whole

The Shore Facility Operator should ensure that appropriate plans are made in order to respond to the foreseeable emergencies. These plans should be coordinated with the port emergency plan and should address incidents and their consequences on sections within the **port area** as well as in adjacent areas or buildings.

The Shore Facility Operator shall ensure that all accidents and other emergencies, including those involving the property, are properly investigated to determine their causes, reported as stipulated in national and local legal requirements, and promptly take any necessary measures to rectify any omissions and prevent their recurrence.

Shore Facility Operator should ensure that the safety of all matters related to the **transportation and handling of dangerous cargoes** are regularly reviewed.

2.1.1. Berthing,

Shore Facility Operator should ensure and provide:

- Appropriate and safe berthing installations,
- Appropriate safe access between the ship and the shore.

2.1.2. Surveillance,

➤ **Shore Facility Operator** should provide proper surveillance in the storage areas of packing and cargo transport units and ensure that the packing or cargo transport units are regularly inspected for leakage or damage. Any leaking packing or cargo transport units should only be handled under the supervision of the **Responsible Person (TMGD)**.

Shore Facility Operator should ensure that no one opens or interferes with **dangerous cargoes** contained in any freight containers, tank-containers, portable tanks or vehicles without a justified reason. When a freight container, tank-container, portable tank or vehicle is opened by persons other than a person authorized to inspect the contents, Shore Facility Operator should ensure that the relevant person is informed about possible damages regarding **dangerous cargoes**.

2.1.3. Identification, Packaging, Marking, Labeling or Placarding and Documentation

Shore Facility Operator should ensure that the **dangerous cargoes** entering its facilities are certified in accordance with the procedure or declared that they are properly identified, packaged, branded, labeled or placarded by the **cargo organizations** in accordance with IMDG and ADR requirements.

Safe handling and segregation Shore Facility Operator should appoint a sufficient number of **Responsible Persons (TMGD)** who are knowledgeable about the national or international legal requirements regarding **the handling and transportation of dangerous cargoes** and the segregation of non-conforming cargoes.

2.1.4. Emergency Procedures

Shore Facility Operator should ensure that appropriate emergency arrangements are implemented and brought to the attention of each concerned person. This arrangements should include:

- Appropriate emergency alarm activation points;
- Procedures for reporting an incident or emergency to appropriate emergency services inside and outside the **port area**;
- Procedures for notification of an incident or emergency to the port authority and to persons using the **port area**, both on land and in the port area;
- Availability of emergency equipment suitable for the risks of **dangerous cargoes** to be handled;
- Arrangements for the release of the **ship** in the event of an emergency; and
- Arrangements for ensuring proper entry/exit at all times.

Shore Facility Operator should take into account the necessary regulations for safe and fast emergency escape, taking into account the nature of the **dangerous cargoes** and any special conditions.

2.1.15. Emergency Information

Shore Facility Operator should make available a list of all **dangerous cargoes** in warehouses, hangars or other areas, including quantities and, if appropriate, Correct Shipping Names, correct technical names (if applicable), UN numbers, classes or, when allocated, parts, classes, groupings of goods, group letter suitability, side risk classes (if assigned), packing group (where allocated) and exact location should be made available to emergency services.

Shore Facility Operator should ensure that the person responsible for the warehouse, hangars or area where **dangerous cargoes** are handled is informed about the storage conditions of the **dangerous cargoes**, which will be available in emergency situations.

Shore Facility Operator should ensure that the person responsible for the cargo handling operations of **dangerous cargoes** has the necessary information that can be accessible in case of incidents and emergencies involving **dangerous cargoes**.

In order to ensure availability and accessibility of the information stated in 2.1.5, electronic or other automatic data processing or transmission techniques should be used;

Shore Facility Operator should ensure that port or **quay** emergency procedures and emergency phone numbers are available at easily accessible points in the warehouses, hangars or areas where **dangerous goods are transported or handled**.

Shore Facility Operator should ensure that the fire-fighting and pollution fighting equipment and installations are placed in a clearly visible manner at all appropriate points marked conspicuously with appropriate pictograms and signs.

Shore Facility Operator should notify the **master of the ship** carrying dangerous cargo, or for which **handling** will be carried out, about the current emergency procedures and the services available in the **quay** area.

2.1.6. Fire Measures

Shore Facility Operator should ensure and provide:

- The **quay** and all parts of any **ship** berthed shall be accessible for emergency services at all times;
- Audible or visual emergency alarms should be set up in the area or other means of emergency communication should be available in conjunction with the emergency services;

- International shore connection should be installed at the quay, in accordance with the requirements for the provision of fire-fighting equipment on ships of 500GRT and above, regardless of the year of construction, as specified in SOLAS II/2/10.2.1.7.
- All areas related to the **handling of dangerous cargoes** should be kept clean and tidy;
- Prior to the handling of **dangerous cargoes**, the Master of the ship will be informed about the nearest means of calling the emergency services;
- Lighting and other electrical equipment in areas where **dangerous cargoes** are present on the **quay** should be of a safe type for use in a flammable or explosive area

Shore Facility Operator should ensure and provide:

- Identification of places where smoking is prohibited; and
- Pictogram notices for prohibition of smoking should be posted in all areas and at appropriate distances from areas where smoking would pose a danger.

Shore Facility Operator should ensure that the equipment used in the area or in the spaces where a flammable or explosive atmosphere is present or possible to form is used in a way that does not cause a fire or explosion.

Shore Facility Operator should ensure that only portable electrical equipment is used safely in a flammable environment, in the area or in spaces where a flammable or explosive atmosphere is present or possible.

Shore Facility Operator should ensure that the electrical equipment on the mobile electrical LED is not used in areas or spaces where flammable environments may occur.

2.1.7. Fire-Fighting

Shore Facility Operator shall ensure that the fire-fighting installations and facilities, which are properly and appropriately tested, are accessible at any time and in accordance with the requirements of the **regulatory authority**, in the areas **where dangerous goods are transported or handled**.

Shore Facility Operator should ensure that the personnel involved in the **handling or transportation of dangerous cargoes** receive training and exercises in accordance with the requirements of the **regulatory authority**.

2.1.8. Environmental Measures

Shore Facility Operator should ensure that the *dangerous cargoes* are handled only in areas that comply with the requirements of the *regulatory authority*.

Shore Facility Operator should ensure that any damaged packaging, unit cargo or cargo transport unit containing *dangerous goods* are handled in accordance with the requirements of the *regulatory authority* and that onward transport and handling of *dangerous goods* is not allowed unless and until they are properly repackaged and made suitable and safe in all respects.

If necessary, **Shore Facility Operator** should ensure that any damaged packaging, unit cargo or cargo transport unit containing *dangerous goods* is transported to the area designated for such cargoes.

Combating environmental pollution

Shore Facility Operator should ensure that the appropriate equipment is accessible in order to minimize the damage in case of spillage of *dangerous goods*. Equipment fencing should contain drain covers, absorbent and neutralizing chemicals, as well as cleaning agents and portable collection ponds.

Shore Facility Operator should ensure that the personnel involved in the *handling and transportation of dangerous cargoes* receive training and exercises in accordance with the requirements of the *regulatory authority* on the use of equipment and installations for combating environmental pollution.

Reporting of Incidents

Shore Facility Operator shall ensure that if a risk arises in terms of the safety or security of the person and the ship or other ships in the port or any other property or environment during the *handling of dangerous cargoes*, the person responsible for the *handling* shall immediately stop the operation and ensure that it does not restart unless and until if it is safe and appropriate safety measures have been taken. **Shore Facility Operator** is required to oblige each member of staff to report incidents and accidents that have occurred during *the handling of dangerous cargoes* to the person responsible for the operation and relevant authorities.

Shore Facility Operator should ensure that any event that may put the safety or security of persons, ships and the environment at risk in the *port area* or any other property is immediately reported to the port authority.

Shore Facility Operator should ensure that any damaged or leaking unit cargo or cargo transport unit containing *dangerous goods* is immediately reported to the Shore Facility Operator and the port authority and appropriate actions are taken.

2.1.9. Controls and Inspections

Shore Facility Operator should, where appropriate:

- control the documents and certificates related to the safe **transportation, handling, packaging and stowage of dangerous cargoes** in the **port area**;
- Where applicable, carry out inspections and checks in order to verify that all packages containing **dangerous goods**, unit cargo and cargo transport units are marked, labeled or placarded in accordance with the IMDG Law on transportation methods and appropriate national or international legal requirements, to remove unnecessary labels, placards and signs, and verify that cargo transport units have been loaded, packed and fastened in accordance with the IMO/ILO/UN ECE Cargo Transport Units Packages (CTUs);
- Check to verify that freight containers, tank-containers, portable tanks and vehicles containing **dangerous goods** comply with the applicable occupational safety approval plate, the International Safety Containers (CSC) Convention 1972 as amended, or approvals have been obtained via the IMDG Code or a certificate or approval system of a relevant authority; and
- check via external inspection to verify that there is no any damage to freight containers, tank-containers, portable tanks and vehicles containing **dangerous good** that would impair their strength or packaging integrity, and there are no signs of leakage in their contents.

Shore Facility Operator is required to carry out such controls on a regular basis in order to ensure occupational safety measures in the **port area** and maintain **transportation** safety.

If any of the aforementioned checks reveal an issue in terms of safe **transportation or handling of dangerous cargoes**, Shore Facility Operator shall immediately inform all parties concerned and ensure that they are eliminated prior to any further **transportation or handling of dangerous cargoes**.

Shore Facility Operator should ensure that all necessary support is given to the port authority intending to carry out the inspection of **dangerous cargoes** or any other person authorized to facilitate the inspections regarding **dangerous cargoes** and/or their contents.

Hot work and other repair or maintenance works **Shore Facility Operator** should ensure that the repair and maintenance operations that will render the emergency/fire equipment recommended by these Recommendations within the quay inaccessible, are not carried out without the permission of the port authority.

2.1.10. Access to Restricted or Enclosed Areas

2.1.10.1. Shore Facility Operator shall not allow anyone to enter any enclosed area, such as the cargo area, the cargo tank, the space around the tank, the cargo handling area, ballast tank or other restricted or enclosed areas that contain or may contain dangerous vapors or cargoes without sufficient oxygen, unless authorized by the **Responsible person**. The responsible person should be trained in on-site testing of applicable equipment and should have the knowledge to correctly interpret the results obtained. The responsible person should keep records of the actions taken.

2.1.10.2. Where necessary for operational purposes, access to an area that has not been purged of hazardous vapors for a reasonable period of time and therefore cannot or is impossible to obtain the certificate specified in 2.1.10.1, access shall only be made by personnel wearing self-contained breathing apparatus and any other necessary protective equipment and clothing. The entire operation should be carried out under the direct supervision of the responsible person and will be provided with self-contained breathing apparatus, protective equipment and rescue equipment. Breathing apparatus, protective and rescue equipment shall not be of a flammable type in a vacuum.

2.1.10.3. Shore Facility Operator should ensure that the procedures mentioned in the international laws and guidelines are carefully followed in such access process.

2.1.11. Fumigation of Warehouses, Sheds or Cargo Transport Units

Shore Facility Operator should ensure that the fumigation of warehouses, sheds or cargo transport units is carried out in accordance with the requirements of the regulatory authority. Reference should be made to the IMDG Code Annex Recommendations for the Safe Use of Pesticides on Ships.

Shore Facility Operator should ensure that the fumigation of the cargo transport units is carried out only in the areas designated for this purpose by the port authority.

The Shore Facility Operator should ensure that fumigated warehouses, sheds or cargo transport units are clearly marked and capable of alerting anyone who comes in contact with the risks involved.

Shore Facility Operator shall ensure that no one enters the warehouse, sheds or cargo transport unit except that it is fully ventilated, gas-free, smoke warning signs are removed, and a clean certificate has been issued by the responsible person. Where appropriate, all restricted area access procedures will be followed.

Guidance on smoking operations given in IMDG Annex 7.

Contaminated wastes, Shore Facility Operator should ensure that dangerous cargoes and contaminated wastes are promptly collected and disposed of in accordance with regulatory authority requirements.

Consumption of alcohol and drugs, Shore Facility Operator should ensure that no one under the influence of alcohol or drugs is involved in the **handling of any dangerous** goods within its area of responsibility. Any such person should be kept away from areas where **dangerous goods** are transported or used.

Weather conditions, Shore Facility Operator, within his area of responsibility, should not allow **dangerous cargoes** to be used in weather conditions that will seriously increase the risk,

Lighting, Shore Facility Operator, within his area of responsibility, should ensure that the areas where **dangerous cargoes** are used or where precautions are taken regarding the **handling of dangerous cargoes** are properly illuminated.

2.1.12. Handling Equipment

Shore Facility Operator, within its area of responsibility, should ensure that all equipment used for the **handling of dangerous goods** is appropriate for such use, and that it is used only by **qualified persons**.

Shore Facility Operator, within its area of responsibility, should ensure that all cargo handling equipment is of the approved type, properly maintained and tested in accordance with national and international legal requirements.

2.1.13. Protective equipment

Shore Facility Operator, within its area of responsibility, should ensure that, when necessary, adequate protective equipment and clothing are provided to all personnel involved in the **handling of dangerous goods**.

They should provide appropriate protection against the specific risks associated with the handled **dangerous goods** and, where appropriate, be of the approved type or approved standards.

2. 2. RESPONSIBILITIES OF RELEVANT CARGO PARTIES

Relevant Cargo Parties (together with Shore Facility Operator) have the primary responsibility for the **transportation** and **handling** of the cargoes in a way that protects health and safety of employees and other persons who may be affected by the works, including the general public.

Relevant Cargo Parties (together with Shore Facility Operator) should consider the risks associated with such activities in **port areas** and should take these issues into account when designing safe operation procedures. Procedures should comply with relevant legal requirements.

Relevant Cargo Parties (together with Shore Facility Operator) should provide its employees with the necessary information, instructions, training and audit them to ensure that safe operation procedures are followed in practice. This audit should include procedures to verify that **dangerous cargoes** comply with relevant legal requirements and can be accepted for **carriage**;

Relevant Cargo Parties (together with Shore Facility Operator) should ensure that the safety of all matters related to the **transportation and handling of dangerous cargoes** are regularly reviewed.

Cargo organizations should also ensure that the dangerous goods they transport for sea transportation comply with the relevant legal requirements.

In many ways, the management of cargo organizations play a key role in protection of the health and safety of everyone involved in the transport chain. They will generally only have control over the correct packaging, segregation and securing of the contents of the cargo transport units. In many cases, the person packing the cargo transport unit will be the last person to see what is inside until it reaches its final destination and therefore has the primary responsibility to ensure it is properly and safely packed. Cargo organizations should ensure that all cargo transport units used for sea transport are fit for purpose in accordance with the Container Security Convention (CSC) 1972 and are properly packaged, labeled, marked and documented in accordance with IMDG, ADR, RID and other relevant laws and include them in the transport chain, and are loaded prior to inclusion in the transport chain in accordance with the IMO/ILO/UN ECE Guidelines for the packaging of cargo transport units.

2.2.1. Documents and Certificates

Cargo organizations shall ensure that documents and certificates related to **dangerous goods** comply with the IMDG Code or, alternatively, the applicable transport mode or national or international legal requirements. Required transport documents for the relevant certificates, where applicable, should be possessed by the party carrying the dangerous cargo at all stages, as long as they are in the **port area**.

2.2.2. Identification, Packaging, Marking, Labeling or Placarding and Documentation

Cargo organizations, along with the Port Operator, shall ensure that the **dangerous goods** entering their facilities are properly identified, packaged, marked, labeled or placarded, and that unnecessary posters, signs and labels are removed, to demonstrate that they comply with the IMDG Code or alternatively, national or international legal requirements appropriate to the applicable transport mode.

2.2.3. Freight Containers, Tank-Containers, Portable Tanks and Vehicles

Cargo organizations shall ensure that freight containers, tank-containers, portable tanks and vehicles comply with the applicable safety approval plate, the International Convention on Safe Containers (CSC), 1972, as amended, or they are approved in accordance with the applicable provisions of Section 6 of IMDG Code or through a certification or approval system of a relevant authority.

Cargo organizations are required to carry the cargo transport units carrying dangerous goods in accordance with the IMO/ILO/UN ECE Cargo Transport Units Packages (CTUs) or any other national or international legal requirements applicable to the transport mode, in order to ensure the safe transportation and handling of such units in the port area.

2.2.4. Controls and Inspections

Cargo organizations should appoint a **Responsible person** during the handling and transportation of dangerous cargoes and this person should check compliance with the provisions of 2.2.1 - 2.2.3 before and during the transportation chain.

The responsible person of the cargo organizations should, by external inspection, check the freight containers, tank-containers, portable tanks and vehicles containing **dangerous goods** for damage that would impair their strength or packaging integrity, and for any signs of leakage in the contents.

The responsible person of the cargo organizations is required to carry out such checks on a regular basis for the implementation of occupational safety measures in the transport chain, within the **port area**.

If any of the checks mentioned in 2.2.1 - 2.2.3 reveals that there is a problem in safe transportation or **handling of dangerous goods**, the responsible person of the cargo organizations will immediately inform all parties concerned and ensure that it is corrected before any other **transportation** or **handling of dangerous goods**.

The responsible person of the cargo organizations should ensure that all necessary support is given to the port authority or the port operator while they carry out the inspection of **dangerous goods**.

Cargo organizations should ensure compliance with applicable IMO Codes regarding dangerous goods and national or international legal safety requirements for shipping methods, commensurate with their responsibilities.

2.3. RESPONSIBILITIES OF MASTER OF SHIP

The person responsible for ***dangerous goods*** should notify the ***port authority*** as soon as possible of any event related to this cargo in the ***port area*** that may cause damage to the persons, the ship or ships in the port, the port or any property or environment.

The ***port authority*** should be aware of the intention of any person on the ***ship's*** deck or ashore that may pose a danger due to the presence of dangerous cargoes to hot work or other repair or maintenance work, and such work should only be performed when it does not pose a danger.

No radio or radar transmitter should be used, except for VHF transmitters with a power output of not more than 25W on ships, in cranes or anywhere in the environment during loading and unloading of Class 1 cargoes (except those in section 1.4) and whose air systems do not exceed a minimum safety distance of 2 m from explosives.

Any damaged, leaking, damp-affected, or otherwise defective package should not be accepted for transport. Repair of defective or damaged packages should not be allowed on the ship's deck.

