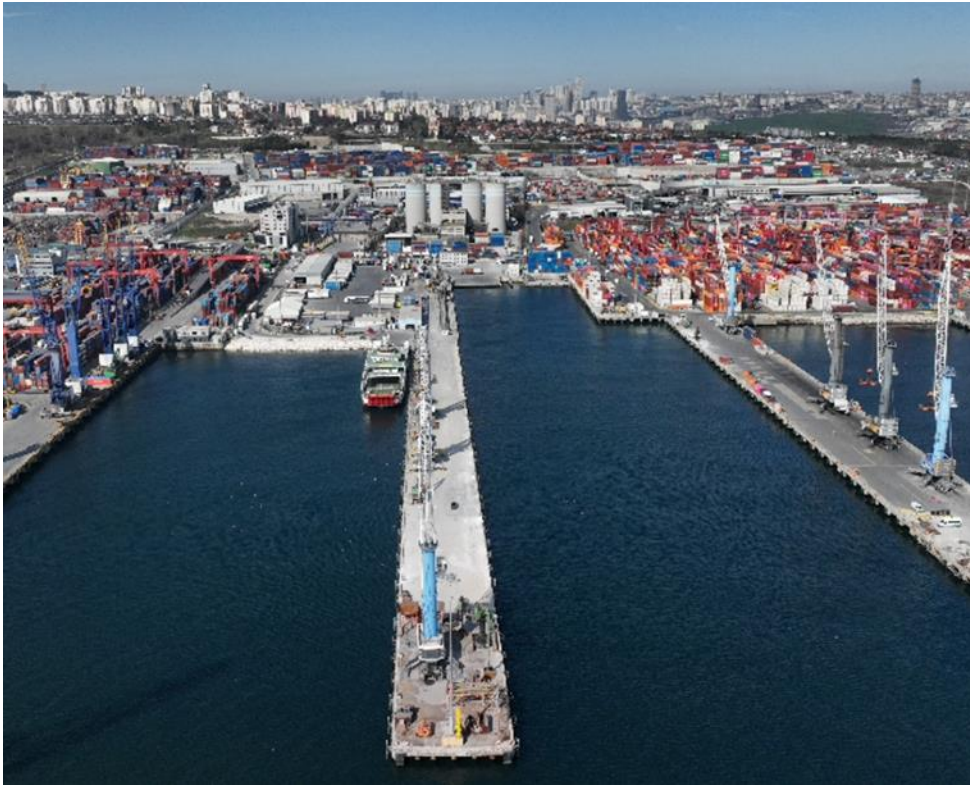




**AKÇANSA AMBARLI PORT
DANGEROUS CARGO HANDLING GUIDE**



PREPARATION DATE:26.09.2022

**IBRAHIM ANIL ZANA
OPERATIONS MANAGER**

SIGNATURE SEAL

DANGEROUS CARGO HANDLING

REVISION PAGE

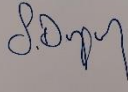
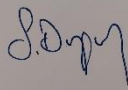
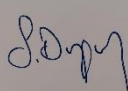
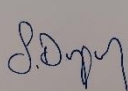
Seq uen ce No	Revision No.	Content of the Revision	Revision Date	Revisionist's	
				Name & Surname	Signatur e
1	-	Initial publishing	26/09/2022	Muammer KIRMIZI	
2	001	TMGD information has been revised in the Facility Information Form.	27/09/2022	Muammer KIRMIZI	
3	002	Change of field of activity	17/09/2025	Savaş DÜZGÜN TMGD	
4	003	Regulatory scan	16/10/2025	Savaş DÜZGÜN TMGD	
5	004	Property information form update	15/12/2025	Savaş DÜZGÜN TMGD	
6	005	Review of areas of activity	08/01/2026	Savaş DÜZGÜN TMGD	
7					
8					
9					
10					
11					
12					
13					

Table1.1 Revision Table

DANGEROUS CARGO HANDLING

TABLE OF CONTENTS

REVISION PAGE	2
TABLE OF CONTENTS	3
FIGURES AND TABLES	9
ECLAIR.....	10
ABBREVIATIONS.....	11
DEFINITIONS	12
PRESENTATION	15
1. ENTRANCE	16
1.1. Facility Information Form	16
1.2. Loading/discharge, handling and storage procedures for dangerous goods handled and temporarily stored at the shore facility	20
1.2.1. IMDG	20
1.2.1.1. Procedure for Safe Handling of Packaged Dangerous Goods and Ro-Ro Activities.....	21
1.2.1.1.1. Purpose	21
1.2.1.1.2. Operation.....	21
1.2.1.1.3. Stacking & Storage.....	25
1.2.1.1.4. Emergency	25
1.2.1.2. Ro-Ro Transportation	26
1.2.1.2.1. Security in Ro-Ro Transportation.....	26
1.2.2. IMSBC	27
1.2.2.1. General loading, handling and unloading precautions	27
1.2.2.2. Ship and personnel security.....	28
1.2.2.3. Shipping information.....	29
1.2.2.4. IMSBC Code dangerous goods list	31
1.2.2.5. Procedure for Safe Handling of Hazardous Solid Bulk Cargo.....	33
1.2.1.5.1. Purpose	33
1.2.1.5.2. General	33
1.2.1.5.3. Operation.....	33
1.2.1.5.4. Security	34
1.2.3. Scrap Loads.....	35
1.2.3.1. Procedure for the Safe Handling of Scrap Cargo	36
1.2.3.1.1. Purpose	36
1.2.3.1.2. Necessity.....	36
1.2.3.1.3. Handling Operation	36

DANGEROUS CARGO HANDLING

2.	RESPONSIBILITIES	38
2.1.	<i>GENERAL RESPONSIBILITY (Regulation on the Carriage of Dangerous Goods by Sea and Loading Safety).....</i>	38
2.1.1.	They are obliged to take all necessary measures to carry out transportation in a safe, secure and environmentally friendly manner, to prevent accidents and to minimize damage as much as possible when an accident occurs.	38
2.1.2.	In case of emergencies such as fire, leakage and spill that occur during the transportation of dangerous goods, they benefit from the EmS Guide, which includes Emergency Response Methods and Emergency Schedules for Ships Carrying Dangerous Goods.	38
2.1.2.1.	<i>Special notes for classes of hazardous substances in fires</i>	39
2.1.2.1.1.	Class 2	39
2.1.2.1.2.	Class 3	39
2.1.2.1.3.	Class 4.1	39
2.1.2.1.4.	Class 4.2	40
2.1.2.1.6.	Class 4.3	40
2.1.2.1.7.	Class 5.1	40
2.1.2.1.8.	Class 5.2	41
2.1.2.1.9.	Class 6.1	41
2.1.2.1.10.	Class 8	41
2.1.2.1.11.	Class 9	41
2.1.2.1.12.	Marine pollutants	41
2.1.2.2.	<i>Special classes for dangerous goods in spills.....</i>	41
2.1.2.2.1.	Class 2	41
2.1.2.2.2.	Class 3	42
2.1.2.2.3.	Class 4.1	42
2.1.2.2.4.	Class 4.2	43
2.1.2.2.5.	Class 4.3	43
2.1.2.2.6.	Class 5.1	43
2.1.2.2.7.	Class 5.2	43
2.1.2.2.8.	Class 6.1	43
2.1.2.2.9.	Class 8	44
2.1.2.2.10.	Class 9	44
2.1.2.2.11.	Marine pollutants	44
2.1.3.	They benefit from the Medical First Aid Guide (MFG) in the annex of the IMDG Code in order to provide the necessary medical first aid to the people affected by the damages of dangerous loads and the health problems that occur as a result of accidents involving these loads.	44
2.2.	<i>Responsibilities of the cargo person</i>	44
2.3.	<i>Responsibilities of the carrier</i>	45
2.4.	<i>Responsibilities of the onshore facility operator</i>	45
2.5.	<i>Responsibilities of the ship's owner</i>	47
2.6.	<i>Education.....</i>	47
2.7.	LOADING SAFETY	48
2.8.	<i>Loads covered by the IMDG Code</i>	48
2.9.	<i>Weighing full containers.....</i>	49
3.	RULES AND PRECAUTIONS TO BE FOLLOWED/APPLIED BY THE COASTAL FACILITY	50