2.3.1. Signals

When signals need to be presented, they should meet following requirements:

- Daytime, International Signals Code flag “B”; and
- At night, completely-round continuous red light

2.3.2. Entry to the Port Area

Before entering the ***port area***, the master of the Ship carrying dangerous cargoes should:

- Provide information to himself and his crew for legal requirements relating to ship transporting or handling dangerous cargoes in the port area, as appropriate;
- Check the conditions of ship, machinery, equipment and appliances, as appropriate;
- Where possible, check dangerous cargoes and their contents for any damage or leakage; and

➤ inform the port management about any damage or leakage related to the ship, machinery, equipment or devices, or any damage or leakage of dangerous cargoes, or any content system failure that may pose a danger to life, property or the environment.

Unless exempted by the port management, the Master of the Ship, upon entry into the port area, should ensure :

- Proper communications is established with the port authority; and
- When necessary, the signals mentioned in 2.3.2 have been given.

2.3.3. Watchkeeping

The master of the ship is required to ensure that a safe aboard watch and a safe engine watch are available at all times. The master should at all times ensure that sufficient crew are available to use the appropriate ship's equipment in the event of an emergency.

The master of the ship should fully consider the nature, quantity, packaging and stowage of dangerous goods under any special conditions at the stage of organizing safe watch arrangements.

In organizing the watches, full consideration should be given to sections A-VIII/2, sections 4-1 and A-VIII/2, sections 4-5 of the STCW Code.

2.3.4. Berthing

The master of the ship should ensure that the anchorages used for mooring the ship are of the appropriate type, of sufficient strength, and of the appropriate size for the ship and local conditions.

Unless exempted by the port authority, the Master of the Ship, who should give the signals mentioned in 3.3.3, while berthed in the port area at all times, should:

- Provide pull cables (also referred to elsewhere as “fire cables”) of suitable size, ready for immediate use, at the fore and aft of the ship. Release the appropriate length of towing cable fleeted on the deck for immediate use, while towing eye (cable box) is held about at the water level by a cable holder that will break under tension. Ensure that the end of the cable matches the relevant fastener; and
- Ensure that berthing lines and equipment can be quickly released from the ship in an emergency.

The master of the ship should ensure that the machinery necessary for the safety of the ship or the proper handling of cargo or ballast is maintained, protected and kept ready for use at all times, and that flue pipes and boiler pipes are not used without the permission of the port authority.

The master of the ship should ensure that suitable means of safe entry are provided between the ship and the shore.

2.3.5. *Emergency Procedures*

The master of the ship should train and teach himself, his officers and crew, as appropriate, of the emergency response procedures at the facilities located in the port area and on the quayside.

The master of the ship should take into account the arrangements that may be needed for a safe and fast emergency evacuation, taking into account the nature of the dangerous cargoes and any special conditions on board.

The master of the ship should establish emergency response procedures regarding the dangerous goods being carried or to be carried on the ship and should ensure that the officers and crew are properly trained to perform such procedures.

2.3.6. *Emergency Information*

The master of the ship carrying dangerous goods should ensure that the following information is available in the same place, in addition to the information given in SOLAS-II-2/15.2.4.2

- A list of all dangerous goods in transit, on board;
- A list of all dangerous goods to be unloaded in the port area, and
- A list of all dangerous goods to be loaded in the port area and the ship's intended stowage and loading arrangements.

The master of the ship should ensure that those responsible for carrying out their duties are equipped with the necessary information to deal with incidents related to dangerous cargoes and be able to use them in emergencies.

In addition to emergency response procedures regarding dangerous goods, the master should ensure that any appropriate safety prerequisites are reached promptly. Such information may include, for example, Emergency Response Procedures for Ships Carrying Dangerous Goods (EmS Guide) to be used with the shipping document, Medical First Aid Guide (MFAG) for use in accidents involving Dangerous Goods (as given in the IMDG Code Annex) and occupational safety data sheets. The master of the ship should ensure that the duty officer is aware of the crew members or passengers and/or visitors at all times.

2.3.7. Fire Measures

The master of the ship should ensure and provide:

- Identification of places where smoking is prohibited; and
- Pictogram notices for prohibition of smoking should be posted in all areas and at appropriate distances from areas where smoking would pose a danger.

The master of the ship should ensure that vehicles or equipment used in the area or in spaces where a flammable or explosive atmosphere exists or is likely to occur are used in a way that does not cause a fire or explosion.

The master of the ship should ensure that only portable electrical equipment is used safely in a flammable environment, including those used for sampling or discharge, in the area or spaces where a flammable or explosive atmosphere is present or possible.

The master of the ship should ensure that the electrical equipment on the mobile electrical LED is not used in areas or spaces where flammable atmospheres may occur.

The master of the ship should ensure that the appropriate and properly tested firefighting installation is appropriate for the dangerous loads on board, so that the crew receives training and practice in the use of the tested firefighting equipment.

Environmental precautions The master of the Ship carrying dangerous goods should ensure that all necessary precautions are taken to prevent the accidental release of such cargoes into the environment.

2.3.8. Reporting of Incidents

The master of the ship shall, within his area of responsibility, ensure that if a risk arises for the safety or security of the person and the ship or other ships in the port or any other property or environment during the handling of dangerous goods, the person responsible for the handling shall immediately ensure that the operation is stopped and, should ensure that it does not restart unless and until it is safe and appropriate safety criteria have been met. The master of the ship is required to oblige each of his crew members to report incidents and accidents that have occurred during the handling of dangerous cargoes to the person responsible for the operation and relevant authorities.

The master of the ship should ensure that any event that may put the safety or security of the person and the environment at risk in the port area is immediately reported to the port authority. This includes incidents related to the ship, crew, machinery, equipment or devices, or dangerous goods or their contents, which may occur in the port area or after notification as specified in Marpol Annex II.

The master of the ship should ensure that any damaged or leaking cargo unit or cargo transport unit containing dangerous cargoes on board is immediately reported to the Port operator and port authority and appropriate actions are taken.

2.3.9. Controls and Inspections

Where applicable, the master of the ship should ensure that regular inspections of dangerous cargoes or their contents are carried out by the crew while in the port area.

The master of the ship should ensure that all necessary support is given to the port authority regarding dangerous cargoes and/or their contents.

2.3.10. Hot Work and Other Repair or Maintenance Work

The master of the ship, after consulting the Port operator, should ensure that, where appropriate, repairs and maintenance operations that will cause inactivity of the ship or its cargo handling equipment or cause the work safety equipment to become inaccessible are not carried out without the permission of the port authority.

The master of the ship and the persons performing the repair or maintenance work should ensure, after consulting the Port operator, that permits are obtained by the port authority for any such work on board and any other repair or maintenance work that may pose a hazard due to hot work and dangerous cargoes.

Minimum occupational safety requirements for the performance of hot works are given in Annex 4.

2.3.11. Access to Restricted or Enclosed Areas

Master of the ship shall not allow anyone to enter any enclosed area, such as the cargo area, the cargo tank, the space around the tank, the cargo handling area, ballast tank or other restricted or enclosed areas that contain or may contain cargoes that can produce hazardous vapours or consume oxygen, unless it does not contain hazardous vapors, there is sufficient oxygen and it is authorized by the Responsible person. The responsible person should be trained in on-site testing of applicable equipment and should have the knowledge to correctly interpret the results obtained. The responsible person should keep records of the actions taken.

Where necessary for operational purposes, access to an area that has not been or cannot be purged of hazardous vapors for a reasonable period of time, access shall only be made by personnel wearing self-contained breathing apparatus and any other necessary protective equipment and clothing. The entire operation should be carried out under the direct supervision of the responsible person and will be provided with self-contained breathing apparatus, protective equipment and rescue equipment. Breathing apparatus, protective and rescue equipment shall not be of a flammable type in a vacuum.

The master of the ship should ensure that the procedures mentioned in international laws and guidelines are carefully followed in the access process.

2.3.12. *Fumigation of Warehouses, Sheds or Cargo Transport Units*

The master of the ship should ensure that appropriate warning signs regarding fumigation or fumigated compartments or fumigated cargo transport units are posted in a clearly visible position at the entrance to the passage or compartment or cargo transport unit. Signs should include risks to anyone entering the ship, compartment or cargo transport unit. The master of the ship will ensure that no one enters the fumigated ship, compartment or cargo transport unit, except that it is fully ventilated, gas-free, fumigation warning signs have been removed and a clean certificate has been issued by the responsible person. Where appropriate, all restricted area access procedures will be followed.

Guidance on smoking operations given in IMDG Annex 7.

2.3.13. *Contaminated Bilge Water, Wastes, Ballast or Slops*

The master of the ship should ensure that bilge water, waste, ballast or slops contaminated with dangerous cargoes are collected and contained in such a way as to prevent accidental spills in the cargo area or other designated locations while in the port area or in watertight receptacles.

Master of the ship who has bilge water, wastes, ballasts or slops contaminated with dangerous cargoes should ensure that such contaminated water, wastes, ballasts or slops are removed from the ship prior to departure of the ship from the port area in accordance with regulatory authority requirements.

Consumption of alcohol and drugs The master of the ship, within his area of responsibility, should ensure that no one under the influence of alcohol or drugs is involved in the handling of any dangerous goods . Any such person should be kept away from areas where dangerous goods are transported or used.

Weather Conditions The master of the ship, within his area of responsibility, should not allow dangerous cargoes to be used in weather conditions that will seriously increase the risk

Lighting, Master of the ship, within his area of responsibility, should ensure that the areas where dangerous cargoes are used or where precautions are taken regarding the handling of dangerous cargoes are properly illuminated.

2.3.14. *Handling Equipment*

The master of the ship, within his area of responsibility, should ensure that all ship equipment used for the handling of dangerous goods, including cargo fastening equipment, is ready for use and used by qualified persons.

The master of the ship should ensure, within his area of responsibility, that all ship's cargo handling equipment is of the approved type, properly maintained and tested in accordance with national and international legal requirements.

2.3.15. Protective Equipment

The master of the ship, within his area of responsibility, should ensure that, when necessary, adequate amount of appropriate protective equipment and clothing are provided to the ship personnel involved in the handling of dangerous goods.

Protective equipment and clothing should provide appropriate protection against the specific risks associated with the handled dangerous goods and, where appropriate, be of approved type or approved standards.

Security procedures The master of the ship should be familiar with the port's security requirements and should have signed the ISPS Code security declaration with the shore facility.

2.4. RESPONSIBILITIES OF DANGEROUS GOODS SAFETY ADVISOR

As dangerous goods are handled in our facility, we receive services from the Dangerous Goods Safety Advisory Firm authorized by the Ministry within the scope of the IMDG Code. Responsibilities and duties are listed as follows;

The main task of the advisor is to facilitate the management of these activities in the safest way, by determining and using the most appropriate tools and activities within the scope of the requirements of the work, directly reporting to the manager of the facility.

A TMGD consultant mainly performs the following duties:

To monitor compliance with the provisions of international agreements and conventions (ADR/IMDG) in the transport of dangerous goods.

To provide suggestions to the management regarding the transportation of dangerous goods in accordance with the provisions of ADR/RID.

TMGD, which is authorized within the scope of the IMDG Code, prepares a quarterly report for his/her responsibilities determined in accordance with the Article 6, paragraph 2 of the "Regulation on the Transport of Dangerous Goods by Sea and Loading Safety" published in the Official Gazette dated 14 November 2021 and numbered 31659 and submits this report to the Management.

To determine the dangerous goods to be transported and to determine the requirements and compliance procedures in the IMDG/ADR regarding this substance.

To guide management the business on procurement of the handling vehicles to be used in the handling of dangerous goods.

To determine the procedures related to the control of the equipment used in the handling, loading and unloading of dangerous goods.

To provide, or ensure provision of, training to the employees of the facility about the national and international legislation and the amendments, and to keep the records of training.

To determine the emergency procedures to be applied in case of an accident or a possible event that will affect the safety during the handling, loading or unloading of dangerous goods,

To have the employees conduct exercises related to these periodically and keep their records.

To ensure that measures are taken to prevent the reoccurrence of accidents or serious violations.

To ensure that the special conditions stipulated by the legislation on the handling of dangerous goods are taken into account in the selection and employment of subcontractors or third parties.

To ensure that employees involved in the handling, loading or unloading of dangerous goods have knowledge of operational procedures and instructions.

To take measures to raise the awareness of the relevant personnel in order to be prepared for possible risks in the handling, loading or unloading of dangerous goods.

To create instructions for keeping the documents and safety equipment that should be in the vehicle during handling according to the class of the dangerous cargo.

To record all activities, including training, audit and control on activities, to keep these records for 5 years and to submit them to the Authority if requested.

To ensure the implementation of the plan by preparing the facility safety plan specified in ADR/RID Section 1.10.3.2.

In accordance with the provisions of the load loaded on the transport vehicle (IMDG/ADR), to determine procedures for work and operations related to packaging, labeling, marking and loading.

To keep records on the inspections to be carried out in relation to his duties in the facility, by specifying the date and time of the audited persons and works.

In case of any danger, to suspend the work until the danger is eliminated, to restart the work with its own approval when the danger is eliminated, and to notify the management or the competent authorities in writing of any stage in the process until the danger is eliminated.

In the event that an accident that occurs during handling, loading or unloading in the facility for which it is responsible, causing harms to life, property and the environment, TMGD collects information about the accident and gives an accident report to the management or the Authority. This report does not replace the report that should be written by the facility management within the scope of international or national legislation.

2.5. RESPONSIBILITIES OF 3RD PERSONS (CONTRACTOR PERSONNEL AND AGENCIES, ETC.) OPERATING WITHIN THE SHORE FACILITY

Third parties on a part-time or full-time temporary duty at the shore facility are responsible for complying with all the rules determined within the facility, performing the duties to be done in case of emergency and supplying all kinds of documents notified to them.

	GÜBRETAS İSKENDERUN FACILITIES DANGEROUS CARGO HANDLING GUIDE (TYER)
	3. RULES AND MEASURES TO BE APPLIED BY SHORE FACILITIES

3. RULES AND MEASURES TO BE APPLIED BY SHORE FACILITIES

3.1. GENERAL RULES

A number of general rules that apply to the handling of dangerous goods at Ports of GÜBRETAS İskenderun are provided below. In this context, the term Ports Authority refers to the GÜBRETAS Port Management, the manager of the Operations Department, the harbour master and the deputy harbour masters.

Pre-Arrival Notification of Dangerous Cargoes: Dangerous cargoes may only be brought into port area of GÜBRETAS port following approval authorization obtained by submitting a pre-arrival notification. Pursuant to this the Ports Authority will issue specific instructions for the transport, handling and/or storage of each individual type of dangerous material or combinations of these.

Preventive measures: When transporting, handling and/or storing hazardous goods/dangerous cargo via Ports of AKSA regard should be paid to the proximity of buildings, the distance to places where people not directly involved in the transport, handling and storage of goods may be present, the environmental sensitivity of the area or additional site or facility/installation that may be affected by the leakage/emission of the hazardous material or by an accident involving the dangerous cargo.

Dangerous Cargo Notice: The Ports Authority designate special areas equipped with emergency response facilities and equipment for the transport, handling and storage of dangerous cargo.

Refusal of Entry of Dangerous Cargoes: GÜBRETAS İskenderun Port Management has the right to refuse entry to the ports of extremely dangerous cargoes or large quantities of dangerous cargoes if the safety of the port is threatened by the transport, handling or storage of such goods. Provisions that apply for these cargoes set out that hazardous good classified in the classes 1.1, 1.2, 2.1, 2.3, 7.1 are particularly unacceptable for transportation and/or storage. IMDG Schedule: Dangerous Cargo Restrictions

Elimination of risks The GÜBRETAS Port Management has the right to take appropriate and reasonable steps to eliminate risks associated with hazardous goods/dangerous cargo. The owner of the goods or the representative of the owner may be liable for the costs incurred.

Inspection of dangerous goods: The GÜBRETAS Port Management has the right to inspect dangerous goods, which includes the inspection of transport documents and certificates, packages, cargo carriers and vessels to ensure that the transport, handling, packaging, stevedoring and storage of dangerous goods is carried out safely.

Anchorage of vessels carrying dangerous goods If an emergency should arise, with the instruction of port authority, the ship have to move and anchor if necessary to another location at the port or leave the port.

Ship always to be prepared to move with own power: If there arise a risk of harming people or property outside the ship during loading and unloading in ships carrying dangerous goods, including the oxygen-reducing accidents caused by explosive goods, flammable gases or liquids, the ship shall always be prepared to move with its own power in a short notice.

Hot Work: The GÜBRETAS Port Management should always be informed about any hot work that will be carried out, both aboard a ship or at the quay where dangerous goods are transported, handled or stored.

Hot work will only be authorized if it is considered that this can be carried out safely with regard to the risks posed by the cargo. Then, emergency response units will be informed about such permission. Permission document should also include the deadline, which may not exceed 24 hours.

Contact Person: GÜBRETAS Ports Management, the stevedore service and the master of the ship should each, for their respective area of responsibilities, designate a responsible person for the daily work involved in the transportation, handling, and storage of dangerous cargo and in addition ensure that a certified advisor is available, in accordance with the legislation governing the transportation of dangerous goods.

Maintenance: GÜBRETAS Port Management should be notified of all major maintenance work intended to be carried out, both aboard the ship and within port areas where dangerous cargo is transported, handled or stored. Maintenance works can be permitted only if it is considered that there is safe and secure conditions to perform such works.

Hazardous Dust: All efforts and steps should be taken to prevent and minimize the occurrence and dispersion of hazardous dust and to protect personnel against such dust.

Hazardous Vapours / Gas: All efforts and steps should be taken to prevent and minimize the occurrence and dispersion of hazardous vapours or gas and to protect personnel against such vapours or gas. When solid dangerous cargo in bulk is being handled that can give rise to hazardous vapours or gases there should be instruments on hand to measure the concentrations of vapours and gases present. Unprotected personnel are not permitted to enter spaces or areas where poisonous or flammable vapours or gases may be present.

Oxygen Depletion: Unprotected personnel may not enter areas where oxygen depletion may occur.

Liquid and condensed hazardous substances in bulk: For specific safety regulations for the transport and handling of liquid and condensed dangerous cargo in bulk please refer to the following sections;

Unauthorized Persons: Unauthorized persons may not enter areas where dangerous goods are transported, handled or stored. When necessary, routes of transportation, handling areas or storage areas may be cordoned-off to prevent unauthorized entry. Before allowing access to an enclosed area where gases posing a risk to health may occur or there is a risk of oxygen being depleted the work supervisor ashore and the master of the ship should ensure that work may be performed within their respective areas of responsibility without risk. Before allowing access for entry to areas aboard or ashore, it should be certified by authorized person that said area are cleaned and free of danger.