DANGEROUS CARGO HANDLING

3.1.	<i>Measures taken by the shore facility operator.....</i>	50
3.2.	<i>Loading protection</i>	52
3.3.	<i>Loads covered by the IMDG Code</i>	52
3.4.	<i>Payloads covered by the IMSBC Code.....</i>	53
3.5.	<i>Scrap loads</i>	53
4.	CLASSES, TRANSPORTATION, HANDLING/DISCHARGE, HANDLING, SORTING, STACKING AND STORAGE OF DANGEROUS GOODS	54
4.1.	<i>Dangerous Goods Classes</i>	54
	CLASSES.....	54
4.1.1.	CLASSIFICATION CODES	55
4.2.	<i>Packages and Packaging of Dangerous Goods.....</i>	62
4.2.1.	Package & Packaging Types	63
4.3.	<i>Plaques, plates, brands and labels for dangerous goods</i>	64
4.3.1.	Dangerous goods placards	64
4.3.2.	Dangerous Goods Plates	65
4.3.3.	Dangerous goods brands.....	67
4.3.4.	Dangerous goods labels	67
4.4.	<i>Dangerous goods markings and packing groups.....</i>	69
4.4.1.	Dangerous goods signs.....	69
4.4.2.	Packing assemblies of dangerous goods	69
4.5.	<i>PORT SEPARATION TABLES ACCORDING TO CLASSES OF HAZARDOUS SUBSTANCES</i>	70
4.5.1.	Segregation of dangerous goods on board	70
4.5.2.	Separation of dangerous cargo at the shore facility	71
4.6.	<i>Separation distances and terms of dangerous goods in warehouse warehouses</i>	71
5.	HANDBOOK ON HAZARDOUS CARGOES HANDLED AT SHORE FACILITY	72
6.	OPERATIONAL CONSIDERATIONS	73
6.1.	Procedures for the safe berthing, mooring, loading/unloading, sheltering or anchoring of ships carrying dangerous goods day and night	73
	PICK-UP AND DROP-OFF PLACE FROM THE PILOT CAPTAIN.....	74
6.2.	Safe docking and mooring of ships carrying dangerous cargo day and night, Procedures for loading/unloading, sheltering or mooring:	75
6.3.	Procedures regarding the additional measures to be taken according to seasonal conditions for the loading and unloading of dangerous goods:	75

DANGEROUS CARGO HANDLING

- 6.4. Procedures for keeping flammable, combustible and explosive materials away from processes that create/may cause sparks and not operating tools, equipment or tools that create/may cause sparks in dangerous goods handling, stacking and storage areas: 76
- 7. DOCUMENTATION, CONTROL AND REGISTRATION 77
- 7.2. Procedures for maintaining an up-to-date list of all hazardous materials and other relevant information at the shore facility site in a regular and complete manner. 77
- 7.3. Procedures for checking that dangerous goods arriving at the facility are properly identified, that the correct shipping names are used, that they are certified, packaged/packaged, labelled and declared, that they are safely loaded and transported in approved and compliant packaging, containers or cargo transport units, and that the results of the inspection are reported 78
- 7.4. Procedures for the provision and possession of dangerous goods safety data sheet (SDS) 79
- 7.5. Procedures for keeping records and statistics of dangerous goods 79
- 8. EMERGENCIES, EMERGENCY PREPAREDNESS and RESPONSE 80
 - 8.1. *Cana, trowel and Procedures for responding to dangerous goods that pose/may pose a risk to life, property and/or the environment and to dangerous situations involving dangerous loads* 80
 - 8.1.1. Information about IMGD Code..... 80
 - 8.1.2. Load characteristics 81
 - 8.1.3. Risks of dangerous goods classes 81
 - 8.1.4. Working with containers and tanks 82
 - 8.1.5. Things to consider and do when working with dangerous loads 82
 - 8.1.5.1. Class 2 – Gases 82
 - 8.1.5.2. Class 3 – Flammable Liquids..... 83
 - 8.1.5.3. Class 4 Loads 84
 - 8.1.5.4. Class 5 Loads 84
 - 8.1.5.5. Class 6.1 Toxic Substances..... 85
 - 8.1.5.6. Class 8 Corrosive Substances..... 86
 - 8.1.5.7. Class 9 Miscellaneous Dangerous Goods and Articles..... 86
 - 8.1.6. Things to consider and do when working with dangerous loads 86
 - 8.2. *Information on the facility's capabilities, capabilities and capacity to respond to emergencies. ...* 87
 - 8.2.1. Shore facility emergencies 87
 - 8.2.2. Contingency plan 87
 - 8.2.3. Emergency management 87
 - 8.2.4. Shore facility actual emergencies..... 88
 - 8.2.5. Preventive measures 88

DANGEROUS CARGO HANDLING

8.2.5.1.	<i>Fire precautions</i>	88
8.2.5.2.	<i>Precautions for explosion</i>	88
8.2.5.3.	<i>Measures for natural disasters</i>	89
8.2.5.4.	<i>Measures for sabotage</i>	89
8.2.5.5.	<i>Precautions for dangerous goods</i>	90
8.3.	<i>Regulations on the first response to accidents involving dangerous goods</i>	90
8.3.1.	Emergency response for fire	90
8.3.2.	Emergency response for explosion	91
8.3.3.	Emergency response for natural disasters	91
8.3.4.	Emergency response requiring first aid and evacuation	91
8.3.5.	Emergency response in cases of sabotage	92
8.4.	<i>Notifications to be made on-site and off-site in case of emergency.</i>	92
8.5.	<i>Procedures for reporting accidents</i>	92
8.6.	<i>Method of coordination, support and cooperation with official authorities</i>	93
8.7.	<i>Emergency evacuation plan for the removal of ships and marine vessels from the shore facility in case of emergency.</i>	94
8.8.	<i>Procedures for the handling and disposal of damaged dangerous goods and wastes contaminated with hazardous cargo</i>	94
8.9.	<i>Emergency drills and their records.</i>	95
8.10.	<i>Information on fire protection systems.</i>	95
8.11.	<i>Procedures for approval, inspection, testing, maintenance and readiness of fire protection systems</i>	95
8.12.	<i>Precautions to be taken in cases where fire protection systems are not working</i>	95
8.13.	<i>Other risk control equipment</i>	96
9.	OCCUPATIONAL HEALTH AND SAFETY	97
9.2.	Information on personal protective clothing and procedures for using them	107
10.	MISCELLANEOUS	108
10.1.	Validity of the Dangerous Goods Certificate of Conformity	108
10.2.	<i>Defined tasks for the Dangerous Goods Safety Advisor</i>	108
10.3.	<i>Issues for those transporting dangerous goods to come to/leave the coastal facility by road</i>	108
10.3.1.	Transport legislation requirements	110
10.4.	<i>Issues for those transporting dangerous goods to come/leave the coastal facility by sea</i>	110
10.5.	<i>Additional Considerations to be Added by the Shore Facility</i>	110
10.5.1.	<i>Prohibited activities</i>	110
10.5.2.	Other matters subject to the permission of the port authority	111

DANGEROUS CARGO HANDLING

11. ECLAIR	114
11.2. General View Photo of the Coastal Facility	116
11.4. General Layout Plan of the Areas Where Dangerous Goods Are Handled	119
11.5. Fire Plan of Areas Where Dangerous Goods Are Handled	120
11.6. General Fire Plan of the Facility	121
11.7. Contingency Plan	122
11.8. Emergency Assembly Place Plan.....	123
11.9. Emergency Management Scheme.....	124
11.18. Other Cases Required	137
11.19. Dangerous Goods Handling Guide Additional Cargo Notification (When Necessary)	138

DANGEROUS CARGO HANDLING**FIGURES AND TABLES**

Table 1.1	Facility Information Form
Table 1.2	Port Area Dangerous Cargo Separation Table
Figure 1.1	Dangerous Goods Classes
Figure 1.2	UN Packaging Code
Table 1.3	Port Area Dangerous Cargo Separation Table
Figure 1.3	Separation distances of dangerous goods in warehouse storage

DANGEROUS CARGO HANDLING**ECLAIR**

- 1- General site plan of the coastal facility
- 2- Overview photos of the shore facility
- 3- Emergency Touchpoints and Contact Information
- 4- General Layout Plan of the Areas Where Dangerous Goods Are Handled
- 5- Fire Plan of Areas Where Dangerous Goods Are Handled
- 6- General Fire Plan of the Facility
- 7- Contingency Plan
- 8- Plan for Emergency Gathering Places
- 9- Emergency Management Scheme
- 10- Dangerous Goods Handbook
- 11- Leak areas and equipment for CTU and Packages, inlet/outlet drawings
- 12- Inventory of Port Service Vessels
- 13- Administrative boundaries of the Port Authority, anchorages and sea coordinates of the pilot's disembarkation/embarkation points
- 14- Emergency response equipment against marine pollution in the onshore facility
- 15- Personal protective equipment (PPE) usage map
- 16- Dangerous goods incident notification form
- 17- Control results notification form for hazardous goods transport units (CTUs)
- 18- Other attachments as needed
- 19- Dangerous Goods Handling Guide Additional Cargo Notification (When Necessary)

DANGEROUS CARGO HANDLING**ABBREVIATIONS**

IMDG: The International Maritime Dangerous Goods

IMO: International Maritime Organization

SOLAS: (safety of life at sea) convention

MARPOL: International Convention for the Prevention of Pollution from Ships (Marine Pollution)

IMSBC Code: International Maritime Solid Bulk Cargoes Code

IBC Kod: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk

IGC Kod: The International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk

CTU: Code of Practice for Packing of Cargo Transport Units

DANGEROUS CARGO HANDLING**DEFINITIONS**

- a) Buyer: Real and legal persons who will receive the dangerous cargo according to the contract of carriage,
- b) Packaging: The transport container in which the dangerous cargo is placed, as defined in Section 6 of the IMDG Code,
- c) Packager: Real and legal persons who place dangerous goods in large packaging containers and make the packages ready for transportation when necessary, pack dangerous goods or change the packages and labels of these goods, label them for transportation, carry out these transactions with the sender or his instructions, and the personnel of the land and coastal facilities who actually carry out this transaction,
- d) Ministry: Ministry of Transport, Maritime Affairs and Communications,
- e) Unloader: Removing a container loaded with dangerous goods, a multi-element gas container, a tank-container, a portable tank from a vehicle; unloading packaged hazardous materials, small containers, and portable tanks from a vehicle or container; an enterprise that discharges dangerous goods from a tank (tanker, detachable tank, portable tank or tank container) from a cylinder gas tanker, MEMU or multi-element gas container, a vehicle or container carrying bulk cargo."
- f) Bulk cargo: Solid, liquid and gaseous substances that are the structural part of the ship or in a tank or hold permanently fixed inside or on the ship, which are planned to be transported without direct containment,
- g) Handling: Relocation, transfer from large containers to small containers, ventilation, separation, griddle, mixing, renewal, replacement or repair of load transport units and packaging, and similar operations for transportation of dangerous goods without changing their essential characteristics,
- h) Fumigation: The process of applying chemicals in the form of solids, liquids or gases acting in gaseous form to a closed cargo transport unit (CTU) or ship hold in order to destroy harmful organisms,
- i) Ship owner: Shipowner, operator, charterer, captain or agents and real or legal persons authorized to represent the ship,
- j) Sender: Real and legal persons who send dangerous goods on their own behalf or on behalf of a third party or who are specified as senders in the contract of carriage,
- k) Safety Data Sheet: Detailed information on the properties of dangerous substances, The document containing the safety measures to be taken according to the hazard characteristics in the facilities where it is located, the necessary information for the protection of human health and the environment from the negative effects of hazardous substances,
- l) Gas measurement: Determination of the gases determined by the Administration in load carrying units and/or closed areas within the scope of the relevant regulation and the amounts that should be determined by authorized institutions and persons using special devices and apparatus,
- m) Degassing: In the event that it is determined that the load transport units that are within the scope of fumigation and that contain gases that are not within the scope of fumigation but may be harmful to life, property and the environment are above the values in the relevant directive as a result of the risk assessment, the works and operations carried out with active or passive ventilation,
- n) IBC Code: International Code for the Construction and Equipment of Ships Carrying Bulk Hazardous Chemical Cargo,
- o) IGC Code: International Code for the Construction and Equipment of Ships Carrying Liquefied Gas in Bulk,
- p) IMDG Code: International Code for Dangerous Goods Transported by Sea,
- q) IMO: United Nations International Maritime Organization,
- r) IMSBC Code: International Maritime Solid Bulk Cargo Code,