3.2. PRE-ARRIVAL NOTIFICATION

All dangerous goods arriving at GÜBRETAS İskenderun Port should be notified in advance. GÜBRETAS will forward this information to the respective unit that needs to know of the arrival of a dangerous cargo. Pre-notice is forwarded using the methods identified by Port Authority.

Arrival of dangerous goods by sea/overland All dangerous goods arriving at the port should be pre-notified. This is done by the shipping company mailing, faxing or electronically transferring data containing the necessary information. Pre-arrival notification is normally made no later than 24 hours prior to arrival of the goods at the port, but if this is not possible, for instance because of prevailing traffic conditions, notification may be made after departure from previous port and/or transshipment point.

When the cargo comprises a larger quantity of dangerous goods in packaged form, or comprises goods that pose a particular danger, Port Area will be secured prior to arrival of the goods.

The pre-notification shall include all of the goods to be unloaded at the port as well as the goods in transit that will remain aboard the ship. The following information should be included in the pre-notification:

- Name of the ship and time of arrival
- The proper shipping name of the goods
- Class in accordance with the IMGD Code and UN Number
- Packing group (where applicable)
- Flashpoint Temperature (if applicable)
- Subsidiary risks (if applicable)
- Marine Pollutant (if the cargo is classified as such)
- EmS instruction
- Becquerel level (if radioactive)
- Quantity and type of packing
- ID number of container or other identification terms
- Quantity of the dangerous cargo
- Net weight of explosive material (for Class 1 Transport)
- Location of where the dangerous cargo is stowed aboard
- The cargo that will be unloaded and the cargo that is goods in transit
- If the goods have been disinfected, what substance was used and on what date
- The sender and receiver of the goods
- Circumstances that can affect the safe maneuverability of the ship in a negative way

3.2.1. Dangerous bulk goods arriving/departing by sea The information that should be included in the pre-notification submission is the following:

- Name of the ship and arrival/departure time, and for the departure of dangerous goods the ship's agent and berth at the port

- Name of the company or depot that will receive the dangerous cargo and that will unload the dangerous goods
- The proper shipping name of the goods
- Class in accordance with the IMGD Code
- UN number
- Packing group (where applicable)
- Flashpoint Temperature (if applicable)
- Quantity of the dangerous cargo
- Valid certification that the cargo is suitable for transport (where applicable)
- Location of where the dangerous cargo is stowed aboard
- Any deficiencies in the ship storage- and/or cargo handling system (if applicable) (if applicable)
- Circumstances that can affect the safe maneuverability of the ship in a negative way

3.3. LOADING/UNLOADING PROCEDURES (OPERATIONS)

When unloading dangerous goods from ships arriving at the port, the staff performing the unloading should always receive advance information about the goods to be unloaded. This is to allow preparations for unloading to be made in the best possible way and thereby minimize the risk of accidents. The personnel should also be provided with information about dangerous goods that are goods in transit.

Pre-notification also applies to goods arriving at the port overland by road transportation. A good planning will be made so as to prevent lost time.

Company personnel shall always be familiar with the risks that exist and precautions while handling the dangerous cargoes. Drivers shall always follow the procedures and if necessary provide assistance in unloading the vehicle.

The team leader in the terminal and master of the ship shall ensure that personnel under their own supervision are provided with security and protective equipment.

The team leader in the terminal and master of the ship shall make sure that the personnel under their own supervision are not under the influence of alcohol and drugs while handling dangerous goods.

The unloading of dangerous goods shall be initiated as soon as possible following the arrival of the vessel. Dangerous goods shall be transported from the port as soon as possible unless special permission has been obtained for the storage of the goods at the port.

Insofar as dangerous goods are being handled, access routes both ashore and aboard may not be hindered by other activities or objects. Such areas should be kept free from contamination and materials.

Vehicles and transport units should be arranged so that free passage is maintained for emergency vehicles both to the ship and the cargo hatches being used and to gangways.

Dangerous goods shall be handled in such a way that they cannot fall, roll over, slide so that they will not damage other materials and environment.

Terminal supervisor and master of the ship should ensure that areas where dangerous goods are handled are appropriately lit.

Terminal supervisor and master of the ship should ensure that "no smoking" warning signs are effectively posted in the ship's hold, on open deck and in the port's cargo handling areas and observe that the rules are strictly followed.

Master of the ship should ensure that warning signs are posted in a visible way and places, that his ship contains dangerous goods and that they are being handled.

When unloading dangerous goods, or handling other goods when dangerous goods are present aboard the vessel, necessary precautions should be taken and communication should be maintained with the terminal supervisor so as to activate the emergency procedures.

Documentation of the dangerous goods should be readily available throughout handling. If these documents are available electronically in the vehicles, it is not necessary to keep their printed versions available.

3.3.1. Checklist for Unloading Dangerous Goods from a Ship

- Unloading is not permitted if ship or the cargo it carries has issues such as leakage, or missing marking. Such problems should be solved before proceeding to unloading.
- Information about dangerous goods and pre-notification should have been communicated to GÜBRETAS management or responsible person and entered in the system.
- Information about the dangerous goods should have been provided to those carrying out the unloading along with the ship's manifest at the latest.
- Check the method to handle the dangerous cargo in case of an accident. Keep these information readily accessible.
- Check that protective equipment are available to use in case of any uncertainty.
- Check that vehicles, railway wagons and containers are correctly labelled In case of inaccuracy, ensure these are corrected at the waiting zone.

➤ Ensure that vehicles, railway wagons and containers are transferred to zones designated for them according to the handling schedule.

3.3.2 Entry of Dangerous Goods Booked for Sea Transport

➤ Any vehicles, containers or railway wagons that have omissions which may negatively affect the handling of dangerous cargoes should be stopped at the port entrance, and such omissions should be rectified before allowing them enter the port area.

➤ By that time, pre-notification of vehicles, containers or railway wagons should have already be obtained by GÜBRETAŞ.

➤ Confirmation that vehicle carrying dangerous cargo has the necessary and correct documentation and it carries dangerous cargo shall be made at the port entrance before it enters in the port area.

➤ Check the method to handle the dangerous cargo in case of an accident. Keep these information readily accessible.

➤ Check, at the port entrance, that vehicle, containers or railway wagons are correctly labelled, and, in case of omissions, ensure them be rectified before entry into the port.

➤ Ensure that vehicles, railway wagons and containers are transferred to zones designated for them according to the handling schedule.

3.4. DANGEROUS CARGO HANDLING GUIDE (TYER)

Maximum efforts shall be exercised to ensure that dangerous cargo operations are carried out in a safe, appropriate and satisfactory manner.

This means that measures specific to dangerous cargo should be taken so that all relevant operations do not cause harm on the human, animals, environment and properties.

Personnel involved in the dangerous cargo handling processes shall implement the knowledge and training as well as the company's procedures and instructions, necessary for a safe operation.

Our facilities shall always use equipment that are, by design, suitable for handling of dangerous goods.

Procurement of vehicles, load handlers and other equipment shall always consider that our operations involve dangerous goods.

Employer and employees shall always be in cooperation by exchanging their opinions and experiences on the operations and reporting risks and dangers with each other.

Employees shall always make sure that the facility has always taken the measures for safe handling of the dangerous goods.

3.5. LABELLING OPERATIONS

Cargo handlers operating within port areas should be correctly labelled in accordance with the latest regulations. Therefore checks will be made to ensure that every transport unit entered in the port is correctly labelled.

To make these checks, personnel should know the rules applicable for these transport unit. These rules include but not limited to IMDG Code, ADR, etc.

Dangerous cargo units which will be transported on road onward may not be permitted to leave the port unless and until they are correctly labelled according to ADR.

Personnel should be familiar with the labelling rules for each packs in a nested packaging as they are subject to different rules in IMDG Code and ADR.

In case of any inconsistency, following checklists will be used:

List 1 Checklist for Container Labelling

List 2 Checklist for Vehicle Labelling

List 3 Checklist for Labelling of Nested Packs

3.6 SEGREGATION AND STORAGE OF DANGEROUS CARGOES AT THE PORT

For dangerous cargoes arrived at port area, we have an obligation to segregate them in a way to reduce risks and prevent accidents.

At our port, the dangerous goods are segregated in accordance with rules of the either IMDG Code or ADR. How to make segregation as per classes is explained in the relevant sections of the said rules.

Dangerous goods may not be stored in the public areas but the enclosed areas.

Third parties are prohibited to access the storage areas of dangerous goods. No information may be provided to third parties about the contents of dangerous goods. Such information may only be given to authorized persons only as permitted by the legislation and to facilitate the rescue efforts.

Storage areas of dangerous cargoes have been labelled in compliance with the rules, and when necessary additional instructions can be posted. No-smoking and inspection areas have been labelled and identified.

Danger of accidental collision should be taken into account while placing the dangerous cargoes. Their positions should be aligned with drain channels. Drainage gates should be adjustable and always ready for operation.

Access/traffic to the areas of dangerous goods should never be blocked. Storage areas are clean and free of the risk-increasing materials.

When required, any special measure for dangerous goods shall be implemented by special teams. Costs of these shall be borne by the cargo owner, or its authorized person.

For road transports, consideration shall be given to the additional requirements in addition to the standard segregation rules of the port area.

Following checklists will be used for segregation operations:

List 4 Checklist according to IMDG

List 5 Checklist according to ADR

3.7 TRANSPORT DOCUMENTS FOR SEA ROUTINES

Combined sea transportation of the dangerous goods requires submission of a DGD (Dangerous Goods Declaration) and either a CPC (Container Packing Certificate) or a VD (Vehicle Declaration).

Correct information of shipping details, full or in part for the dangerous goods should necessarily be provided, otherwise shipping will not be allowed.

DGD should always be issued in English.

Declaration should contain correct information and signed by the shipper. In addition, loader and carrier should guarantee that cargo has been secured in accordance with maritime regulations.

List 6 Checklist for Dangerous Goods Declaration

3.8. TRANSPORT DOCUMENTS FOR ROAD ROUTINES

For transportation of the dangerous goods, "cargo declaration" and "waybill" are required. Normal invoice (B/L) suffices to transport dangerous cargo in limited quantities.

➤ Cargo Declaration

This document will be issued in Turkish for domestic transport, and, for international transport, in English, French or German.

Checks on the Cargo Declaration shall particularly include accuracy of the information, labelling and marking. In case of any inconsistency, following checklist will be used:

List 7 Cargo Declaration Checklist

➤ Dangerous Cargo Transport Document

➤ Transport Documents for Road Routines

Dangerous Cargo transportation shall also be accompanied with the "Dangerous Cargo Transport Document" in addition to the Cargo Declaration. This document should be issued in Turkish for domestic transports, and, for international transports, in the language of each destination country, that is intelligible for the driver. A form of the document is provided in Appendix 18

List 8 Checklist for Dangerous Good Transport Document

3.9. LOADING PROCEDURES

For the loading of the dangerous cargo, personnel should be in possession of the information about the content of the cargo. This information should also contain preparations required to prevent potential accidents and reduce the risks.

Personnel should also be informed about the actions to be taken in case of any incident during the loading of the dangerous cargo. A coordination shall be maintained with ship crew to increase safety at all times throughout operation.

Guidelines on the actions to be taken during an accident should be readily available at all times during dangerous cargo operations.

Dangerous cargo that will arrive at the port for loading purposes shall arrive at the port as close to the time of loading as is practically possible.

To facilitate the loading operation, the following checklists will be used:

List 9 Checklist for Vehicles and Container Loading

List 10 Checklist for Single Item and General Loading of the Vehicles

3.10. COLLECTION PROCEDURES

For collection of the dangerous goods from the port for onward transport by road the personnel should always be informed in advance about the dangerous goods to be handled. This includes information required to prevent accidents and reduce the risks.

Personnel should also be informed about the actions to be taken in case of any incident during the collection and loading of the dangerous cargo. A coordination shall be maintained with the drivers to increase safety at all times throughout operation.

Guidelines on the actions to be taken during an accident should be readily available at all times during dangerous cargo operations.

To facilitate the loading operation, the following checklists will be used:

List 11 Equipment Inspection Checklist

3.11. SHIP ARRIVAL, DEPARTURE, BUNKERING AND WATCH-KEEPING OPERATIONS

3.11.1. Berthing

The Master, before his ship arrives at the GÜBRETAS Facility for dangerous cargo operations shall:

- ensure that they are familiar with the rules of GÜBRETAS facility that apply to the ships carrying dangerous cargoes.
- check the condition of the ship, its machinery and other equipment relating to handling and stowage equipment of dangerous cargo.
- where possible, verify that the dangerous goods and packaging are intact and there is no damage or leakage.
- inform the Ports Authority if faults or omissions have been noticed.
- Ensure that reliable communication is established and maintained with GÜBRETAS Port , Port and Traffic Control.

3.11.2. Departure

- Ships carrying dangerous goods shall depart from the port not later than 3 hours after the departure time notified by GÜBRETAS or authority.

3.11.3. Bunkering

- At our facility bunkering is allowed in line with the Implementation Instruction 2013/210 of Ministry of Transportation and Infrastructure on the Fuel, Oil and Water Supply Operations on the Sea.

3.11.4. Watch-keeping

- Master of the ships carrying, loading or unloading dangerous cargoes aboard shall always maintain safety of operation and make necessary equipment available, keep its engine and machinery ready for maneuvering in case of an emergency.
- Officers and crew shall have been trained to the STCW 1978 Standards, as a minimum.
- If demanded by GÜBRETAS Port officers, a watchman which satisfies above criteria shall conduct watch-keeping during dangerous cargo operations.

Watchman on the ship should;

- be qualified in the prevention of the dangers that may be caused by dangerous cargo.
- take measures required by its duty and specialization, and keep continuous eye on the risks that may arise in the vicinity of the ship.
- raise an alarm in case of a danger, and take other actions appropriate to the nature of the situation.

3.12. FIRE PREVENTION MEASURES

In all handling of dangerous cargo, the supervisors of the terminal and the master of the ship should ensure that appropriate fire and environmental protection measures have been taken.

Fire-fighting equipment shall be available for immediate use if necessity arise. The equipment should be suitable in content to the nature of, and in number to the quantity of, the dangerous cargo.

In locations or spaces where flammable or explosive gases or dust may occur, electrical equipment used are rated explosion-proof. Electrical extension cables may not be used at such sites.

In places where dangerous goods are stored and handled there is a mandatory ban on smoking, open flames, spark-generating tools, hot surfaces and similar.

A fire safety team is required for dangerous cargo handling, this organization shall be arranged within the time as required by the cargo relevant person.

In locations where dangerous goods are transported, handled or stored, alarms or emergency services and emergency communication means have been made available.

Responsible personnel shall, before the carriage or handling of dangerous goods begins, identify the device for alerting the emergency services and their locations.

In places where dangerous goods are transported, handled or stored, there should always be manhole (drain) covers available.

3.13. EMERGENCY PROCEDURES

Emergency procedures are defined and in place, which also detail the actions to be taken during an accident in places where dangerous cargoes are handled.

Terminal supervisor and master of the ship shall make sure that the security measures under their authority are taken and equipment are made readily available. Information about this shall also be indicated in the transport documents, Emergency Procedures (EmS) and Medical First Aid Guide (MFAG), etc.

This guide has been compiled from the lessons learnt during dangerous cargoes handling processes at the port, and made available to the personnel.

List 12 Checklist for Emergency Procedure

3.14. ACCIDENT REPORTING

Any accident, incident and injury occurred during the dangerous cargo handling shall be reported promptly to GÜBRETAŞ Management, Iskenderun Regional Port Authority.

Report shall be submitted to the authority via FR.YRM.90 Accident and Incident Report Form filled in accordance with PR.YRM.12 Dangerous Cargo Accident and Incident Reporting Procedure.

Safety Advisory shall investigate the incidents and draft a report on the corrective actions.

3.15. DANGEROUS CARGO HANDLING TRAINING PROCEDURES

GÜBRETAS personnel has the task of documentation of the dangerous goods handling and transport processes. Personnel received the basic training as required by IMDG Code and ADR Section 1.3.

Personnel should fully understand the procedures for handling dangerous goods to ensure a safe transport and handling.

Personnel with highest level of responsibilities received 2-day training on their duties. They will receive refreshing training once a two years, unless regulation requires otherwise.

New recruits will receive the training to develop their skills on their new tasks. Records of these training shall be communicated to human resources to archive them in the personal files.

3.16. REPORTING

Dangerous cargo handling operations at the facility shall be communicated by Safety Advisor to Authority with an annual report. They are archived by UAB for the statistical purposes. Report will contain following:

- Compliance with procedures
- Deviation statistics
- Corrective and preventive actions taken during the year
- Training
- Financial information
- Future plans (new targets)
- Available resources

An internal audit will be conducted to develop the management before preparation such report. This report will form the basis for development of the management and future actions.

3.17. SECTION APPENDICES

- Ship Notification Form

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4. CLASSIFICATION, TRANSPORTATION, LOADING/UNLOADING, HANDLING, SORTING, STOWAGE AND STORAGE OF DANGEROUS CARGO

4.1. CLASSES OF DANGEROUS CARGOES

4.1.1. CLASS 1 - EXPLOSIVES

Class I comprises:

- explosive substances (a substance which is not itself an explosive but which can form an explosive atmosphere of gas, vapour or dust is not included in class 1), except those which are too dangerous to transport or those where the predominant hazard is one appropriate to another class;
- Explosive articles, except devices containing explosive substances in such quantity or of such a character that their inadvertent or accidental ignition shall not cause any effect external to the device either by projection, fire, smoke, heat or loud noise, and
- Substance and articles not mentioned under (1) and (2) above which are manufactured with the view to producing a practical explosive or pyrotechnic effect.

Transport of explosive substances which are unduly sensitive, or so reactive as to be subject to spontaneous reaction, is prohibited.

Any substance or article having or suspected of having explosive characteristics shall first be considered for classification in class 1 in accordance with the procedures in IMDG Code 2.1.3. Goods are not classified in class 1 when:

- unless specially authorized, the transport of an explosive substance is prohibited because sensitivity of the substance is excessive;
- the substance or article comes within the scope of those explosive substances and articles which are specifically excluded from class 1 by the definition of this class; or
- the substance or article has no explosive properties.