DANGEROUS CARGO HANDLING

- s) ISPS Code: International Ship and Port Facility Security Code,
- t) Administration: General Directorate of Transport Services Regulation,
- u) Captain: The person who steers and manages the ship,
- v) Coastal facility: Buildings and structures used for administrative and service purposes, docks, piers, buoys, platforms and anchorages related to them, approach areas, indoor and outdoor storage areas, where ships can safely receive and deliver cargo or passengers or shelter, the boundaries of which are determined by the Administration,
- w) Container: A load carrying equipment that has a certificate in accordance with the applicable standards within the scope of the CSC Contract,
- x) MARPOL 73/78: International Convention for the Prevention of Pollution of the Seas by Ships,
- y) Hot work: Done by persons certified by the relevant authority; use of open fires and flames, power tools or hot rivets, grinding, brazing, burning, cutting, welding or any work involving heat or producing sparks,
- z) SOLAS: The 1974 International Convention for the Safety of Life at Sea,
- aa) Carrier: The actual carrier, broker, ship owner, transport organizer, transport broker, ship agency, and real and legal persons who carry out the transportation of dangerous cargo by road or rail by road or rail, with or without a contract, who receives, bids, accepts the offer for the transportation of all kinds of dangerous goods on their own behalf or on behalf of third parties,
- bb) Carrier: The actual carrier, broker, ship owner, transport organizer, transport broker, ship agency, and real and legal persons who carry out the transportation of dangerous cargo by road or rail by road or rail, with or without a contract, who receives, bids, accepts the offer for the transportation of all kinds of dangerous goods on their own behalf or on behalf of third parties,
- cc) Hazardous waste: Parts, solutions, mixtures and used packaging and load transport units of the cargo or dangerous cargo that is not intended to be used directly, or packaging and cargo transport units carrying dangerous goods, which are classified as specified in the Basel Convention and whose transport class and conditions are determined within the scope of SOLAS, for reprocessing, disposal, incineration or by any other means,
- dd) Dangerous goods conformity certificate (TMUB): The document issued by the Administration and which coastal facilities engaged in dangerous goods handling and temporary storage activities are obliged to obtain within the scope of the regulation
- ee) Dangerous cargo (dangerous goods): Petroleum and petroleum products covered by Annex I of the International Convention for the Prevention of Pollution of the Seas by Ships (MARPOL 73/78), Packaged substances listed in the International Code for Dangerous Goods Transported by Sea (IMDG Code), Bulk substances with the UN Number given in Annex-1 of the International Maritime Solid Bulk Cargo Code (IMSBC Code), International Code on the Construction and Equipment of Ships Carrying Hazardous Chemicals in Bulk (IBC Code) The substances given in Chapter 17 and the substances given in Chapter 19 of the International Code on the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code) and substances that are not yet included in these lists but have the potential to harm life, property and the environment or other substances during transportation due to their physical, chemical properties or the way they are transported, the packaging and cargo transport units in which these substances are transported and not properly cleaned.
- ff) UN number: A four-digit identification number of dangerous goods or parts taken from the United Nations model regulations,
- gg) Transportation Electronic Transport Document System (U-ETES): The system in which the data determined by the Ministry regarding the activities of real and legal persons operating in accordance with this Regulation are kept, and when necessary, they are open to data sharing with the relevant public institutions and organizations.
- hh) New coastal facility: A coastal facility that has not received a coastal facility operation permit/coastal facility temporary operation permit within the scope of the "Regulation on the

DANGEROUS CARGO HANDLING

Procedures and Principles Regarding the Issuance of Operating Permits to Coastal Facilities" published in the Official Gazette No. 26438 dated 18/2/2017.

- ii) Regulation: The Regulation on the Transport of Dangerous Goods by Sea published in the Official Gazette dated 14.11.2021 and numbered 31659,
- jj) Loader: Real or legal persons who load dangerous cargoes and cargoes that pose a danger to loading safety on a ship and sea vessel, vehicle or cargo transport unit in accordance with the instructions of the sender, and label, plate the cargo transport unit, handle, stack and unload cargoes, including dangerous cargoes inside the ship or cargo transport unit,
- kk) Cargo owner: The sender, consignee, representative and transport broker of the dangerous cargo,
- ll) Load carrying unit (CTU): Designed and manufactured for the transport of packaged or bulk dangerous cargoes; road trailer, semi-trailer and tanker, portable tank and multi-element gas container, railway wagon and tank wagon, container and tank container, refers to.

DANGEROUS CARGO HANDLING**PRESENTATION**

In the numbered sections of the coastal facility, which has a pier of 930 meters in length, loading/unloading and handling services are provided according to the field of activity.

The field of activity of the facility is in the form of General Cargo/Dry Bulk, Containers, Wheeled Vehicles – Ro-Ro Vessels, packaged dangerous cargoes (including Ro-Ro activity), dangerous solid bulk cargoes and scrap cargoes.

The total area of the closed areas is 2012 m².

The port management provides services for storing dangerous cargoes within the scope of the relevant transportation codes coming from the coastal facility by road or sea in the appropriate stacking area according to the type and nature of the cargo, Ro-Ro transportation and handling services of packaged dangerous goods in the IMDG CFS area, and temporarily storing them in warehouses. While providing these services, the balance and safety of human, environment and ecosystem are taken into consideration.

Measures are taken to ensure the safety of all parties (crew safety and storage, loading/evacuation personnel) in the process of making dangerous goods available at the port in packages, by means of portable tanks/tank containers, and in the process of non-dangerous cargo transport units becoming dangerous goods (eg fumigation). In addition, Ro-Ro transportation is also carried out within the scope of packaged dangerous goods activity.

The recommendations in the dangerous goods handling guidelines are limited to dangerous goods located at the shore facility. The recommendations in the Guidelines do not apply to dangerous cargoes generally held for storage in the port area or used in the port area, but the Administration may wish to check whether such use and storage complies with its statutory national requirements.

An important prerequisite for the safe loading/unloading, stacking and handling of dangerous goods arriving by road or ship is the correct identification of cargoes, compliance with the separation stacking provisions, storage, packaging, safekeeping, marking, labeling, plate affixing and documentation. For this, it is the training and renewal training of the employees involved in the loading/unloading, stacking, handling and, when necessary, documentation sides of the provisions specified in both ADR and IMDG Codes.

DANGEROUS CARGO HANDLING

1. ENTRANCE

1.1. Facility Information Form

The general information about the facility includes the minimum information specified in the facility information form presented below.

1	Facility operator name/title	Akçansa Cement Industry and Trade Co. Inc.		
2	Contact details of the facility operator (address, telephone, fax, e-mail and web page)	Palladium Tower D.124-125 ISTANBUL Phone: 0(216)571-3000 Fax: 0(216)571-3111 info@akcansaport.com		
3	Name of the property	Akçansa Ambarlı Port		
4	The province where the facility is located	Istanbul		
5	Contact details of the property (address, phone, fax, e-mail and web page)	Marmara Mahallesi Kuyumcular Yolu Ambarlı Port Facilities Akçansa Terminal 34524 Beylikdüzü/İSTANBUL Tel: 0(212)875-2700 Fax: 0(212)875-2722 info@akcansaport.com www.akcansaport.com		
6	Geographical area where the property is located	Marmara Region		
7	Port Authority to which the facility is affiliated and contact details	Ambarlı Regional Port Authority Phone: +90(212)875-6848 Fax:+90(212)875-6849 E-mail: ambarli.liman@uab.gov.tr		
8	The Municipality to which the facility is affiliated and its contact details	Beylikdüzü Municipality 444 09 39-0(212)871- 1531		
9	Name of the Free Zone or Organized Industrial Zone where the facility is located	-		
10	Effective date of Coastal Facility Operation Permit/Temporary Operating Permit	29/06/2026		
11	Operating status of the facility (X)	Own Load and Additional 3rd Party (X)	Own burden (...)	3rd Party (...)

DANGEROUS CARGO HANDLING

12	Name and surname of the facility manager, contact details (phone, fax, e-mail)	Ibrahim Anil ZANA Phone:0(212)875-2700 GSM:0(530)939-7404 Fax:0(212)875-2722 ibrahimanil.zana@akcansa.com.tr
13	Name and surname of the facility's hazardous materials operations officer, contact details (phone, fax, e-mail)	Günay Vatansever Phone:0(212)875-2700 GSM:0(539)234-7080 Fax:0(212)875-2722 gunay.vatansever@akcansa.com.tr
14	Name and surname of the facility's Dangerous Goods Safety Advisor, contact details (phone, fax, e-mail)	Savaş DÜZGÜN +90(507)961-5655 savas.duzgun@atlastmgd.com.tr
15	Sea coordinates of the facility	40° 57' 47'' (N) - 28° 40' 41'' (E)
16	Types of dangerous goods handled at the facility (cargoes within the scope of IMDG Code, IMSBC Code, Grain Code, TDC Code and scrap cargoes)	Within the scope of the IMDG Code, packaged, packaged or bale/bundle/bundled cargoes, general cargo loads and project loads; Within the scope of the IMSBC Code, all kinds of bulk mines (supalan), coal, cement, clinker, scrap and such bulk cargoes; All kinds of bulk cereals under the Grain Code
17	Dangerous goods handled at the facility (Loads other than IMDG Code, which are among the load types in Article 16, will be written separately. The request for additional cargo will be forwarded to the affiliated port authority with the Annex-1 form. It will be added to TYER when deemed appropriate)	Within the scope of the IMSBC Code, all kinds of bulk mines (supalan), coal, cement, clinker, scrap and such bulk cargoes; All kinds of bulk cereals under the Grain Code
18	Classes for handled cargoes, subject to IMDG Code	Class 2, Class 3, Class 4.1, Class 4.2, Class 4.3, Class 5.1, Class 5.2, Class 6.1, Class 8 and Class 9
19	IMSBC Subject to the code, for handled cargoes Groups in the characteristic table	Group "B" and group "A and B" and "Group C"
20	Types of vessels that can dock at the facility	General Cargo Ships, Bulk Carriers, Ro-Ro Ship, Container Ship
21	Distance of the property to the main road (kilometers)	4 Km

DANGEROUS CARGO HANDLING

22	Facility's distance to the railway (kilometers) or rail connection (Yes/None)	There is no rail connection.	
23	Name of the nearest airport and distance to the resort (kilometers)	15 km.	
24	The load handling capacity of the facility (Tons/Year; TEU/Year; Vehicle/Year)	Bulk Cargo: 3 million tons/year, Ro-Ro: 150000 vehicles/year Container: 45000 TEU/Year	
25	Whether scrap handling is carried out at the facility	Yes	
26	Is there a border gate? (Yes/ No)	Yes	
27	Is there a bonded area? (Yes/ No)	Yes	
28	Load handling equipment and capacities	Gottwald-HMK 260 – 100T Fantuzzi – MHC-200 – 80T Sennebogen 870 –35T Sennebogen 835 –25T Liebherr 320 – 100 T	
29	Storage tank capacity	No	
30	Open storage area (m ²)	47754 m ²	
31	Semi-closed storage area (m ²)	No	
32	Closed storage area (m ²)	2012 m ²	
33	Specified fumigation and/or defumigation area (m ²)	40 units of 20 feet container capacity space	
34	Name/title, contact details of the pilotage and towage services provider	It is provided by Marne Tug.	
35	Has a security plan been created? (Yes/No)	Yes. (Under ISPS Code) It is provided by Tepe Security.	
36	Waste Reception Facility capacity (this section will be arranged separately according to the waste accepted by the facility)	Waste Type	Capacity (m3)
		Exempt	
37	FEATURES OF DOCKS/PIERS, ETC.		

DANGEROUS CARGO HANDLING

Dock/Pier No	Height (meters)	Width (meter)	Maximum Water Depth (Meters)	Minimum Water Depth (Meters)	Largest Ship Tonnage and Length to Live (Dwt or Grt – Meter)
1	200	11	9,5	8	15,000 DWT
2	350	25	13,5	9,5	80,000 DWT
3	350	25	12,5	8	80,000 DWT
Name of the pipeline (if available at the plant)			Number (Pieces)	Length (Meters)	Diameter (Inch)
Product Handling Line					

DANGEROUS CARGO HANDLING**1.2. Loading/discharge, handling and storage procedures for dangerous goods handled and temporarily stored at the shore facility**

Packaged dangerous cargoes, including dangerous Ro-Ro activities within the scope of IMDG code, dangerous solid bulk cargoes under IMSBC, grain cargoes and scrap cargoes under GRAIN code are handled at the coastal facility. In addition, fumigation and degazin services are provided in the restricted area. The pier designated for dangerous goods of the facility is pier no. 4 and loading, evacuation and handling services are provided in this area.

Services such as detection, inspection and sampling of dangerous goods are provided in the field of IMDG CFS, and the training of the handling personnel is fully within the scope of the "DIRECTIVE ON IMDG CODE TRAINING SEMINARS".

- a) Loads defined as class 1 explosive cargoes, class 6.2 infectious substances and class 7 radioactive materials in the IMDG Code are not allowed to the shore facility. These cargoes are called dangerous cargoes that are not accepted and are operated as transit cargo if the authorized administration has permission. Loading and unloading are carried out in a special area in the coastal facility and they are shipped and removed without waiting in the coastal facility. If such loads are handled, the safety rules specified in this guide will apply. Within the scope of the IMDG Code, packaged, packaged or bale/bundle/bundled cargoes, general cargo loads and project loads are handled. All kinds of bulk cargo, mines, coal, cement, clinker, fertilizers containing ammonium nitrate and solid bulk cargoes of this type within the scope of the IMSBC Code; Within the scope of the Grain Code, all kinds of bulk grain are handled in the port area.
- b) It will be ensured that the following issues are fulfilled in terms of the safety of the coastal facility, employees and ships in the coastal facility in matters such as handling dangerous cargoes coming to the coastal facility, temporarily keeping them in the coastal facility, stacking and separation, and storage.
- c) Before the acceptance of dangerous cargoes to the coastal facility, the cargo will submit the safety data sheet of the cargo and as a result of the examination of the HSE unit, Operation, Site planning will take the necessary actions. Regarding the dangerous cargo/s to be accepted to the port of the HSE unit;
 - Risk from hazardous cargo
 - Interaction with dangerous cargoes present in the shore facility,
 - interaction with cargoes planned to be accepted into the shore facility in the near future,
 - Terms of stacking
 - Decomposition conditions
 - The need for materials and equipment in terms of Emergency Response
 - Competence of Emergency Response teams
 - Interaction issues with neighboring facilities are handled within the scope of current IMDG Code documents and acceptance/rejection or managerial decision is taken.
- d) If a decision is taken at the meeting to accept the dangerous cargo, the management, operation, storage, security and emergency response units are informed and the preparation and acceptance process is initiated.