4.1.2. CLASS 2 - GASSES

A gas is a substance which:

- at 50°C has a vapour pressure greater than 300 kPa, or
- is completely gaseous at 20°C at a standard pressure of 101.3 kPa.

The transport condition of a gas is described according to its physical state as:

- **Compressed Gas:** is a gas which when packed under pressure for transport is entirely gaseous at -50°C; this category includes all gases with a critical temperature less than or equal to -50°C;

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➤ **Liquefied Gas:** a gas which when packaged under pressure for transport is partially liquid at temperatures above -50°C. A distinction is made between:

➤ **High Pressure Liquefied Gas:** A gas with a critical temperature between -50°C and +65°C.

➤ **Low Pressure Liquefied Gas:** A gas with a critical temperature above +65°C;

➤ **Refrigerated liquefied gas:** a gas which when packaged for transport is made partially liquid because of its low temperature;

➤ **Dissolved Gas:** A gas which is, a gas which when packaged under pressure for transport is dissolved in a liquid phase solvent.

4.1.2.1. Class Subdivisions

Class 2 is subdivided further according to primary hazard of the gas during transport:

4.1.2.1.1. Class 2.1 Flammable Gases

Gases, which at 20 °C and a standard pressure of 101.3 kPa:

- are ignitable when in a mixture of 13% or less by volume in air; or
- have a flammable range with air of at least 12 percentage points regardless of the lower flammable limit. Flammability shall be determined by tests or calculation in accordance with methods adopted by the International Organization for Standardization (see ISO Standard 10156: 1996). Where insufficient data are available to use these methods, tests by a comparable method recognized by a national competent authority may be used.

4.1.2.1.2. Class 2.2 Non-flammable, Non-toxic Gases

Gasses which:

- are asphyxiant - gases that dilute or replace the oxygen normally in the atmosphere, or
- oxidizing - gas which may, generally by providing oxygen, cause or contribute to the combustion of other material more than air does, or
- do not come under the other classes.

4.1.2.1.3. Class 2.3 Toxic Gases

Gasses which:

- are known to be so toxic or corrosive to humans so as to pose a hazard to health or
- are presumed to be toxic or corrosive to humans because they have a LC50 value (as defined in 2.6.2.1) equal to or less than 5,000 me/m³ (ppm).

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4.1.3. CLASS 3 – FLAMMABLE LIQUIDS

Class 3 includes the following substances:

- Flammable liquids (see IMDG Code 2.3.1.2 and 2.3.1.3);
- Liquid desensitized explosives (see IMDG Code 2.3.4)

Flammable liquids are liquids, or mixtures of liquids, or liquids containing solids in solution or suspension (such as paints, varnishes, lacquers, etc., but not including substances which, on account of their other dangerous characteristics, have been included in other classes) which give off a flammable vapour at or below 60°C closed-cup test (corresponding to 65.6°C open-cup test), normally referred to as the "flashpoint". This also includes:

- liquids offered for transport at temperatures at or above their flashpoint; and
- Substances transported or offered for transport at elevated temperatures in a liquid state, which give off a flammable vapour at temperatures equal to or below the maximum transport temperature.

Liquid desensitized explosives are explosive substances which are dissolved or suspended in water or other liquid substances, to form a homogeneous liquid mixture to suppress their explosive properties. Entries in the Dangerous Goods List for liquid desensitized explosives are UN 1204, UN 2059, UN 3064, UN 3343, UN 3357 and UN 3379.

4.1.4. CLASS 4 – FLAMMABLE SOLIDS

In this Code, class 4 deals with substances. other than those classified as explosives, which, under conditions of transport, are readily combustible or may cause or contribute to a fire. Class 4 is subdivided as follows:

4.1.4.1. Class 4.1 - Flammable Solids

Solids which, under conditions encountered in transport, are readily combustible or may cause or contribute to fire through friction; self-reactive substances (solids and liquids) which are liable to undergo a strongly exothermic reaction; solid desensitized explosives which may explode if not diluted sufficiently

4.1.4.2. Class 4.2 - Substances liable to spontaneous combustion

Substances (solids and liquids) which are liable to spontaneous heating under normal conditions encountered in transport, or to heating up in contact with air, and being then liable to catch fire;

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

Substances (solids and liquids) which, by interaction with water, are liable to become spontaneously flammable or to give off flammable gases in dangerous quantities.

4.1.5. CLASS 5 - OXIDIZING SUBSTANCES AND ORGANIC PEROXIDES

In this Code, class 5 is divided into two classes as follows:

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4.1.5.1. Class 5.1 - Oxidizing substances

Substances which, while in themselves not necessarily combustible, may, generally by yielding oxygen, cause, or contribute to, the combustion of other material. Such substances may be contained in an article;

4.1.5.2. Class 5.2 - Organic peroxides

Organic substances which contain the bivalent -O-O- structure and may be considered derivatives of hydrogen peroxide, where one or both of the hydrogen atoms have been replaced by organic radicals. Organic peroxides are thermally unstable substances which may undergo exothermic self-accelerating decomposition. In addition, they may have one or more of the following properties:

- be liable to explosive decomposition;
- burn rapidly;
- be sensitive to impact or friction;
- react dangerously with other substances;
- cause damage to the eyes.

4.1.6. CLASS 6 - TOXIC AND INFECTIOUS SUBSTANCES

Class 6 is subdivided into two classes as follows:

4.1.6.1. Class 6.1 - Toxic Substances

These are substances liable either to cause death or serious injury or to harm human health if swallowed or inhaled, or by skin contact.

4.1.6.2. Class 6.2 - Infectious Substances

These are substances known or reasonably expected to contain pathogens. Pathogens are defined as micro-organisms (including bacteria, viruses, rickettsiae, parasites, fungi) and other agents such as prions, which can cause disease in humans or animals.

4.1.7. CLASS 7 - RADIOACTIVE MATERIAL

Radioactive material means any material containing radionuclides where both the activity concentration and the total activity in the consignment exceed the values specified in IMDG Code 2.7.7.2.1-2.7.7.2.6.

Contamination means the presence of a radioactive substance on a surface in quantities in excess of 0.4 Bq/cm² for beta and gamma emitters and low-toxicity alpha emitters, or 0,04 Bq/cm² for all other alpha emitters.

Non-fixed contamination means contamination that can be removed from a surface during routine conditions of transport.

Fixed contamination means contamination other than non-fixed contamination.

4.1.8. CLASS 8 - CORROSIVE SUBSTANCES

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Class 8 substances (corrosive substances) means substances which, by chemical action, will cause severe damage when in contact with living tissue or, in the case of leakage, will materially damage, or even destroy, other goods or the means of transport.

In cases where particularly severe personal damage is to be expected, a note to that effect is made in the Dangerous Goods List in chapter 3.2 in the wording "causes (severe) burns to skin, eyes and mucous membranes"

4.1.9. CLASS 9 - MISCELLANEOUS DANGEROUS SUBSTANCES/ARTICLES AND SUBSTANCES HARMFUL TO ENVIRONMENT

For the purposes of this Code, criteria for substances harmful to environment (marine environment) are applied to the classification of marine pollutant (see IMDG 2.10).

However criteria for substances harmful to environment (marine environment) can be applied to all hazard classes, (see IMDG 2.10.2.3) and (2.10.2.5), criteria are incorporated in this section.

Class 9 substances and articles (miscellaneous dangerous substances and articles) are substances and articles which, during transport, present a danger not covered by other classes.

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4.1.10. DANGEROUS CARGO HANDLED AT THE GÜBRETAŞ İSKENDERUN PORT

➤ UN 1824 SODIUM HYDROXIDE SOLUTION (Bulk Liquid)

The cargo that we handle as bulk liquids are loaded to the tanks dedicated to them via pipelines again dedicated to them.

UN 1824 SODIUM HYDROXIDE CORROSIVE SUBSTANCE CLASS 8
PG II



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4.2. PACKING AND PACKAGING OF THE DANGEROUS CARGO

4.2.1. Definitions

Effectively closed: Liquid-tight closure

Hermetically closed: Vapour-tight closure

Securely closed: so closed that dry contents cannot escape during normal handling; the minimum provisions for any closure.

4.2.2.

Dangerous goods shall be packed in good quality packagings, including IBCs and large packagings, which shall be strong enough to withstand the shocks and loadings normally encountered during transport, including trans-shipment between cargo transport units and between cargo transport units and warehouses as well as any removal from a pallet or overpack for subsequent manual or mechanical handling. Packagings, including IBCs and large packagings, shall be constructed and closed so as to prevent any loss of contents when prepared for transport which may be caused under normal conditions of transport, by vibration, or by changes in temperature, humidity or pressure (resulting from altitude, for example). Packagings, including IBCs and large packagings, shall be closed in accordance with the information provided by the manufacturer. No dangerous residue shall adhere to the outside of packages, IBCs and large packagings during transport. These provisions apply, as appropriate, to new, re-used, reconditioned or remanufactured packagings, and to new, re-used, repaired or remanufactured IBCs, and to new or re-used large packagings.

4.2.3. Parts of packagings, including IBCs and large packagings, which are in direct contact with dangerous goods:

- shall not be affected or significantly weakened by those dangerous goods; and
- shall not cause a dangerous effect, such as catalysing a reaction or reacting with the dangerous goods.
- shall not allow permeation of the dangerous goods that could constitute a danger under normal conditions of transport.

Where necessary, they shall be provided with a suitable inner coating or treatment.

4.2.4. Unless provided elsewhere in this Code, each packaging, including IBCs and large packagings, except inner packagings, shall conform to a design type successfully tested in accordance with the provisions of 6.1.5, 6.3.2, 6.5.4 or 6.6.5, as applicable.

However, IBCs manufactured before 1 January 2011 and conforming to a design type which has not passed the vibration test of 6.5.6.13 or which was not required to meet the criteria of 6.5.6.9.5.4 at the time it was subjected to the drop test, may still be used.

4.2.5. When filling packagings, including IBCs and large packagings, with liquids, sufficient ullage (outage) shall be left to ensure that neither leakage nor permanent distortion of the packaging occurs as a result of an expansion of the liquid caused by temperatures likely to occur during transport.

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Unless specific requirements are prescribed, liquids shall not completely fill a packaging at a temperature of 55 °C.

4.2.6. Inner packagings shall be packed in an outer packaging in such a way that, under normal conditions of transport, they cannot break, be punctured or leak their contents into the outer packaging. Inner packagings containing liquids shall be packed with their closures upward and placed within outer packagings consistent with the orientation marks prescribed in 5.2.1.7 of these Regulations. Inner packagings that are liable to break or be punctured easily, such as those made of glass, porcelain or stoneware or of certain plastics materials, etc., shall be secured in outer packagings with suitable cushioning material. Any leakage of the contents shall not substantially impair the protective properties of the cushioning material or of the outer packaging.

4.2.7. Dangerous goods shall not be packed together in the same outer packaging or in large packagings, with dangerous or other goods if they react dangerously with each other and cause:

- Combustion and/or evolution of considerable heat;
- Evolution of flammable, toxic or asphyxiant gases;
- The formation of corrosive substances; or
- The formation of unstable substances.

4.2.8. Liquids may only be filled into inner packagings which have an appropriate resistance to internal pressure that may be developed under normal conditions of transport

4.2.9. Liquids shall be filled only into packagings, including IBCs, which have an appropriate resistance to the internal pressure that may develop under normal conditions of transport. As the vapour pressure of low boiling-point liquids is usually high, the strength of receptacles for these liquids shall be sufficient to withstand, with an ample factor of safety, the internal pressure likely to be generated.

4.3. PLACARDS, PLATES, MARKING AND LABELS OF DANGEROUS CARGO

IMDG Code suggests a system which is based on labels and placards designed so that anyone particularly involved in the dangerous cargoes, can identify, if possible at the first sight, the risks of these substances, regardless of their packagings.

LABELS:

IMDG Code states that packagings, package and IBCs containing dangerous substances should be labelled as such. Labels are in the shape of a rhombus in white, orange, blue, green, red, or a combination of these colors. Symbols showing the Danger Class is also required. In general, each label is divided into two parts, a lower half and an upper half. The upper half is for the symbol of the class of the good(s) and the lower half is for the text, class or symbol of division number. The minimum dimensions of the labels are 10 cm x 10 cm. Labels should be firmly affixed to the package and placed in such a way that they can be easily seen. The quality of the labels should be such that they do not deteriorate under ambient conditions and remain unchanged during the entire transport and at least three months at sea.

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As dangerous goods may pose more than one risk, it is also necessary to use "subsidiary risk labels". These labels are the same as those for primary risk in terms of colour, shape and symbols. Notwithstanding the requirement of IMDG Code, in some countries, the class number is indicated only on the primary risk label and the secondary risk label does not contain the class number. This is an effective way to distinguish between the two.

PLACARDS:

IMDG Code requires that all cargo transport units containing dangerous goods should be placarded. In this context, cargo transport units include containers, containers for liquids, tank vehicles, land transport vehicles, railway wagons with water tanks, goods tanks carried for intermodal transport.

The placards have the same shape, color and symbols as labels, except for dimensions which is 25 x 25 cm. Containers carrying dangerous goods of more than 4000 kg, and all liquid and gas tanks should bear relevant UN number "UN". 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 should have at least one placard on each side and one at each end of the unit. Rail wagons should be placarded on at least both sides.

Freight containers, trailers and portable tanks should be placarded on all four sides. Road vehicles should have appropriate placards on both the rear and both sides.

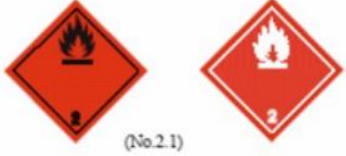
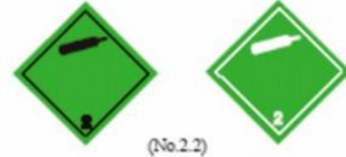
Shapes and Colors of Labels/Placards

Class 1 - Explosives

	Division 1.1 / 1.2 / 1.3
	Symbol - explosion in black color
	Background color - orange
	Text - Explosive (optional)
	*** Place for Division and/or Compatibility Group
	* Place for Compatibility or Text
	Figure 1 - bottom corner
	Division 1.4 / 1.5 / 1.6
	Background color - orange
	Subdivision numbers - black color (about 30 mm x 5 mm for 100 mm x 100 mm labels)
	* Place for Compatibility Group
	Figure 1 - bottom corner

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Class 2 - Gases

	Class 2.1 Flammable Gases
	Symbol - Flame in black or white
	Background color - red
	Text - Flammable gas (optional)
	Figure 1 - bottom corner
	Class 2.2 Non-Flammable Gases
	Symbol - Gas cylinder in black or white
	Background color - green
	Text - Non-Flammable compressed gas (optional)
	Figure 2 - bottom corner
	Class 2.3 - Toxic Gases
	Symbol - Skull and crossbones in black color
	Background color - white
	Text - Toxic (optional)
	Figure 2 - bottom corner

Class 3 - Flammable Liquids:

	Symbol - Flame in black or white
	Background color - red
	Text - Flammable liquid (optional)
	Figure 3 - bottom corner

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Class 4 - Flammable Solids; Substances liable to spontaneous combustion; Substances which, in contact with water, emit flammable gases

	Class 4.1 Flammable Solids
	Symbol - flame in black color
	Background color - white with seven vertical red stripes,
	Text - Flammable Solids Figure 4 - bottom corner
	Class 4.2 - Substances liable to spontaneous combustion
	Symbol - Flame in black and white
	Background color - blue
	Text - Substances liable to spontaneous combustion (optional) Figure 4 - bottom corner
	Class 4.3 - Substances which, in contact with water, emit flammable gases
	Symbol - Flame in black and white
	Background color - blue
	Text - Substances which, in contact with water, emit flammable gases (optional) Figure 4 - bottom corner

Class 5 - Oxidizing substances and Organic peroxides

	Class 5.1 Oxidizing substances - flame over circle in black color
	Background color - yellow
	Text - Oxidizing substance (optional)
	Figure 5.1 - bottom corner
	Class 5.2 Organic peroxides
	Symbol - flame in white color
	Upper Half - red
	Lower Half - yellow
	Text - Organic peroxides (optional)
	Figure 5.2 - bottom corner

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Class 6 - Toxic Substances and Infectious Substances

	Class 6.1 - Toxic Substances
	Symbol - skull and crossbones
	Background color - white
	Text - Toxic (optional)
	Figure 6 - bottom corner
	Class 6.2 - Infectious Substances
	Symbol - three crescents superimposed on a circle
	Background color - white
	Text - Infectious Substance. In case of damage or leakage immediately notify Public Health Authority (optional)
	Figure 6 - bottom corner

Class 7 - Radioactive Materials

	Category I - White
	Symbol - trefoil in black color
	Background color - white
	Black Text (Mandatory) - black in lower half of label: "Radioactive I" "Contents ..." "Activity ..." and "Transport Index" Box
	Figure 7 - bottom corner
	Category II - Yellow
	Symbol - trefoil in black color
	Background color - upper half yellow with white border, lower half white.
	Black Text (Mandatory) - in lower half of label: "Radioactive I" "Contents..." "Activity ..." and "Transport Index" Box
	Figure 7 - bottom corner
	Category III - Yellow
	Symbol - trefoil in black color
	Background color - upper half yellow with white border, lower half white.
	Black Text (Mandatory) - in lower half of label: "Radioactive I" "Contents..." "Activity ..." and "Transport Index" Box
	Figure 7 - bottom corner

Class 8 - Corrosive Substances

	Symbol - liquids, spilling from two glass vessels and attacking a hand and a metal in black color
	Background color - upper half white; lower half black with white border.
	Text - Corrosive (optional)
	Figure 8 - bottom corner

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Class 9: Miscellaneous dangerous substances and articles

	Symbol - seven vertical stripes in upper half in black color
	Background color - white
	Figure 9 - bottom corner

Other Labels

	Indicates elevated temperature (liquid at a temperature equal to or greater than 100°C, or solid at a temperature equal to or greater than 240°C)
	Orange-colored plates with hazard-ID number and UN Number
	Black and red direction arrows

Marine Pollutant Placards

	Packages and cargo transport units containing dangerous substances classified as "Marine pollutants" by the IMDG Code should bear the marks shown here and should be durable. These should be affixed near the hazard labels or hazard placards of the goods. The dimensions of marine pollutant markings should be a minimum of 10 cm per side of packages and 25 cm per side of cargo transport units.
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4.4. Markings and Packing Groups of Dangerous Cargo

The hazards presented by dangerous goods in sea transport are associated with their packaging, so they should be secure, well designed, manufactured and in good condition. It is unlikely that these cargoes cause injuries, however, if cargo is damaged, release of dangerous substances or their vapour is possible.