In case of the need to inform the Port Authority at the time of admission to the coastal facility, the Port Authority is notified in writing together with the reasons for the situation.

1.2.1. IMDG

- 1) Substances and objects that are prohibited to be transported in the IMDG Code cannot be transported by sea. Cargoes that are prohibited to be transported by sea are not allowed in the port facility.
- 2) Parties involved in the transportation of dangerous goods transported in packages shall take measures in accordance with this Regulation and the provisions of the IMDG Code, taking into account the nature

DANGEROUS CARGO HANDLING

- and extent of foreseeable risks in order to prevent damage and injury and to minimize their impact.
- 3) The stowage area of dangerous cargo is separated. The IMDG CFS site has also been created as a separate area for dangerous cargo containers opened for customs clearance.
 - 4) For the activities in the IMDG CFS field, an assessment is made in advance for the measures to be taken according to the dangerous cargo classes to the Operation Unit.
 - 5) The cargo owner submits a safety data sheet before making a request for Customs works such as detection, inspection and sampling. No service is provided to cargo owners who do not submit a safety data sheet in Turkish.
 - 6) In the transportation of dangerous goods by sea, it is obligatory to use packages defined in Section 6 of the IMDG Code and tested and given a UN certificate by the Ministry or by the authorized administration of a country party to SOLAS.
 - 7) Our onshore facility has both UN approved IBC and plastic drums.
 - 8) The Container/Vehicle Packaging Certificate in IMDG Code Rule 5.4.2 is completed and signed by the persons loading the dangerous goods into the cargo transport unit (excluding tank containers). They receive the relevant training in Rule 1.3 of the IMDG Code. The Container/Vehicle Packaging Certificate is presented to the port before the cargo arrives at the port or at the entrance with the cargo. A copy of this certificate is placed on the inner wall of the right door of the container: The Container/Vehicle Packaging Certificate of dangerous cargoes opened for customs clearance at the IMDG CFS Field and infiltrated by internal filling in the port area is checked.

1.2.1.1. Procedure for Safe Handling of Packaged Dangerous Goods and Ro-Ro Activities**1.2.1.1.1. Purpose**

To ensure that Ro-Ro activity and the handling and temporary storage of packaged dangerous goods are carried out safely.

1.2.1.1.2. Operation

- I. The person responsible for the handling of dangerous cargo, including Ro-Ro activity, who will provide communication between the ship and the shore facility, and job description
 - The person who will provide the communication between the ship and the shore facility:
Anil Zana
 - Job Description:

The personnel who will provide communication between the ship responsible for the operation of dangerous cargoes, including Ro-Ro activity, and the port have been determined and their job description has been made and communicated.

In our facility, the responsible persons responsible for the operation of dangerous goods and the port are as follows. (1 ship operations chief)

JOB DESCRIPTIONS

The duties of the responsible personnel who will ensure communication between the ship responsible for the operation of dangerous cargoes, including Ro-Ro activity, and the port in our facility are as follows.

- a.) Determines the name of the Dangerous Substance(s) and checks the documents.
- b.) It reviews the procedures related to the handling, loading/unloading of dangerous goods.
- c.) It determines the safety measures to be taken by working on the risks and hazards that may arise from dangerous goods.
- d.) Determines the protective equipment related to the personnel who will load/unload and handle the dangerous cargo.
- e.) It informs the personnel who will carry out the loading/unloading and handling of dangerous goods about the cargo.
- f.) It helps to implement the "Accident Prevention Policy" determined in the port facility in order to prevent accidents that may occur during the handling of dangerous cargoes, to ensure the safety

DANGEROUS CARGO HANDLING

- of life, property and the environment, and to minimize the damage of possible accidents to people and the environment.
- g.) When it detects a nonconformity in the handling of dangerous goods, the handling operation is stopped and the nonconformity is eliminated.
 - h.) It constantly checks the fire, safety and security measures taken in the coastal facility and ensures that the deficiencies are corrected immediately.
 - i.) It ensures that coastal facility personnel and seafarers in charge of dangerous cargo handling wear protective clothing during loading, unloading and storage.
 - j.) It ensures that the people who will fight the fire in the dangerous goods handling area are equipped with fire-fighting equipment and that fire extinguishers and first aid units and equipment are ready for use at any time.
 - k.) It is aware of the practices in the emergency evacuation plan for the evacuation of ships and marine vehicles from coastal facilities in emergencies and coordinates the operation.
 - l.) It checks that the persons involved in the loading, unloading and handling of dangerous goods have received dangerous goods training and have a certificate. It allows personnel who do not yet have certification to work only under the control of competent personnel.
 - m.) It ensures that dangerous goods are transported, handled, sorted, stacked, temporarily held and inspected in a safe and proper manner by appropriately qualified, trained personnel who have taken occupational safety measures at the operating site.
 - n.) It checks that all mandatory documents, information and documents that must be found regarding dangerous goods are included with the cargo. When it detects a deficiency, it does not allow the cargo to be handled.
 - o.) It checks the relevant documents in order to confirm that the dangerous cargoes arriving at the facility by sea or that will continue to travel by ship have been identified, classified, certified, packaged, labeled, declared, safely loaded and transported in accordance with the provisions of IMDG.
 - p.) It takes the necessary safety measures for dangerous substances that do not comply with the rules, are unsafe or pose a risk to people or the environment.
 - q.) It ensures that emergency arrangements are made and that all relevant persons are informed about these issues.
 - r.) Reports dangerous cargo accidents to their managers.
 - s.) It prevents ships and marine vehicles carrying containers containing dangerous cargo from docking at the pier and dock without the permission of the port authority.
 - t.) In the event of an accident caused by dangerous substances, it initiates the necessary emergency response, taking into account the EMS and the Emergency Plan.
 - u.) It takes the necessary arrangements and measures to prevent the contamination of dangerous cargoes handled in the facility to the sea, soil, water or areas where water is discharged.
 - v.) It provides medical first aid to people affected by the damages of dangerous loads and to people who require first aid as a result of accidents involving these loads, taking into account the "Medical First Aid Guide (MFAG)" in the IMDG CODE annex, and transfers them to the nearest hospital as soon as possible.
 - w.) It checks that all kinds of equipment used in dangerous goods handling and stacking operations, operated or not operated by power, are used and maintained under the conditions specified in the instructions and communicates the defects to the relevant units.
- II. In order to keep records of the positions of dangerous cargoes on the ship and at the port, the personnel responsible for these operations have been determined and their job descriptions have been made and notified.