Packages/containers should meet following requirements:

- They should not react with the substances they are carrying.
- They should be strong so that they withstand the shocks and hazard normally encountered in the sea transportation.
- They should withstand the rain, wind and seawater.
- They should be suitable and sufficient for loads they are carrying.
- They should be in good condition.
- They should be appropriately marked, labelled and placarded.

4.4.1. Marking of Dangerous Cargo

Markings of packaging, including IBCs, are as stated in Section 4.3 of Dangerous Cargo Handling Guide.

Markings of cargo transport units are as stated in Section 4.3 of Dangerous Cargo Handling Guide.

4.4.2. Packing Groups of Dangerous Cargo:

For packaging purposes, substances other than Classes 1, 2, 5.2, 6.2 and 7 and substances other than self-reactive substances of Class 4.1 are divided into three packing groups according to the degree of danger they present:

Packing group I : higher danger

Packing group II : medium danger

Packing group III : low danger

4.4.3. Markings and Packing Groups of Dangerous Cargo Handled at our Shore Facility:

Among the dangerous cargoes handled in our shore facility, UN 1824 - SODIUM HYDROXIDE SOLUTION comes under the packaging group II (Substances with medium level of danger).

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4.5 TABLES OF SEGREGATION OF DANGEROUS CARGO IN SHIP AND SHORE FACILITY ACCORDING TO THEIR CLASSES

4.5.1. Definition of Segregation:

Segregation is the process of separating two or more substances or articles which are considered mutually incompatible when their packing or stowage together may result in undue hazards in case of leakage or spillage, or any other accident.

The extent of the hazard arising from possible reactions between incompatible dangerous goods may vary and so the segregation arrangements required may also vary as appropriate. Such segregation is obtained by maintaining certain distances between incompatible dangerous goods or by requiring the presence of one or more steel bulkheads or decks between them, or a combination thereof. Intervening spaces between such dangerous goods may be filled with other cargo compatible with the dangerous substances or articles in question.

4.5.2. Segregation Terms:

Segregation terms used in this Code are explained further in the other subsections of this chapter as they apply to the segregation in case of packaging of cargo transport units and different modes of sea transport:

- .1 "Away from";
- .2 "Separated from";
- .3 "Separated by a complete compartment or hold from";
- .4 "Separated longitudinally by an intervening complete compartment or hold from".

4.5.3. Provisions for Segregation:

In order to decide on the segregation requirements between two or more dangerous goods, the segregation table and the dangerous goods list segregation provisions as well as the appendix to this section, should be consulted. In the case of conflicting provisions, dangerous cargo list always take precedence.

- They are not allowed to be packed in the same outer packaging, and
- They are not allowed to be transported in the same cargo transport unit, excluding exceptions.

Where the Code indicates a single secondary hazard (one subsidiary risk label), the segregation provisions applicable to that hazard shall take precedence where they are more stringent than those of the primary hazard. Segregation provisions for the Class 1 subsidiary risk are those for Class 1 Subdivision 1.3.

The segregation provisions for substances, materials or articles having more than two hazards (2 or more subsidiary risk labels) are given in the Dangerous Goods List.

Segregation Table for Ships

The following table shows the general provisions for segregation between the various classes of dangerous goods.

Since the properties of substances, materials or articles within each class may vary greatly, the dangerous goods list shall always be consulted for particular provisions for segregation as, in the case of conflicting provisions, these take precedence over the general provisions. Segregation shall also take account of a single subsidiary risk label.

CLASS	1.1 1.2 1.5	1.3 1.6	1.4	2.1	2.2	2.3	3	4.1	4.2	4.3	5.1	5.2	6.1	6.2	7	8	9
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
Flammable gases 2.1	4	4	2	X	X	X	2	1	2	X	2	2	X	4	2	1	X
Non-flammable, Non-toxic 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
Flammable solids (including self-reactive substances and solid desensitized explosives) 4.1	4	3	2	1	X	X	X	X	1	X	1	2	X	3	2	1	X
Substances liable to spontaneous combustion 4.2	4	3	2	2	1	2	2	1	X	1	2	2	1	3	2	1	X
Substances which, in contact with water, emit flammable gases 4.3	4	4	2	X	X	X	1	X	1	X	2	2	X	2	2	1	X
Oxidizing substances (agents) 5.1	4	4	2	2	X	X	2	1	2	2	X	2	1	3	1	2	X
Organic peroxides 5.2	4	4	2	2	1	2	2	2	2	2	2	X	1	3	2	2	X
Toxic substances 6.1	2	2	X	X	X	X	X	X	1	X	1	1	X	1	X	X	X
Infectious substances 6.2	4	4	4	4	2	2	3	3	3	2	3	3	1	X	3	3	X
Radioactive material 7	2	2	2	2	1	1	2	2	2	2	1	2	X	3	X	2	X
Corrosive substances 8	4	2	2	1	X	X	X	1	1	1	2	2	X	3	2	X	X
Miscellaneous dangerous substances and articles 9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Numbers and symbols in the Table means:

- 1 – "Away from";
- 2 – "Separated from";
- 3 – "Separated by a complete compartment or hold from";
- 4 – "Separated longitudinally by an intervening complete compartment or hold from".
- X – See Dangerous Goods List to verify if there is any special segregation provisions.*

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4.6. SEGREGATION DISTANCES OF DANGEROUS CARGO AT THE PORT WAREHOUSES AND TERMS

TABLE 1 - TABLE OF SEGREGATION OF DANGEROUS CARGO IN PORT AREAS

Classes	2.1	2.2	2.3	3	4.1	4.2	4.3	5.1	5.2	6.1	8	9
Flammable gases 2.1	0	0	0	s	a	s	0	s	s	0	a	0
Non-flammable, Non-toxic Gases 2.2	0	0	0	a	0	a	0	0	a	0	0	0
Toxic gases 2.3	0	0	0	s	0	s	0	0	s	0	0	0
Flammable liquids 3	s	a	s	0	0	s	a	s	s	0	0	0
Flammable solids, self-reactive substances and 4.1 solid desensitized explosives	a	0	0	0	0	a	0	a	s	0	a	0
Substances liable to spontaneous combustion 4.2	s	a	s	s	a	0	a	s	s	a	a	0
In contact with water, emit flammable gases 4.3	0	0	0	a	0	a	0	s	s	0	a	0
Corrosive substances 5.1	s	0	0	s	a	s	s	0	s	a	s	0
Organic peroxides 5.2	s	a	s	s	s	s	s	s	0	a	s	0
Toxic substances (liquid and solid) 6.1	0	0	0	0	0	a	0	a	a	0	0	0
Corrosives (liquid and solid) 8	a	0	0	0	a	a	a	s	s	0	0	0
Miscellaneous dangerous substances and articles 9	0	0	0	0	0	0	0	0	0	0	0	0

Note on the non-segregation table

Class 1, Subdivision 6.2. and Class 7 cargoes (excluding those in section 1.4S) should normally only be accepted to the port area for direct receiving and shipping without storage on the port area. These classes are not indicated on the table. However, if these cargoes need to be held temporarily at the port due to unexpected conditions, they should be held in designated areas. As stated in IMDG Code, the segregation requirements of one single class should be considered by port authority while determining the specific requirements.

0 : No segregation is required

a : Keep away - a minimum separation of 3 metres is required

s : Separated - a separation by a distance of at least 6 metres vertically and horizontally for outdoor storage is required. If not separated by a certified fire wall, a separation by a distance of at least 6 metres vertically and horizontally in the holds or decks.

TABLE 2 - TABLE OF SEGREGATION OF SODIUM HYDROXIDE SHIP LOADINGS

General Segregation from other classes

1.1 1.2 1.5	1.3 1.6	1.4	2.1	2.2	2.3	3	4.1	4.2	4.3	5.1	5.2	6.1	6.2	7	8	9
4	2	2	1	X	X	X	1	1	1	2	2	X	3	2	X	X

X	Segregation, if any, is shown in the Dangerous Goods List: - transported in bulk - transported conventionally	
1	Away from: - transported in bulk - transported conventionally	
2	Separated from - transported in bulk - transported conventionally	- Container ships - Hatchless container ships - Ro-Ro ships - Conventional ships - Conventional ships bulk material
3	Separated by a complete compartment or hold from: - transported in bulk - transported conventionally	
4	Separated longitudinally by an intervening complete compartment or hold: - transported in bulk - transported conventionally	

Special Provisions:

n/a

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	5. HANDBOOK FOR DANGEROUS CARGO HANDLED AT THE GÜBRETAS İSKENDERUN PORT

Handbook For Dangerous Cargo Handled At The Facility is provided in the appendix.

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	6. OPERATIONAL PROCEDURES

6.1. Procedures for day and night safe approach, berthing, loading/unloading, stay or mooring of dangerous cargo ships

Ships carrying dangerous goods will be berthed to the quay in guidance of the Pilots and Tugboats, preferably during the daytime, and at night when allowed by the Port Authority, as determined by the Port Regulation.

The Pilot will be informed about the dangerous cargoes on the ship before the maneuver.

In risky situation, berthing of the ship after the departure shall be planned, taking into account the position of the ship carrying dangerous cargo.

If practice of the master of the ship for the mooring of the ships is deemed unsafe for the port, the master of the ship will be required to fasten the ship with extra cables.

In cases where conditions such as unfavorable weather conditions, currents and winds are considered to make loading/unloading unsafe, measures will be taken such as stopping the activity or even departure of the ships to the mooring points.

The mooring areas are different for the ships carrying dangerous goods, and the ships will wait in these mooring areas reserved to them.

6.2. Procedures for additional seasonal measures for loading/unloading of the dangerous cargo

Seasonal conditions should be taken into account in the loading / unloading of dangerous cargoes. Handling of flammable, combustible and explosive loads should be postponed or stopped in the extremely hot, extremely cold, extremely rainy weather and poor visibility, lightning and electrically charged weather until conditions allow to do so.

If it is necessary to continue loading / unloading despite unfavorable conditions, then fire, fire brigade, fire extinguisher tugboats and emergency response teams must be kept available and alerted so that they can respond to any emergency in a short time possible.

If the unfavorable conditions persist, such measures must be taken as assignment of experienced workers, allowing frequent rest, break periods for personnel, increasing the lighting, etc.

6.3. Procedures for keeping flammable, ignitable and explosive cargo from ignition sources, and prohibition of the igniting or ignitable tools, devices and equipment at dangerous cargo handling, stowing and storage areas:

Not performing hot works (welding, cutting, etc.), or if it is absolutely necessary doing the work by taking technical safety measures, working in a controlled manner,

Using ex proof (non-sparking) hand tools, Assigning experienced personnel,

Informing the relevant units before the works,

Briefing the personnel who will do the works,

Taking measurements of toxic, asphyxiating gases and sufficient oxygen, especially in works in enclosed spaces, and keeping the measuring devices ready for use,

Keeping protective measures such as water curtain, protective separation, mechanical ventilation and equipment ready for use,

Ensuring that the personnel who will do such hot work should work with protective clothing and equipment and, if necessary, closed circuit breathing apparatus.

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	7. DOCUMENTATION, CONTROL AND RECORD-KEEPING

7. DOCUMENTATION, CONTROL AND RECORD-KEEPING

7.1 All required documentation and information for dangerous cargo, and procedure for supplying of them by relevant persons

The Following Documents Related to Dangerous Goods are kept up-to-date by the Shore Facility.

-IMDG CODE Volume 1, 2

-SOLAS 1974

-IBC Code Code of the Construction and Equipment of the Ships Carrying Dangerous Chemicals in Bulk

-ISGOTT

The procedures, instructions and forms related to the safe handling of dangerous cargoes are as follows:

- PR.YRM.13 Safe Handling of Packaged Dangerous Cargo Operation Procedure
- PR.YRM.14 Safe Handling of Hazardous Solid Bulk Cargo Operation Procedure
- PR.YRM.15 Safe Handling of Hazardous Liquid Bulk Cargo Operation Procedure
- PR.YRM.16 Ship Operations Degassing Procedure
- PR.YRM.17 Hot Works Operation Procedure
- TL.YRM.105 Flexible Hose Operation Manual
- FR.YRM.12 Ship Shore Safety Check List
- FR.YRM.91 Chemical Tanker Discharging Control Form
- FR.YRM.92 Chemical Tanker Loading / Discharging Protocol Form

Preparations and controls are performed prior to the operation by the operation responsible for each dangerous cargo to be handled. After mutual agreement, the instruction is given to start the operation.

7.2 Procedures for keeping regular and complete up-to-date list and all other information relating to all dangerous cargo present in the shore facility site

Dangerous goods handled at GÜBRETAŞ İskenderun Port are listed in the table below according to the type of handling:

Item	UN Number	Dangerous Cargo	Liquid Bulk	Solid Bulk	Packaged
1	UN 1824	Sodium Hydroxide Solution	√		

With respect to the Dangerous Goods handled at our port, the Operations Department will create all records regarding Dangerous Goods arriving at the port, dispatched from the port, stored at the port, temporarily stored at the port, and will keep them in a way that can be produced when requested.

Access to the dangerous cargo records are limited to personnel who need to know.

7.3 Procedures for checking that dangerous cargo arriving at the facility are properly identified, that dangerous cargo are correctly designated with shipping names, certified, packaged, labelled and declared, and loaded and handled in the proper packing, container or cargo transport units and reporting the inspection results.

Planning in coordination with the Operation, checks the accuracy of the following information on the Dangerous cargo documents issued by the Shipper of the Dangerous goods to be accepted to the Port;

- UN Number,
- PSN Name (Proper Shipping Name,
- Class (including subsidiary risks)
- Packing Group
- Whether a Marine Pollutant, or not,
- Container / Packaging, number,
- Seal Number
- Additional Information (Ignition point, viscosity etc. information)
- Where to be stored in the Port Area

This information is delivered to the timekeepers, Field Supervisors, Warehouse officers, HSE, and the personnel who need to know, via Terminals / Documents, and the control of the incoming dangerous cargo is ensured.

If the information from the operation and the cargo are different, the Operation is immediately informed and the Shipper is instructed to verify the information about the dangerous cargo / vehicle / container and to correct the missing incorrect label marking.

7.4 Procedures for supplying and keeping Safety Data Sheets available

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

- UN Number,
- PSN name (Proper Shipping Name,) (Required for sea transport)
- Class (including subsidiary risks)
- Packing Group (Class 3, 4.1, 4.2, 4.3, 5.1, 6.1, 8, 9)
- Whether a Marine Pollutant, or not,
- Tunnel Restriction Code (Required for road transport.)

7.5 Procedures for keeping records and statistics of the dangerous cargo

Statistical evaluations using the records of Dangerous Goods handled annually in our port are made by the Departments of Commerce and Operations.

The monthly inventory and control reports of dangerous goods stored in our Port Area are prepared by the operations department and presented to the Management.

Records and reports are archived by the departments in 5-year periods.

7.6 Information about Quality Management System

Our company has ISO 9001: 2015 Quality Management System Certificate.

	GÜBRETAŞ İSKENDERUN FACILITIES DANGEROUS CARGO HANDLING GUIDE (TYER)
	8. EMERGENCIES, EMERGENCY PREPAREDNESS AND RESPONSE

8. EMERGENCIES, EMERGENCY PREPAREDNESS AND RESPONSE

8.1 Procedures for responding to the dangerous cargo that may pose risks to the life, property and environment, and dangerous situations involving the dangerous cargo.

For a given situation, preventive action options 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 a combination of these two actions can be used. In any emergency, authorities need to issue public instructions quickly. The public will constantly need to hear information and instructions while being protected at or evacuated from the incident scene.

Protective Measures: It refers to the steps to be taken to protect the health and safety of the emergency teams and the public in the event of an incident involving the release of hazardous substances.

Isolation of Hazardous Area and Prohibition of Access: It means keeping anyone not directly involved in emergency response operations from the area. Unprotected emergency response teams should not be allowed to enter the isolated area.

Evacuation: It means that everyone should be transferred from a dangerous area to a safer place. In order for an evacuation to take place, there should be sufficient time for people to be alerted, prepared, and to leave the area. If there is enough time, then evacuation is the best measure of protection.

First of all, people who are nearby and within sight should be evacuated. When additional help arrives, evacuate upwind and downwind areas at least to the extent specified in this manual.

Even after people have been evacuated to recommended distances, they may not be completely safe from danger. These people should not be allowed to assemble within these distances.

Get the evacuees to a certain distance, on a special route and a distance where they do not need to be evacuated again when the wind blows.

On-Site Protection: It means that people should be protected inside a building and stay inside until the danger passes. An on-site containment measure is applied when trying to evacuate people poses a greater risk than staying where they are, or when evacuation is not possible. Instruct occupants to close all doors and windows and to turn off all ventilation, heating and cooling systems.

8.2 Information of Facilities, Capacity and Capability of Shore Facility to Respond to Emergencies.

The facility has an approved fire plan. Fire-fighting teams have been constituted for each shift. Planned or unannounced training, drills and exercises are carried out within the scope of various scenarios, reports and records are created. The fire-fighting equipment stipulated in the approved plan is kept in full, and maintenance controls and tests are carried out.

The facility has an approved plan to combat Environmental and Marine Pollution. Pollution response teams have been constituted for each shift. Training and drills are carried out within the scope of a planned scenario twice a year, and reports and records are created. Equipment related to Environmental and Marine Pollution is stored in the facility and counted and checked. The facility also has a protocol for material stored in the area to receive support in case of need.

8.3 First Response Arrangements in case of Accidents Involving Dangerous Cargo (First Response Methodology, First Aid Facilities and Capabilities, etc.)

In the event that an Emergency Situation occurs or its signs are detected, the Emergency Coordinator initiates taking appropriate measures according to the Emergency Management System in accordance with the relevant plans. The Emergency Management Group reviews and implements the decisions regarding the measures to be taken within the scope of ISGOTT and IMDG Code. Developments are constantly monitored by the Emergency Management Group, and if necessary, higher-level measures or assistance is decided upon.

Emergency Management at the facility level; A well-designed organization will be maintained by using personnel equipped with training and drills, Emergency Plans containing procedures and documentation, and secure, fast internal and external communication facilities. In Emergency Management, the following measures will be implemented and the process will be monitored and controlled.

ACTIONS TO BE TAKEN	Responsible Departments
WARNING: Notification of the occurrence/probability of an emergency and unexpected situation	All Personnel and Ship
CALL FOR HELP: Reaching the relevant authorities and providing the necessary information	All Personnel
RESPONSE: Responding to the Emergency as soon as possible with the right equipment and trained personnel defined in the Plan	Response Teams
FIRST AID: Carrying out first aid activities until the professional support teams arrive.	All Personnel with First Aid Training
RESCUE: Recovering materials, vehicles, information, documents and other important documents owned by the Port Facility.	First-Aid Personnel
PROTECTION: Protecting the recovered material, vehicles, information, documents and other important documents	Security Personnel
INFORMATION: Providing necessary explanations to customers, other business partners and the press	Public Relations
MANDATORY REPORTING: Providing mandatory notifications to public authorities in accordance with the legislation	Management

8.4 Mandatory Internal and External Reporting in Case of Emergencies

Emergency phone list for Gübretaş port facility

INSTITUTION	PHONE
FIRE BRIGADE	110
POLICE HELP	155
EMERGENCY MEDICAL SERVICE	112-184
İSKENDERUN DISTRICT GOVERNOR	0 326 614 18 26
DISTRICT POLICE DEPARTMENT	(0326) 614 21 23
EMERGENCY and DISASTER OFFICE	(0326) 216 10 67
HATAY PROVINCIAL DIRECTORATE OF ENVIRONMENT AND URBANIZATION	(0326)2160606
ISKENDERUN PORT AUTHORITY	0326 613 27 40
HATAY GOVERNOR'S OFFICE	(0326) 214 62 13
ISKENDERUN DISTRICT COMMANDER OF THE GENDARMERIE	(0326) 614 10 65
ISKENDERUN PUBLIC HOSPITAL	(0326) 618 24 24

8.5 ACCIDENT REPORTING PROCEDURE

The Emergency Management Center will operate the reporting system which will accurately and promptly report the relevant authorities of the Emergency that will occur. It will keep an accurate record of these reports, which contain the information that should be reported in an emergency.

Dangerous cargo accidents should be reported to the Port Authority. The report format will be a free form and will cover the following information about the accident completely.

- a) Time, day and date of the accident occurs,
- b) If known, how the accident occurred and the reason,
- c) The place where the accident occurred (shore facility and/or ship), its position and area of influence,
- ç) Information, if any, of the ship involved in the accident (name, flag, IMO number, owner, operator, cargo and quantity, name of the master and similar information),
- d) Meteorological conditions,
- e) UN number of the dangerous substance, proper shipping name (based on the legislation specified in the definition of dangerous substance) and amount,
- f) Hazard class of the dangerous substance or sub-hazard division, if any,
- g) Packing group of the dangerous substance, if any,
- ğ) Additional risks of the dangerous substance, such as marine pollutants, if any,
- h) Sign and label details of the dangerous substance,
- ı) The characteristics and number of the package, cargo transport unit and container in which the dangerous substance is transported, if any,
- i) Manufacturer, consigner, carrier and recipient of dangerous goods,
- j) The extent of the damage/pollution,
- k) Number of injured, dead and missing, if any,
- l) Emergency response carried out by the shore facility for the accident.

8.6 Coordination, Support and Cooperation Methods with Public Authorities

All accidents involving the Dangerous Goods will be coordinated primarily with the Port Authority. By informing the Port Authority, support and cooperation will be provided with the Provincial / District Fire Brigade, AFAD, and the response units of the neighboring facilities.

In case of a possible explosion, fire or emergency in the adjacent facility;

- First of all, measures will be increased in the facility,
- It will be ensured that the teams are prepared to help the neighboring facility.

Considering the urgency of the situation and the extent of the danger, if it is considered that there is no opportunity or time to ask for help, response and support teams will immediately be assigned to respond to the incident.

By evaluating the dangerous cargo area and the class, quantity and danger risk of the cargo in the field, preparations will be made for measures such as discharging and dilution of the cargo, and returning the ship to the mooring if there is an intervening ship.

8.7 Emergency Evacuation Plan for Evacuation of Ships and Sea Vehicles from Shore Facility during Emergencies

Emergency Departure System Preparation

All emergencies should be reported to the Port Authority.

If it is decided to leave the ship urgently, the safe places where the ship can be sailed under controlled conditions should be specified by the Port Authority.

In cases where urgent departure is required, the master of the ship and the port facility will initiate the emergency departure process by mutual agreement and will notify the Port Authority as soon as possible. In cases where the severity of the emergency and time permits, a representative from the Port Authority or the Harbor Master, Terminal Manager/Operation Officer, Master of the Ship, Pilot will agree on the time and method of the departure before the emergency departure.

Machinery, steering gear and marine system breakout equipment of the ship should be made ready for immediate use.

All cargo unloading, ballast operations should be stopped and prepared for departure.

The ship fire circuit should be flooded and water mist should be used for strategic sections.

If venting to the atmosphere is required, engine room personnel should be available, all non-essential receiving inputs should be closed, all safety precautions related to normal operation should be followed and a warning notice should be issued.

In all emergencies, if the required response goes beyond the capacity of the terminal, the local police or fire department should be reported immediately.

The decision that the ship will depart under control is based on the principle of life safety and should also cover the following conditions.

Adequacy of tugboats, the ability of the ship to move under its own power, the availability of safe places where an emergency ship can advance or be towed, firefighting capability, proximity of other ships, fire cables, fire cable should be kept on the bow and shoulder of the ship on the sea side as long as the ship is at the port facility.

The eye of the cables should be lowered to sea level and the part above the side should be tightened by wrapping at least five turns on the bollard. The part of the cable above the side should be taut from the bollard. A cable that can support the cable should be tied just before the eye of the cable and positioned so that the eye of the cable is three meters above sea level. While the ship is in the port facility, the eye of the cable should be kept at this level all the time.

Realization of Emergency Departure

If all the above preparations are examined and deemed appropriate, the ship will be departing immediately.

Emergency Departure procedures will be provided by performing the following procedures in order. Close coordination and cooperation between Terminal, Ship and Port Authorities is required at each stage.

Emergency Departure Procedures are below:

- Giving off the alarm siren
- Giving information about the emergency via telephone, VHF,
- Making the first situation assessment between the Master of the ship and the port facility officer.
- Suspension of operation
- Initiating port facility and ship emergency plan measures
- The worsening of the current situation and the existence of the emergency departure conditions mentioned above.
-
- Evaluation of the situation between the ship master, the port facility officer, the port authority or the Harbor Master and the pilot.
- Deciding on emergency departure
- Informing the surrounding facilities and other ships
- Deploying of the tugboats for emergency departure around the ship, completion of their preparations and verification that they are ready
- Completion by the master of the ship of the preparations for the ship, communicating that it is ready.
- Approval of the opening of the release hooks by the authorized person.

Ship emergency departure should be considered as a last resort and departure hooks should not be released until all precautions are taken and the above conditions are met.

After Emergency Departure

Following shall be done after emergency departure:

- Backing up of the ship and deciding and declaration of the location it will be taken after the emergency departure.
- Transfer / mooring of the ship to the allocated area, accompanied by tugboats or with its own machinery
- Inspection by Port Management on the Port Facility and determining a possible damage or deficiency
- Evaluation of the time when the ship and port facility will be ready for cargo handling again.
- Exchanging any problems, if any, that occurred during the Emergency Departure.
- Agreement between the pilotage and tugboat organization and the shore facility authorities regarding fire, explosion and similar emergencies that may occur during loading/unloading.
- In case of emergency, in accordance with the protocol signed with the authorized company, tugboats with sufficient towing power and number equipped to fight fires according to the weather and sea conditions reach the scene as soon as possible in order to move the ship away from the facility and tow it to a safe point.

8.8 Procedures for handling and disposal of the damaged dangerous cargo and waste contaminated with dangerous cargo

The process described in Section 8.3 shall be applied in case of release of dangerous goods into the environment due to reasons such as deterioration of the package of the dangerous goods during handling in the field, or if the packages of dangerous goods to be handled from the container are damaged, Materials such as absorbent pads, etc., formed in this process are classified as hazardous waste and are evaluated within the scope of the Environmental Law No. 2872 and applicable regulations. The waste will be transported to the hazardous waste site after contacting the buyer of the relevant cargo and communicating that the waste will be disposed of. Licensed disposal companies are notified and the waste is released via MOTAT and notifications are made at the end of the year.

8.9 Emergency Drills and Recording Keeping

Drills;

In order to ensure preparedness for emergencies within the facility, the personnel in the emergency organization should be kept prepared for their duties through various trainings. Trainings should be carried out with the support of specialist organizations when necessary. In this context, the relevant personnel at the port received IMDG CODE training on Dangerous Goods and was certified. In order to test the adequacy of the emergency plans and to be prepared for real situations, the drills should be carried out and implemented according to the worst scenarios that may occur in the facility.

Drill Scenarios;

In the drill planning, the worst scenario is foreseen as a single event or a combination of events that the port may encounter. In line with the prepared scenarios, drills are implemented in the fastest and most effective way.

Emergency Drills to be carried out within the port facility;

They should be specified in the annual training plans of port.

It can be planned as a local or general response,

Safety, Spill etc. can be combined into drill scenarios,

Drills can be made with or without notice.

The drills are based on various emergency scenarios.

Drills can be made in practice, as well as in a desktop, seminar settings.

Different time, day, season and event scenarios are prepared for each drill.

8.10 Information about Fire Protection Systems

Emergency and fire equipment are as follows:

Fire Hydrants, Fire Extinguishers, Fire Cabinets and Fire Hoses, Field Fire Alarm Detectors, Electric and Diesel Fire Pumps

The fire inventory is the same as those specified in the Emergency Plan.

8.11 Procedures for Approval, Inspection, Testing, Maintenance and Keeping Fire Protection System Available for Use

Fire Water Tanks and Fire Water

In order to prevent algae and sludge formed at the bottom or side 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.

In case of rapid drops in the water level, the leakage points should be investigated and the faults should be rectified, if any, due to the possibility of leakage.

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

Fire Pumps

In addition to the planned maintenance, important points regarding the operation of fire pumps and the elimination of possible failures are listed below.

It should be checked that the thrust bolts of the packing 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 opening under the bearing console.

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

Make sure that the pump and 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.

Pump motors will draw more current than normal 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 different and appropriate time intervals according to the number of pumps and the amount of pumps to be activated at the same time, so that the pumps are activated sequentially.

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

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

The discharge pipes of the pumps should be equipped with a valve before and a check valve after the valve. If the check valve in the discharge pipe of the failed pump prevents the check valve from closing completely by jamming materials such as paper, garbage, stone pieces, moss and slime, some of the water pumped by the other pumps is pressed back into the pool while passing through these failed pumps and suction pipes. This fault, which restricts the required water flow in the event of a fire, should be eliminated. If a rotation is observed in the couplings of some of the failed 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.

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

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

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

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

Sprinkler Installation

The most important point to be considered and maintained with respect to the sprinkler installation is to prevent the sprinkler heads from clogging. To ensure this, the sprinkler should be operated in accordance with the standards/legislation and it should be ensured that it is in working order. Sufficient number of spare sprinkler heads should be kept in each facility, and in case of a failure, they should be replaced with new ones and the defective ones should be repaired and used as a backup.

Fire Hydrant Installation

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

Fire valves should be fault-free and leak-proof. Defective nozzles, valves, hoses will be promptly replaced with new ones, and repaired and used as a backup. 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, any failure and/or fault must be rectified promptly.

Working fire hoses should not be placed in cabinets when they are wet and contain water while the malfunctions detected following the drills are eliminated. Facilities should provide suitable hose hangers for the complete draining and drying of the water in the hoses, and should not put them back in place without making sure that the hose is thoroughly dry. If sea water has been pumped with hoses, they should first be washed with fresh water and dried in a cool-windy place.

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

All fire hydrants, hoses and nozzles are repaired by the responsible persons if any deficiencies or malfunctions are detected as a result of the control.

Portable Fire Extinguishers

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

All fire extinguishers are visually inspected and checked on a monthly basis. After the control, the extinguishers are marked. During the control, especially dry powder extinguishers shall be 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.

Fire extinguishers shall undergo a general maintenance checks once a year by the seller company, according to the TS ISO 11602-2 Fire Protection: Portable and Wheeled Fire Extinguishers standard. Fire extinguishers are tested by the relevant company at intervals not exceeding 10 years, and chemical powder is checked at the

end of the 4th year.

Freeze Protection

Protection of Generators

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.

Protection of Fire Water Pumps

Fire water pumps and suction pipes are always kept full of water. Therefore, the ambient temperature should not fall below +4C.

Protection of Fire Water Distribution Pipes

The exposed main and branch pipes should 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 Necessary Measures in Case of Unavailability of Fire Protection Systems.

Facility fire-fighting equipment are systems that back up each other and are installed as an alternative to the other.

In cases where the facility's own fire-fighting equipment does not work or is insufficient, the support of neighboring facilities, Fire Brigades and AFAD Units will be requested.

It is ensured that other dangerous and flammable materials/vehicles that are likely to be affected by the fire are removed from the area, if possible.

It may be necessary to make a protocol that specifies the conditions and scope of assistance and support.

The capacity of tugboats or marine vehicles with fire extinguishing features in the region should also be taken into account.

8.12 Other Risk Control Equipment

Other risk control equipment is specified in the emergency plan.

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	9. OCCUPATIONAL HEALTH AND SAFETY

9. OCCUPATIONAL HEALTH AND SAFETY

9.1 Occupational Health and Safety Measures

The Port Facility Management is obliged to take all necessary measures to prevent the employees from being affected by these substances when working with dangerous chemical substances, and, if it is not possible, to minimize this and to protect the employees from the dangers of these substances.

Risk Assessment

9.1.1.1 The Port Facility Management is under obligation to make a risk assessment in accordance with the provisions of the Occupational Health and Safety Risk Assessment Regulation (OJ 28512 - 29/12/2012) in order to identify whether there are dangerous chemicals available in the port facility and to determine the negative effects in terms of the health and safety of the employees in case of dangerous chemical substances.

9.1.1.2 In the risk assessment to be made for the works involving chemical substances, the following points shall particularly be considered:

9.1.1.2.1 Hazards and damages of the chemical substance in terms of health and safety.

9.1.1.2.2 Material safety data sheet (SDS) in Turkish to be obtained from the manufacturer, importer or seller.

9.1.1.2.3 Type, level and duration of exposure.

9.1.1.2.4 Amount of chemical substance, conditions of use and frequency of use.

9.1.1.2.5 Occupational exposure limit values and biological limit values given in the annexes of this Regulation.

9.1.1.2.6 The effect of preventive measures taken or to be taken.

9.1.1.2.7 Results of previous health surveillance, if any.

9.1.1.2.8 In works with more than one chemical substance, each of these substances and their interactions with each other.

9.1.1.3 Port Facility Management obtains additional information required for risk assessment from the supplier or other sources. This information also includes special risk assessments of chemicals, if any, included in the current legislation for users.

9.1.1.4 A new activity involving dangerous chemicals can only be started after taking all kinds of measures as determined by risk assessment.

9.1.1.5 Measures to be taken when working with dangerous chemical substances

9.1.1.5.1 Risks in terms of health and safety of employees working with hazardous chemical substances are mitigated or minimized by the following measures:

9.1.1.5.2 Appropriate arrangement and work organization shall be provided made at the port facility.

9.1.1.5.3 Working with hazardous chemicals is done with a minimum number of employees.

9.1.1.5.4 It is ensured that the amount of substances to which the workers will be exposed and the duration of exposure are as low as possible.

9.1.1.5.5 The amount of chemicals to be used in the port facility is kept to a minimum.

9.1.1.5.6 Workplace buildings and outbuildings are kept neat and clean at all times.

9.1.1.5.7 Appropriate and sufficient conditions are provided for the personal cleaning of the employees.

9.1.1.5.8 Necessary arrangements are made for the most appropriate processing, use, handling and storage of hazardous chemicals, waste and residues at the Port facility.

9.1.1.5.9 By applying the substitution method, non-hazardous or less dangerous chemicals are used instead of hazardous chemicals in terms of health and safety of employees. If the substitution method cannot be used due to the nature of the work, the risk is reduced by taking the following measures according to the result of the risk assessment and in order of priority:

9.1.1.5.10 Appropriate process and engineering control systems are selected and appropriate machinery, materials and equipment are used in working with hazardous chemicals, including maintenance and repair works that may pose a risk to the health and safety of employees, and taking into account technological developments.

9.1.1.5.11 In order to prevent the risk at its source, collective protection measures such as proper work organization and establishment of adequate ventilation systems are implemented.

9.1.1.5.12 In cases where the measures taken for the collective protection of employees from the negative effects of hazardous chemicals are not sufficient, personal protection methods are applied together with these measures.

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9.1.1.6 Adequate control, supervision and surveillance is provided to ensure the effectiveness and continuity of the measures taken.

9.1.1.7 The Port Facility Management ensures that the chemical substances that may pose a risk to the health of the employees are regularly measured and analyzed. These measurements are repeated whenever there is any change in the conditions that may affect the exposure of the workers to the chemical substances in the port facility. The measurement results are evaluated by taking into account the occupational exposure limit values specified in the annexes of this Regulation.

9.1.1.8 The Port Facility Management also considers the specified measurement results. In all cases where occupational exposure limit values are exceeded, the Port Facility Management takes protective and preventive measures to mitigate this situation as soon as possible.

9.1.1.9 Without prejudice to the provisions of the Regulation on the Protection of Employees from the Dangers of Explosive Environments published in the Official Gazette numbered 28633 and dated 30/4/2013, Port Facility Management shall take technical measures and makes organizational arrangements, commensurate with the nature of the work performed, including the processing, storage, transportation of these substances and the prevention of the contact of chemical substances that may affect each other, on the basis of the risk assessment results and risk prevention principles, in order to protect employees against the chemical and physical hazards presented by the chemical substances, in accordance with the following priority order:

9.1.1.9.1 At the port facility, dangerous concentrations of flammable and explosive substances and chemically unstable substances are prevented from being present in dangerous quantities. If this is not possible,

9.1.1.9.2 The presence of ignition sources that may cause fire or explosion in the port facility is prevented. Conditions that may cause harmful effects of chemically unstable substances and mixtures are eliminated. If this is not possible,

9.1.1.9.3 Necessary measures shall be taken to prevent or minimize the injury of employees in case of fire or explosion caused by flammable and/or explosive materials or from the harmful physical effects of chemically unstable substances and their mixtures.