In order to keep records of the positions of dangerous cargoes on the ship and at the port in our facility, the personnel responsible for these operations have been determined (5 field planning personnel)

In order to keep records regarding the positions of dangerous cargoes on the ship and at the port in our facility, the duties of the personnel responsible for these operations are as follows.

DANGEROUS CARGO HANDLING

- a.) Determines the name of the Dangerous Substance(s) and checks the documents.
 - b.) It informs the personnel who will carry out the loading/unloading and handling of dangerous goods about the cargo.
 - c.) It helps to implement the "Accident Prevention Policy" determined in the port facility in order to prevent accidents that may occur during the handling of dangerous cargoes, to ensure the safety of life, property and the environment, and to minimize the damage of possible accidents to people and the environment.
 - d.) When it detects a nonconformity in the handling of dangerous goods, the handling operation is stopped and the nonconformity is eliminated.
 - e.) It ensures that the people who will fight the fire in the dangerous goods handling area are equipped with fire-fighting equipment and that fire extinguishers and first aid units and equipment are ready for use at any time.
 - f.) It is aware of the practices in the emergency evacuation plan for the evacuation of ships and marine vehicles from coastal facilities in emergencies and coordinates the operation.
 - g.) It checks that the persons involved in the loading, unloading and handling of dangerous goods have received dangerous goods training and have a certificate. It allows personnel who do not yet have certification to work only under the control of competent personnel.
 - h.) It checks that all mandatory documents, information and documents that must be found regarding dangerous goods are included with the cargo. When it detects a deficiency, it does not allow the cargo to be handled.
 - i.) It checks the relevant documents in order to confirm that the dangerous cargoes arriving at the facility by sea or that will continue to travel by ship have been identified, classified, certified, packaged, labeled, declared, safely loaded and transported in accordance with the provisions of IMDG.
 - j.) IMDG maintains an up-to-date list of all dangerous goods in its area.
 - k.) It ensures that emergency arrangements are made and that all relevant persons are informed about these issues.
- III. Packages and packages to be used in the activities of replacing and repairing load carrying units or placing damaged packages in rescue packages must be produced and certified in accordance with the nature of the dangerous goods and within the scope of the provisions of Part 6 of the IMDG Code. Salvage packaging at Akçansa Port meets the requirements of IMDG Part 6.
- IV. In the coastal facility, freight transport units; The provisions of the "Packaging of Load Transport Units Application Code (CTU Code)" should be taken into account in internal loading operations and/or loading on other transport mode vehicles. A "Container/Vehicle Packing Certificate" must be issued by the onshore facility operator if container/vehicle loading is carried out in the areas where the load handling units of the facility are unloaded and/or in closed warehouses (CFS areas). In addition, it is checked by the coastal facility operator that each cargo transport unit coming to the coastal facility to be transported by sea has a "Container/Vehicle Loading Certificate", and cargo transport units without such a certificate are not allowed to be loaded on the ship.
- V. The coastal facility operator shall carry out the handling and temporary storage operations at the shore facility in accordance with the separation rules specified in Table 1 (Separation Schedule for Dangerous Goods in Port Areas) in the Annex of the "Recommendations on the Safe Transport of Dangerous Goods and Related Activities in Port Areas" of the International Maritime Organization (IMO) Circular No. MSC/Circ.1216. *Even if there are no containers or CTUs containing dangerous goods in the port area, the separation stacking provisions are complied with according to the provisions of IMO MSC/Circ.1216.*
- VI. Fumigated and/or containing toxic gas must be stacked in such a way that the covers cannot be opened uncontrollably. *Fumigation operations in our port area are carried out according to the requirements of TMUB Annex-9.*
- VII. Handling, transportation, storage, stacking of dangerous packaged cargo; It is carried out by the ship captain and Akçansa Port Authority in accordance with national and international legislation, IMO and EU recommendations/directives.

DANGEROUS CARGO HANDLING

- VIII.* Works and operations for damaged cargo transport units or packages containing dangerous goods will be carried out by taking the necessary precautions in the secured area. In case of leakage in the said load carrying unit or packages, the relevant operations will be carried out in portable leak pools with a capacity of 2 40-foot containers.

DANGEROUS CARGO HANDLING

- *WAREHOUSE, WAREHOUSE AND OUTDOOR STACKING SEPARATION REQUIREMENTS of dangerous cargo are given in 4.5.2.*

1.2.1.1.3. Stacking & Storage

- A storage area should be established in accordance with the separation and stacking rules for packaged dangerous goods, containers carrying dangerous goods and Ro-Ro cargoes, and the temporary storage of such packaged cargoes and containers should be done in accordance with the separation and stacking rules. Necessary fire, environmental and other safety measures should be taken in these areas. If dangerous goods are stacked or stored in the entire area, access roads to the cargo transport units containing dangerous goods should be open and there should be equipment in the field that can provide emergency facilities and capabilities that can be intervened in a short time.
- The hardware, software and interfaces required to transfer electronic data for dangerous goods handled or temporarily stored should be provided.
- Cargo transport units in which temperature-controlled dangerous goods are transported can only be temporarily stored in special areas where necessary precautions are taken at the port. The temperature values of the aforementioned load carriers should be continuously monitored and, to the extent applicable, monitored with remote monitoring facilities.
- Class 4.3 packages containing dangerous substances that emit flammable gases in contact with water and cargo transport units containing such packages are temporarily stored on the porch in front of the port warehouse in our facility in a way that will not be affected by rain, sea water and similar factors, and its place is shown in the general layout plan of the port. This area is equipped with warning signs indicating the risks of this type of cargo. CTUs containing these hazardous substances can be stacked in open facility areas if they are not affected by rain, sea water and similar factors.

1.2.1.1.4. Emergency

- In case of emergencies or accidents, first aid materials to be used for intervention should be stored in places that are known and easily accessible by the personnel.
- Necessary warnings, warning signs and fire alarm buttons should be placed in visible and easily accessible places. In dangerous places and situations, the relevant personnel should be equipped with personal protective clothing and equipment in accordance with occupational safety and health criteria. Personnel who do not have personal protective clothing and equipment suitable for their job descriptions and working areas should not be employed.
- Communication equipment in the operations of loading/evacuating and handling dangerous cargoes; It should be kept in working order and in good condition, in a number and sufficient to ensure safely usable and uninterrupted communication.
- Training is given gradually according to the duties and responsibilities of the personnel involved in the loading/evacuation of Ro-Ro loads and packaged dangerous cargoes, in accordance with the job descriptions and working areas of the personnel involved in the work and fields of emergency (fire, explosion, leakage, etc.), occupational health and safety, security and similar issues in line with the relevant legislation
- Our port facility is equipped with an electric and diesel-powered water pump for cooling purposes with sufficient power and capacity, a fire hydrant connected to fire pipes of sufficient number/diameter where necessary, a fire cabinet, backup energy production devices (generator) of sufficient power, a sufficient number of foam (for buildings and extinguishing works other than liquefied gas fires) and dry chemical/powdered fixed/mobile fire extinguishers. It is equipped and has a port fire plan approved by a competent engineer.