9.1.1.10 The design, manufacture and supply of protective systems provided for the protection of work equipment and employees are carried out in accordance with the legislation in force in terms of health and safety. The Port Facility Management ensures that all equipment and protective systems to be used in explosive atmospheres comply with the provisions of the Regulation on Equipment and Protective Systems Used in Potentially Explosive Environments (94/9/AT) published in the Official Gazette numbered 26392 duplicate 4 and dated 30/12/2006.

9.1.1.11 Arrangements are made to reduce the effect of burst pressure.

9.1.1.12 It is ensured that the facility, machinery and equipment are kept under constant control.

9.1.1.13 In workplaces, minimum safety distances are observed when placing storage tanks with liquid oxygen, liquid argon and liquid nitrogen.

Emergencies

9.1.2.1 Without prejudice to the issues specified in the Regulation on Emergencies at Workplaces published in the Official Gazette numbered 28681 and dated 18/6/2013, Port Facility Management shall particularly consider the following issues in the emergency situations that may arise from dangerous chemicals at the port facility:

9.1.2.1.1 Preventive measures to reduce the negative effects of emergencies are taken immediately and employees are informed of the situation. Necessary work is carried out to ensure that the emergency situation returns to normal as soon as possible, and only employees assigned in emergencies for maintenance, repair and mandatory works and teams from outside the workplace are allowed to enter the affected area.

9.1.2.1.2 Persons who are allowed to enter the affected area are given appropriate personal protective equipment and special safety equipment and are provided to use them as long as the emergency continues. Persons without appropriate personal protective equipment and special safety equipment are not allowed to enter the affected area.

9.1.2.1.3 Information on hazardous chemicals and emergency response and evacuation procedures are available for use. Employees assigned in emergencies at the port facility and organizations operating in areas such as first aid, emergency medical response, rescue and firefighting outside the workplace are provided with easy access to this information and procedures. This information:

9. OCCUPATIONAL HEALTH AND SAFETY

9.1.2.1.3.1 The hazards, precautions to be taken and works to be done so that the employees assigned in emergencies at the port facility and the organizations operating in areas such as first aid, emergency medical response, rescue and fire-fighting outside the workplace can be prepared in advance and make appropriate response,

9.1.2.1.3.2 Information about special hazards and actions to be taken in an emergency;

Training and Information of Personnel

9.1.3.1 The Port Facility Management provides the training and information to the employees and representatives, without prejudice to the issues specified in the Regulation on the Procedures and Principles of Occupational Health and Safety Training of Employees numbered 28648 and dated 15/5/2013. These trainings and briefings include the following, in particular:

9.1.3.1.1 Information obtained as a result of risk assessment.

9.1.3.1.2 Information on the identification of dangerous chemicals, health and safety risks, occupational diseases, occupational exposure limit values and other legal regulations regarding hazardous chemical substances that are present or that may arise in the port facility.

9.1.3.1.3 Necessary measures and actions to be taken so that employees do not endanger themselves and other employees.

9.1.3.1.4 Information on material safety data sheets in Turkish provided from the supplier for hazardous chemicals.

9.1.3.1.5 Information on labeling/locking in accordance with the legislation on sections, containers, piping and similar installations containing hazardous chemicals.

9.1.3.2 The training and information to be given to the employees or their representatives in working with hazardous chemicals will be in the form of training supported by verbal instructions and written materials, depending on the degree and nature of the risk arising as a result of the risk assessment. This information is updated according to changing conditions.

9.2 Information about Personal Protective Equipment and Procedures for how to use them

Requirements are listed in the 4.4. Personal Protectors heading of TL.01 Occupational Health and Safety Instruction on Personal Protective Equipment. In addition, extensive information has been given about PPE, starting from the 6th page of the Occupational Health and Safety Information and Practice Handbook.

TL.01 Occupational Health and Safety Instruction, **4.4. Personal Protective Safety Materials** states: As Personal Protective Equipment (PPE), it is obligatory to use safety glasses, steel-toed shoes, phosphorescent vest, and hard hat.

9.2.1. Helmet; a hard hat that protects the head from impacts. Helmets should be worn during all work in the field.

9.2.2. Safety Goggles; different types of glasses made to protect the eyes of the wearer in every situation and according to the nature of the job.

9.2.3. Face shield; a transparent mask that is fixed to the head with an adjustable band, can be lowered and raised in an articulated manner and partially or completely protects the face against external influences. It should be used for all grinding and cutting jobs.

9.2.4. Filtered dust mask; a mask that gives the dusty air around by passing it through a filter

9.2.5. Safety gloves; a gloves made of various materials that prevents the hands from being burned, cut and protected from chemical effects.

9.2.6. Safety harness; an equipment that prevents falling to the ground while working at height. Safety harness consists of belts and hooks to be attached to the body. Seat harness will definitely be used from heights that cannot be climbed on foot from the ground.

	GÜBRETAS İSKENDERUN FACILITIES DANGEROUS CARGO HANDLING GUIDE (TYER)
	9. OCCUPATIONAL HEALTH AND SAFETY

Personal Protective Equipment of Response Teams

Level A

Area of use : Incidents requiring high level of protection of skin, respiratory, eye, etc. – Gas-tight.

Positive pressure Scuba Breathing apparatus – SCBA

Fully protective clothing against chemicals

Gloves, chemical resistant inside

Gloves, outside chemical resistant

Boots, chemical resistant, steel heels

Underwear, cotton, long sleeves and long legs

Hard Hat

Long sleeve

Two-way radio communication (Non-Sparking)

Level B

Minimum level required for access to incident site, but rather for spillage of liquids.

Positive pressure Scuba Breathing apparatus – SCBA

Chemical protective clothing

Gloves, chemical resistant inside

Gloves, outside chemical resistant

Boots, chemical resistant, steel heels

Hard Hat

Two-way radio communication (Non-Sparking)

Face Mask

Level C

It is used when the chemical in the environment is known, the concentration is determined, and it is decided that the skin and eyes will not be harmed. However, continuous measurement should be made.

→Full mask, air-purifying filter

→ Protective clothing against chemicals

→Gloves, chemical resistant inside

→Gloves, chemical resistant outside

→Boots or boots, chemical resistant, steel heels

→Hard Hat

→Two-way radio communication (Non-Sparking)

→Face Mask

Level D

Safety clothing (emergency responders). Requires long sleeves and safety shoes/boots. Other Personal protective equipment varies according to the situation. If there will be a problem in contact with the skin, such clothes should not be entered into the scene.

9.3. ENCLOSED AREA ACCESS PERMISSION MEASURES AND PROCEDURES

In order to be able to work in enclosed areas, first of all, the requirements of TL.01 Occupational Health and Safety Instruction in 4.4.4.Safety at Entry to enclosed areas should be met. In addition, TL.YRM.25 Safety Precautions Instruction to be Applied Before, During and After Cleaning, Maintenance and Repair Works in Enclosed Containers and Areas will be followed. Requirements of TL.01 Occupational Health and Safety Instruction under 4.4.4.Safety at Access to Enclosed Areas:

Do not start work without obtaining permission to access enclosed area. (FR.094 Work Permit Form)

9. OCCUPATIONAL HEALTH AND SAFETY

- While the personnel is working in the enclosed container, a supervisor will wait in front of the entrance and constantly monitor the status of the working personnel.
- If the supervising personnel sees a change in the situation of the personnel working in the enclosed container, they will never enter the container and will immediately inform their superiors.
- When entering the enclosed container; safety belt, safety rope and necessary protective equipment will be used.
- Necessary safety measures will be taken to avoid harming the workers inside the enclosed container during loading or unloading of materials with a rope.
- If there is an electrically operated mechanical system such as a mixer in a enclosed container, the electricity of the motor will be cut off and the switch will be locked.
- If the manholes, manholes, pipe trenches, etc., where the personnel work, have to be left without a watchman, they will be covered or guarded with barriers.

SECTION APPENDICES

Occupational Health and Safety Information and Implementation Handbook

TL.YRM.15 Personal Protective Instructions for Use

FR.YRM.34 Warehouse PPE Delivery Form

TL.01 Occupational Health and Safety Instruction

TL.YRM.25 Instruction for Safety Measures to be Applied Before, During and After Cleaning, Maintenance and Repair Works in Enclosed Containers and Areas

PR.YRM.01 Work Permit Procedure

FR.094 Work Permit Form

"Occupational Health and Safety Handbook" will also be distributed while handbooks are distributed to personnel handling dangerous goods.

	GÜBRETAS İSKENDERUN FACILITIES DANGEROUS CARGO HANDLING GUIDE (TYER)
	10. OTHER MATTERS, APPENDICES

10. OTHER MATTERS

10.1 Dangerous Cargo Compliance Document

GÜBRETAS İskenderun Port has a Dangerous Goods Compliance Certificate No DGM.252014.TYUB.585.

10.2 Duties of Dangerous Goods Safety Advisor

As dangerous goods are handled in our facility, we receive services from the Dangerous Goods Safety Advisory Firm authorized by the Ministry within the scope of the IMDG Code. Responsibilities and duties are specified in the service contract and listed as follows:

The main task of the advisor is to facilitate the management of these activities in the safest way, by determining and using the most appropriate tools and activities within the scope of the requirements of the work, directly reporting to the manager of the facility.

A TMGD consultant mainly performs the following duties:

To monitor compliance with the provisions of international agreements and conventions (ADR/IMDG) in the transport of dangerous goods.

To provide suggestions to the management regarding the transportation of dangerous goods in accordance with the provisions of ADR/RID.

To determine the dangerous goods to be transported and to determine the requirements and compliance procedures in the IMDG/ADR regarding this substance.

To guide management the business on procurement of the handling vehicles to be used in the handling of dangerous goods.

To determine the procedures related to the control of the equipment used in the handling, loading and unloading of dangerous goods.

To provide, or ensure provision of, training to the employees of the facility about the national and international legislation and the amendments, and to keep the records of training.

To determine the emergency procedures to be applied in case of an accident or a possible event that will affect the safety during the handling, loading or unloading of dangerous goods,

To have the employees conduct exercises related to these periodically and keep their records.

	GÜBRETAS İSKENDERUN FACILITIES DANGEROUS CARGO HANDLING GUIDE (TYER)
	10. OTHER MATTERS, APPENDICES

To ensure that measures are taken to prevent the reoccurrence of accidents or serious violations.

To ensure that the special conditions stipulated by the legislation on the transport of dangerous goods are taken into account in the selection and employment of subcontractors or third parties.

To ensure that employees involved in the handling, loading or unloading of dangerous goods have knowledge of operational procedures and instructions.

To take measures to raise the awareness of the relevant personnel in order to be prepared for possible risks in the handling, loading or unloading of dangerous goods.

To create instructions for keeping the documents and safety equipment that should be in the vehicle during handling according to the class of the dangerous cargo.

To record all activities, including training, audit and control on activities, to keep these records for 5 years and to submit them to the Authority if requested.

To ensure the implementation of the plan by preparing the facility safety plan specified in ADR/RID Section 1.10.3.2.

In accordance with the provisions of the load loaded on the transport vehicle (IMDG/ADR), to determine procedures for work and operations related to packaging, labeling, marking and loading.

To keep records on the inspections to be carried out in relation to his duties in the facility, by specifying the date and time of the audited persons and works.

In case of any danger, to suspend the work until the danger is eliminated, to restart the work with its own approval when the danger is eliminated, and to notify the management or the competent authorities in writing of any stage in the process until the danger is eliminated.

TMGD, in the event that an accident that occurs during transportation, loading or unloading in the enterprise for which it is responsible causes damage to life, property and the environment; collects information about the accident and gives an accident report to the enterprise management or the Management. This report does not replace the report that should be written by the facility management within the scope of international or national legislation.

Further, Dangerous Goods Safety Advisor

In addition to the IMDG Code, within the scope of dangerous goods handled at the shore facility, they have knowledge about the IBC Code, IGC Code, IMSBC Code and MARPOL 73/78 applications and generally about the dangerous goods activities of the shore facility.

Advisor inspects whether the dangerous goods handled at the shore facility are handled in accordance with the rules and informs the shore facility.

	GÜBRETAS İSKENDERUN FACILITIES DANGEROUS CARGO HANDLING GUIDE (TYER)
	10. OTHER MATTERS, APPENDICES

Advisor prepares a quarterly report in the format determined by the Management regarding the responsibilities of the shore facility in the Regulation and the Directive and notifies this report to the Management.

Advisor is present at the shore facility and actively participates in the inspections during the PIU inspections carried out within the scope of Article 7 of the Directive.

TMGD, working/serving at the shore facility, prepares the Dangerous Goods Handling Guide of the shore facility together with the shore facility and checks its accuracy.

10.3 Matters relating to carriers of the dangerous cargo that will arrive at or depart from shore facility by road (Mandatory documents that road vehicles carrying dangerous cargo should carry when entering or leaving the port or shore facility site, Mandatory equipment and devices that these vehicles should have, Speed limits in the port site, etc. matters)

While road vehicles carrying dangerous goods are entering or leaving the port area;

- Transport document specified in ADR 5.4.1
- Dangerous goods transport driver training certificate (SRC 5)
- Official identity document (Driver's license or passport) for each personnel on duty in the vehicle.
- Written instruction prepared to be given to the driver in accordance with ADR 5.4.3
- Multi-modal dangerous goods transport form in ADR 5.4.5 for dangerous goods transported in more than one mode
- Valid ADR certificate of conformity for vehicles
- Photocopy of the transport permit obtained from the competent authorities determined within the scope of this regulation for the transportation of dangerous goods within the scope of class 1 defined in ADR.
- Port Management is obliged to keep the dangerous goods and dangerous waste compulsory liability insurance policy documents belonging to the vehicles carrying dangerous goods.
- Personal and protective equipment to be used in an emergency specific to the load carried in the vehicle

The procedures, instructions and forms regarding the vehicles arriving/leaving the facility by road are as follows:

- PLN.YRM.05 ADR Safety Plan
- TL.YRM.91 Instruction for Control of Equipment Used in Transport, Loading and Unloading of Dangerous Goods
- UN 1824 Sodium Hydroxide Solution Vehicle Filling and Output Control Form

Speed limits of vehicles in the facility as stated in TL.01 Occupational Health and Safety Instruction 4.2.9. Driving Rules;

- Vehicles will be kept clean and tidy. The driver of the vehicle should take the vehicle clean and orderly, given to the use of other personnel. Otherwise, he/she will ensure cleaning and orderliness of the vehicle by his/her own means.

10. OTHER MATTERS, APPENDICES

- Speed limit at the Factory site of Gübre Fabrikaları T.A.Ş. is 20 km/h.
- Seat belts will strictly be fastened while driving.
- It is forbidden to drink or eat while driving.
- It is necessary to keep the headlights on during the day and night while on the move.
- It is strictly forbidden to smoke inside the vehicle,
- Personnel driving vehicles should comply with all instructions.
- The speed limits of the construction machinery in the field are 10 km/h.

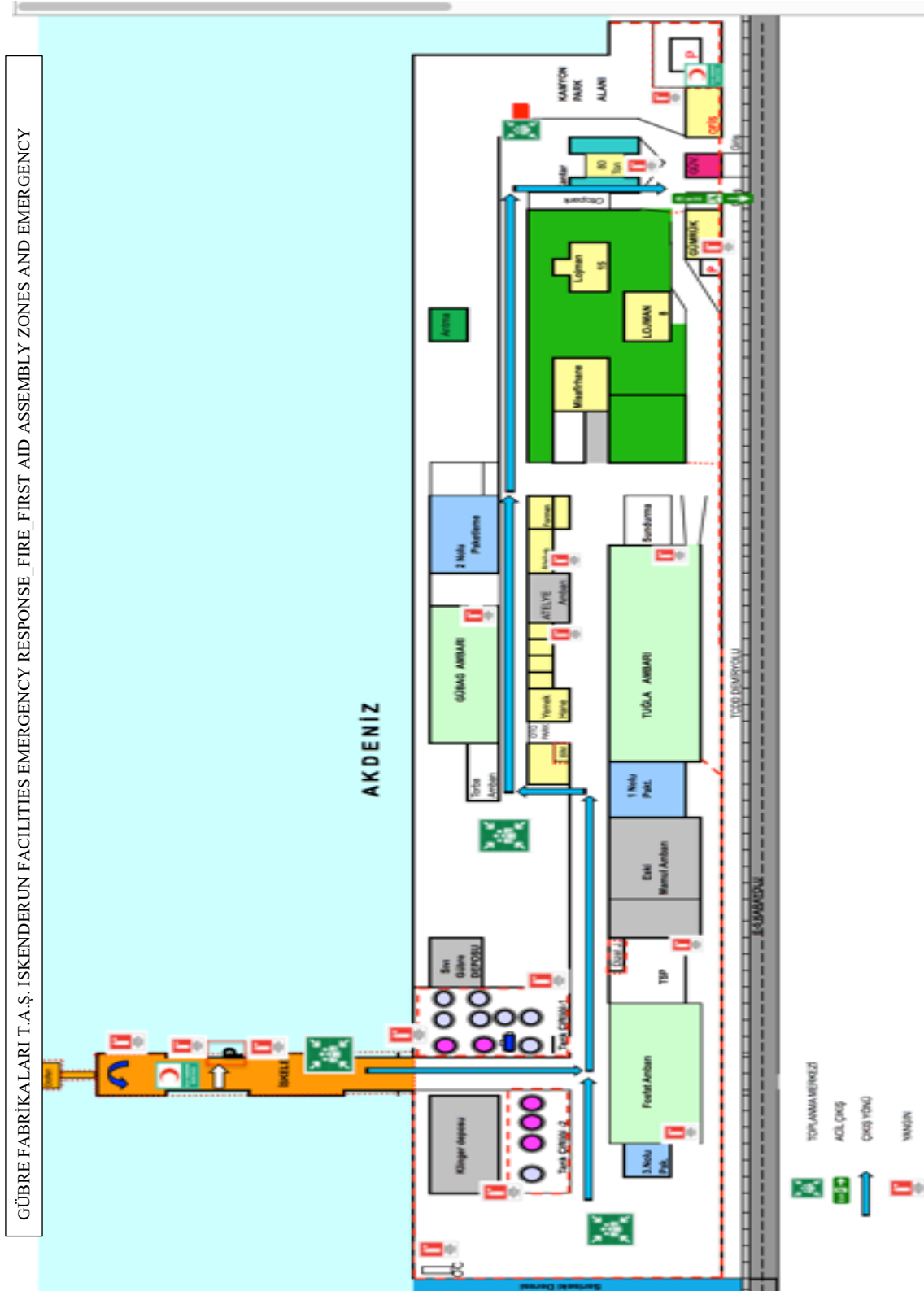
10.4 Matters relating to the carriers of the dangerous cargo that will arrive at or depart from shore facility by sea (Day/night signals that ships and sea vehicles carrying dangerous cargo will send at port or shore facility, Hot and Cold Work Methods at Ships, etc. matters)

Ships shall receive approval from the port facility first, and then from the port authority, with the appropriate form of the ministry, and from the port facility, provided that they take safety measures, through their agencies with the appropriate form of the ministry.

11. APPENDICES

- 1- General Layout Plan of Shore Facility
- 2- Photographs Showing General View of the Shore Facility
- 3- Emergency Contacts and Contact Details
- 4- General Layout Plans of Dangerous Cargo Handling Areas
- 5- Fire Plans of Dangerous Cargo Handling Areas
- 6- General Fire Plan of the Facility
- 7- Emergency Plan
- 8- Emergency Assembly Zones Plan
- 9- Emergency Management Chart
- 10- Dangerous Cargo Guide
- 11- Leakage Areas and Equipment for CTU and Packages, Entry/Exit Drawings
- 12- Port Service Ships Inventory
- 13- Administrative Borders of Port Authority, Sea Coordinates of the Mooring Locations and Harbor Pilot Embarking/Disembarking Points
- 14- Emergency Equipment of Shore Facility for Sea Pollution
- 15- Personal Protective Equipment (PPE) Use Map
- 16- Dangerous Cargo Incidents Report Form
- 17- Inspection Results Report Form for Dangerous Cargo Transport Units (CTUs)
- 18- Other Appendices That are Found Necessary
- 19- Dangerous Cargo Handling

11.1 General Layout Plan of Shore Facility



11.2 Photographs Showing General View of the Shore Facility



11.3 Emergency Contacts and Contact Details

GÜBRE FABRİKALARI T.A.Ş. İSKENDERUN FACILITIES DIRECTORATE

PHONE : 0.326.6562288

FAX : 0.326.6562280

DISTRICT MUNICIPALITY (ISKENDERUN): 0326 614 16 66

DISTRICT POLICE DEPARTMENT (ISKENDERUN): 0326 615 63 63--155

DISTRICT PUBLIC HOSPITAL (ISKENDERUN): 0326 615 37 50

DISTRIT FIRE DEPARTMENT (ISKENDERUN : 0326 614 10 00 --110

DISTRICT POLICE DEPARTMENT 0326 614 21 23

TAEK EMERGENCY REPORT HOTLINE: 172

TAEK OFFICE : 0 312 287 57 23 – 287 52 46

RSGD OFFICE : 0 312 285 96 68

TAEK HOTLINE: 0 312 287 15 29 – 287 20 71

TAEK FAX: 0 312 285 42 84 – 287 87 61

11.4 General Layout Plans of Dangerous Cargo Handling Areas

As shown in the General Layout plan.

11.5 Fire Plans of Dangerous Cargo Handling Areas

As shown in the General Layout plan.

11.6 General Fire Plan of the Facility

As shown in the General Layout plan.

11.7 Emergency Plan

It is kept as a separate document at the port facility and is renewed at least every 3 years. Emergency Plan details are as follows.

Emergency procedures,

Emergency response organization chart

Name, title and contact details of the person/organization that prepared the emergency procedures,

Name, title and contact information, duties and responsibilities of the authorized person appointed to coordinate emergency response activities that may occur at the shore facility,

Name, title and contact information, duties and responsibilities of the facility officer who will contact the relevant Port Authority and other relevant institutions and organizations in case of emergency,

The names and duties of the teams designated for emergency response, and the names, duties and responsibilities of the personnel assigned to these teams,

The nature and capacities of the resources, equipment and devices to be used by the shore facility for emergency response,

Measures to be taken and actions to be taken in order to control the serious conditions that can be foreseen to cause emergencies and to minimize the negative effects that may arise from them, and the existing facilities, capabilities and capacity of the facility,

In case of an emergency, the nature of the precautions and warnings to be taken in order to prevent or minimize the possible risks to the persons in the shore facility and the methods of announcement, and the arrangements regarding the actions of the persons in the face of a warning,

In case of emergency, the first notification procedures to be made to the Port Authority, the content of the information to be provided in this notification, and the procedures for providing updates to the Port Authority as new information is obtained,

Trainings required for the personnel to be assigned in emergency situations,

Coordination methods to be provided with emergency teams outside the shore facility in emergencies,

The nature and period of the drills for emergencies,

Arrangements for providing support for measures taken outside the shore facility in emergencies.

Emergency plans should cover each of the following emergencies:

a) Facility, equipment and site fires,

b) Cargo fires belonging to each dangerous cargo class and sub-hazard classes allowed to be handled in the port,

c) Ship fires,

ç) Explosion,

d) Accidental death and serious injury,

e) Natural disasters such as earthquakes, floods, landslides, tsunami waves,

f) Adverse weather conditions such as very strong winds, storms, excessive snow or icing,

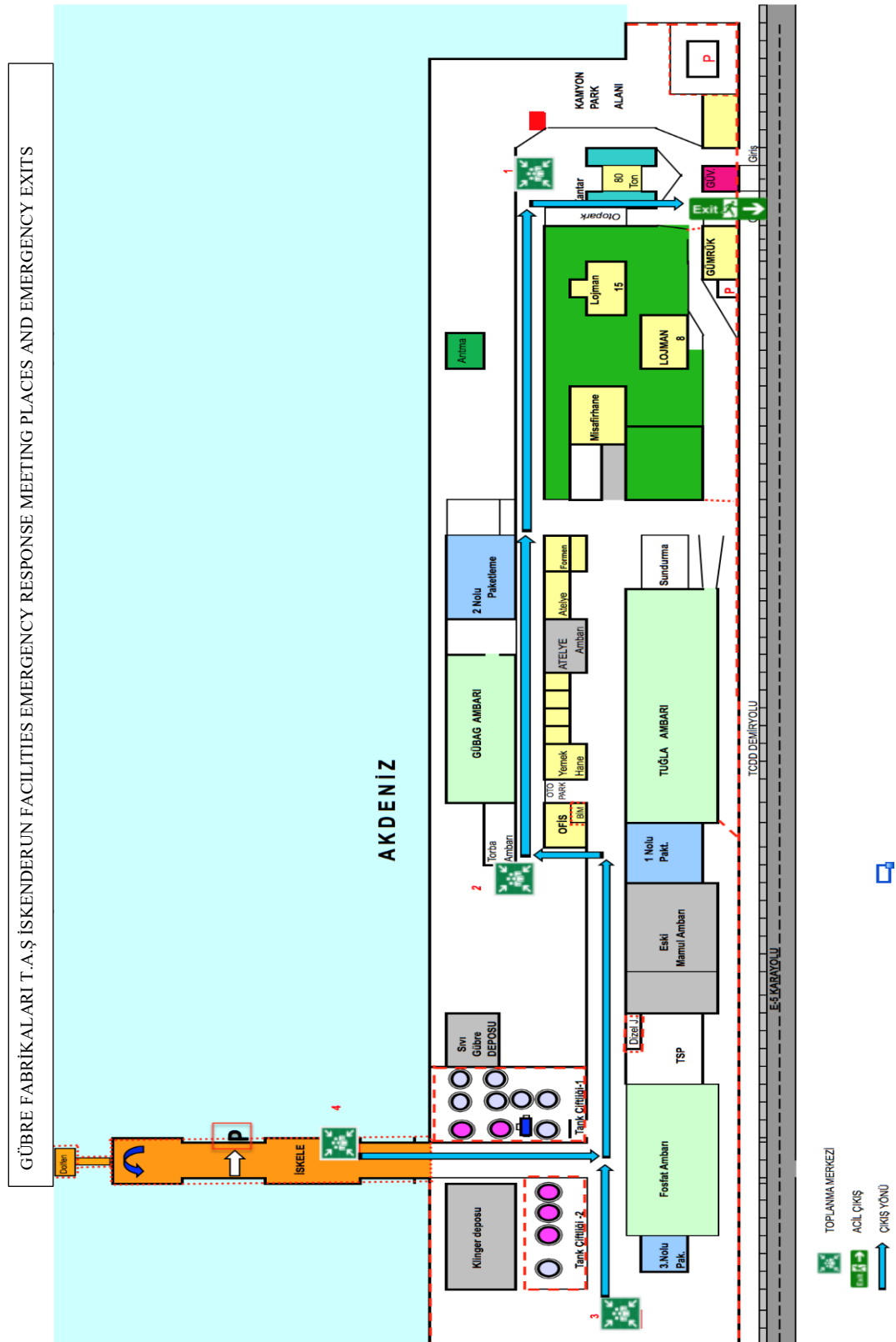
g) Leakage, flow or spillage of dangerous goods belonging to each hazard class or sub-hazard classes allowed to be handled at the port,

ğ) Marine pollution (for example: oil/fuel leakage or spilling/falling of dangerous cargo or environmentally harmful substances into the sea),

h) Gas leak,

i) Power outage.

11.8 Emergency Assembly Zones Plan



11.9 Emergency Management Chart

11.10 Dangerous Cargo Handbook

11.11 Leakage Areas and Equipment for CTU and Packages, Entry/Exit Drawings

Shown in the layout plan.

11.12 Port Service Ships Inventory

Ships are outsourced from a 3rd party company.

11.13 Administrative Borders of Port Authority, Sea Coordinates of the Mooring Locations and Harbor Pilot Embarking/Disembarking Points

The port administrative area of Iskenderun Port Authority is the sea and shore area, which is in the east of the line drawn from coordinate (a) to the true south (180°) and bounded by the Turkish territorial waters adjacent to this area.

- a) 36° 25' 15" N – 035° 35' 57" E
- b) 36° 49' 48" N – 036° 10' 00" E (Deliçay)

B) Mooring areas

a) South mooring area The mooring area for ships not carrying dangerous goods and military ships is the sea area enclosed by the following coordinates.

- 1) 36° 36' 30" N – 036° 08' 30" E
- 2) 36° 36' 30" N – 036° 07' 00" E
- 3) 36° 38' 00" N – 036° 07' 00" E
- 4) 36° 38' 00" N – 036° 08' 30" E

b) Mooring area for dangerous cargo ships The mooring area for ships carrying dangerous goods, nuclear powered military ships, ships to be quarantined and ships to be degassed is the sea area enclosed by the following coordinates.

- 1) 36° 37' 21" N – 036° 10' 30" E
- 2) 36° 37' 21" N – 036° 09' 00" E
- 3) 36° 38' 00" N – 036° 09' 00" E
- 4) 36° 38' 00" N – 036° 10' 30" E

c) East mooring area: The mooring area for ships not carrying dangerous goods and military ships is the sea area enclosed by the following coordinates.

- 1) 36° 40' 00" N – 036° 10' 30" E
- 2) 36° 40' 00" N – 036° 09' 00" E
- 3) 36° 42' 00" N – 036° 08' 00" E
- 4) 36° 42' 00" N – 036° 09' 30" E

ç) North mooring area: The mooring area for ships not carrying dangerous goods and military ships is the sea area enclosed by the following coordinates.

- 1) 36° 43' 30" N – 036° 09' 00" E
- 2) 36° 43' 30" N – 036° 07' 30" E
- 3) 36° 46' 00" N – 036° 07' 30" E
- 4) 36° 46' 00" N – 036° 09' 00" E

C) Harbor Pilot Embarking/Disembarking Points

- 1) 36° 36' 48" N – 036° 10' 42" E (South)
- 2) 36° 40' 42" N – 036° 10' 30" E (East)
- 3) 36° 44' 00" N – 036° 09' 30" E (North)

11.14 Emergency Equipment of Shore Facility for Sea Pollution

As specified in the Approved Marine Pollution Emergency Response Plan.

11.15 Personal Protective Equipment (PPE) Use Map

PERSONAL PROTECTIVE EQUIPMENT SELECTED FOR SPECIFIC LOCATIONS

PPE TYPES TO BE USED

1. Hard Hat
2. Steel toe boots
3. Reflective safety clothing
4. Reflective vest

PPE TYPES TO BE USED ABOARD AND ON THE QUAY

1. Hard Hat
2. Steel toe and non-slip sole safety boots
3. Reflective safety clothing
4. Reflective vest
5. Safety Gloves
6. Parachute Type Safety Belt

TYPES OF PPE TO BE USED IN MAINTENANCE AND REPAIR OPERATIONS

1. Hard Hat
2. Steel toe boots
3. Reflective safety clothing
4. Reflective vest
5. Safety goggles
6. Dust mask
7. Metal gloves
8. Parachute type safety belt

TYPES OF PPE TO BE USED IN WELDING OPERATIONS

1. Welder mask
2. Welder spot goggles
3. Welder fireproof safety clothes
4. Welder fireproof safety gloves
5. Welder fireproof laceless steel toe boots

TYPES OF PPE TO BE USED IN ELECTRICAL OPERATIONS

1. Hard-toed electrician safety shoes with insulating soles
2. Insulating glove
3. Electrician Helmet
4. Reflective safety clothing
5. Reflective vest

TYPES OF PPE TO BE USED IN HANDLING OPERATIONS

1. Hard Hat
2. Steel toe boots
3. Reflective safety clothing
4. Reflective vest
5. Gloves suitable for the MSDS form of the material
6. Mask suitable for the MSDS form of the material
7. Safety goggles suitable for the MSDS form of the material

TYPES OF PPE TO BE USED IN WASTE STORAGE

1. Hard Hat
2. Steel toe boots
3. Reflective safety clothing
4. Reflective vest
5. Safety Gloves
6. Chemical resistant safety gloves
7. Safety Goggles

11.16 Dangerous Cargo Incidents Report Form

Number - Date		
Company / Authority		
Sender		CONTACT DETAILS
Duly Action		

PORT FACILITY
"DANGEROUS GOODS INCIDENT NOTIFICATION"
DATE:

1. Time, day and date where the accident occurred,

2. If known, how the accident occurred and the reason,

3. The place where the accident occurred (shore facility and/or ship), its position and area of influence, ç) Information, if any, of the ship involved in the accident (name, flag, IMO number, owner, operator, cargo and quantity, name of the master and similar information),

4. Meteorological conditions,

5. UN number of the dangerous substance, proper shipping 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,
Marking and labelling details of the dangerous substance,
The characteristics and number of the package, cargo transport unit and container in which the dangerous substance is transported, if any,
Manufacturer, consigner, carrier and recipient of dangerous goods,

6. The extent of the damage/pollution,

7. Number of casualties (if any),

8. Emergency Response Applied,

9. From which organizations help is requested,

10. Other ships or neighboring facilities that may be affected by the accident,

PREPARED BY:

Name-Surname:
Position:
Signature :

11.17 Inspection Results Report Form for Dangerous Cargo Transport Units (CTUs)

Year/Period	 /	Number	Percent
Packages inspected:			
Defective packages:			
Total			
Loaded in domestic country			
Loaded overseas			
Defects:			
Documentation:			
Dangerous Cargo Declaration			
Container/Vehicle Packaging Certificate			
Placarding and marking			
Container Security Convention approval plate			
Serious structural defects			
Land tankers connection attachments			
Portable tanks and land tankers (<i>improper or damaged</i>)			
Labelling (for packages)			
Packaging (<i>improper or damaged</i>)			
Segregation of Cargo			
Stowage / Fastening of the Inner Package			

11.18 Other Appendices Found Necessary

Accident Prevention Policy

As Gübretaş management, we are aware that the operations carried out in our port have the potential to cause accidents due to their nature. However, we believe that all accidents can be prevented. For this reason, we are committed to managing the operations in the best way to prevent accidents and to protect employees, subcontractors, visitors, neighbors and the environment at the highest level. In line with Gübretaş Quality Management Systems, we, as Gübretaş İskenderun Port and personnel, in order to prevent accidents and reduce their effects, are committed to:

- take high-level safety measures for people and the environment around the port facility and provide all necessary resources for this purpose.
 - carry out a risk assessment based on quantitative analysis of ordinary and extraordinary operations in order to identify and evaluate accidents and keep these assessments up-to-date.
 - make arrangements regarding the identified risks, including maintenance, repair and temporary stops, and preparing the necessary procedures.
 - provide the necessary support to follow the technological developments and continuously improve the security measures in the facilities in order to prevent accidents and reduce their effects.
 - make necessary arrangements and controls for the new facility and process design together with the planned changes, and make risk assessments and evaluate their acceptability before they are carried out.
 - identify emergencies that can be detected in advance with systematic analysis, preparation of emergency plans for these emergencies and their regular inspection and review in exercises
 - monitor the performance of the system within the framework of procedures in order to evaluate the compliance with the targets determined by the Quality Management Systems, and investigate the corrective actions in case of non-compliance.
 - Periodically and systematically evaluate the effectiveness and suitability of Quality Management Systems, documenting it, review it as senior management, and support the continuous improvement of Quality Management Systems.
 - assign personnel with appropriate knowledge, skills, training and experience for positions that will affect operational business processes, safety and security within the organization,
 - ensure the continuous improvement of our personnel by providing trainings,
 - adhere to national and international laws, regulations, regulations and standards
-
- ensure the health and safety of employees, contractors, visitors and neighbors and protecting the environment by systematically eliminating their effects and prevent accidents by investigating potential non-compliances with the policy and taking the necessary measures.

11.19 Dangerous Cargo Handling Guide Additional Cargo Notification (When necessary)

The cargo notification that is not specified in the current Dangerous Goods Guide of the facility and is planned to be handled at the facility is made to the relevant Port Authority by filling out the form below. The shore facility is under obligation to demonstrate that the equipment to be found in the facility is available, that all necessary precautions such as first aid, fire, safety, etc. have been taken, and that the necessary updates have been made in the Dangerous Goods Handling Guide and other procedures, according to the code to which the cargo is subject and the attached safety data sheet.

Proper shipping name	
UN Number and Groups in Class ID/Characteristic table, if any	

The type of cargo and the code that apply to it	Dangerous Liquid Bulk Cargoes (Oil and Oil Derivatives-MARPOL Annex-1)	
	Dangerous Liquid Bulk Cargoes (Chemical and Similar-IBC Code)	
	Dangerous Liquid Bulk Cargoes (Liquefied Gas-IGC Code)	
	Packaged Dangerous Goods (IMDG Code)	
	Dangerous Solid Bulk Cargoes (IMSBC Code)	

Appendix: Safety Data Sheet (SDS)

Dangerous Goods Safety Advisor

Authorized Officer of Shore Facility

Name/Surname/Signature

Name/Surname/Signature