DANGEROUS CARGO HANDLING*1.2.1.2. Ro-Ro Transportation*

As Ro-Ro transportation in the coastal facility, cargo loads, vehicles, containers and tanks are included in the field of activity. Loads provide boarding and disembarkation on rubber-wheeled vehicles by their own means. It is not possible to unload or unload containers, tanks, swap bodies or other land vehicles directly from the Ro-Ro ship. Load transport units (box containers, tanks, swap bodies) other than wheeled cargoes are towed by mafi trailers.

1.2.1.2.1. Security in Ro-Ro Transportation

Self-propelled vehicles and machines and towable units (box containers, tanks, swap bodies, etc.) are taken to Ro-Ro ships during the loading/unloading process by means of mafi trailers.

1. Loads are fixed. This process is carried out both on the deck of the Ro-Ro ship and in the land facility before the cargo is boarded on the Ro-Ro ship. Before boarding the Ro-Ro ship, it is checked through the multi-modal transport document where the cargo transport units are fixed. This control does not apply to tanks. It is valid for loads in load transport units such as box containers, swap bodies of packaged dangerous goods. In the relevant section of the multimodal transport document, it is checked whether the "container packing certificate" field is duly filled in by the cargo concerned. A packaging certificate is not required for the tanks boarding the Ro-Ro ship, but these loads are fixed on the Ro-Ro ship.
2. Employees who will take part in the loading/evacuation of the Ro-Ro ship should use their personal protective equipment during the operation period and complete their deficiencies. Uninterrupted and understandable communication tools should be preferred, especially for communication. In maneuvers, the directions of the pointers must be followed. In order to avoid accidents and injuries, mafi and stacker operators must perform environmental control during their reversing maneuvers.
3. The weather forecast must be constantly checked. In fast-paced loading/unloading operations, workers should watch out for inclement weather conditions and stop work if the wind exceeds the operating limits.
4. Lighting should be sufficient for operation. During the landing and embarkation of Ro-Ro ships, the illumination of the working areas and even their surroundings should be sufficient and there should be no spots in the dark.

DANGEROUS CARGO HANDLING**1.2.2. IMSBC**

The International Code of Bulk Solid Cargo (IMSBC) provides information about the dangerous nature of solid bulk cargoes and establishes the provisions for the safe stacking and shipment of these cargoes. The list of loads covered by the code is given below. It should be noted that the transportation of grains in bulk is covered by the GRAIN code.

Cargoes consist of Group A, which can liquefy when shipped with a substance content exceeding the portable humidity limits, Group B and Group A with chemical hazards that may become dangerous from the ship, and Group B (liquefaction and non-chemical hazards) Group C cargoes. Although Group C loads are not defined in the Regulation (REGULATION ON THE TRANSPORT OF DANGEROUS GOODS BY SEA AND LOADING SAFETY), they are included in the guide to understand the other groups (groups A and B) in IMSBC.

Dangerous goods (MHB) only in bulk are substances with chemical hazards that are transported in bulk other than those in the IMDG Code dangerous goods classification.

Solid bulk cargo is a cargo consisting of granules or a combination of large pieces of material, usually of a single type, which can be loaded directly into the cargo areas of ships without any intermediate packaging, other than liquid or gas.

The stop angle means the maximum angle of inclination of the free-flowing (non-cohesioned) granular material. It is measured as the angle between a horizontal plane and the cone slope of such material. In other words, when bulk granular materials are poured on a flat surface, they will form a conical pile, the inner angle between the bulk surface and the horizontal surface is the stopping (bending) angle. The stopping angle depends on the density, surface area and shape of the particle, as well as the coefficient of friction. For example, the lying angle of Un 1942 AMMONIUM NITRATE is between 27 and 43 degrees.

Moisture content (MC) is the amount of water, ice, or other liquids, expressed as a percentage of the total liquid mass of the sample belonging to the bulk solid cargo.

Portable moisture content (TML) is the maximum moisture content of a liquefiable cargo that is considered safe for transportation.

Trimming is any partial or total leveling of a cargo in a cargo hold.

The stacking factor refers to the amount of cubic meters that a ton of cargo will occupy.

1.2.2.1. General loading, handling and unloading precautions

Undesirable accidents occur as a result of improper loading and unloading of solid bulk cargo in ship cargo areas. It is necessary to ensure the stability of the ship and to prevent excessive stress of the ship structure. In addition, the shipper (cargo owner) must provide the captain with sufficient information about the cargo to ensure that the ship is properly loaded.

To prevent overstretching of the ship structure;

- The vessel should be in the range of 1.30 to 1.67 cubic meters per ton when loaded to full bale and deadweight capacities.
- Care must be taken to distribute the load weight to avoid excessive stresses.
- Ship stability must be utilized for weight distribution.
- To the extent possible, high-density cargo should be loaded in sub-hold cargo bays rather than intermediate deck cargo bays.

DANGEROUS CARGO HANDLING

- When high-density cargo has to be transported on intermediate decks or in higher cargo spaces, overstretching of the deck area must be avoided and the stability of the ship must be prevented from falling below the minimum acceptable level.
- *The* high-density load is used to mean a robust bulk cargo with a stacking factor of 0.56 m.

Loading and unloading

- Before loading and unloading, the suitability of the cargo spaces for the load to be loaded should be checked.
- Bilge lines, sounder pipes, and other service lines in the cargo area must be in good condition.
- Considering the speed at which some high-density solid bulk cargoes are loaded, special care must be taken to avoid damage to cargo areas.
- Ventilation systems should be closed or screened and air conditioning systems should be recirculated in order to prevent or minimize dust ingress into living areas and other indoor spaces as much as possible during loading or unloading.
- Care must be taken to minimise the degree to which the dust of the cargo comes into contact with the moving parts of deck machinery and external navigational aids.

1.2.2.2. Ship and personnel security

All necessary safety precautions must be taken before and during the loading, transportation and unloading of solid bulk cargo.

A copy of the medical first aid manual (MFAG) must be available on board for use in accidents involving hazardous materials related to incidents involving dangerous goods in bulk.

Toxic, corrosive and suffocating loads

Some solid bulk cargoes are susceptible to oxidation, which can cause oxygen depletion, the spread of toxic gases and fumes, and spontaneous heating. Others, although not prone to oxidation, can emit toxic fumes when wet. When wet, there are loads that corrode the skin, eyes and mucous membranes or the structure of the vessel.

When transporting these cargoes, special precautions must be taken to protect personnel and before and after loading.

It should be noted that cargo spaces and adjacent spaces may be oxygen-depleted, contain toxic or suffocating gases, and an empty cargo space or tank that remains closed for a period of time may have insufficient oxygen to support life.

Many solid bulk cargoes can cause oxygen depletion in a cargo area or tank. These include most vegetable and forest products, ferrous metals, metal sulfide concentrates and coal cargoes, and the list is not limited to these.

Before entering the closed area on the ship, it should be verified that the oxygen is at a sufficient level and that there are no toxic and suffocating gases inside.

When working with a solid bulk cargo that tends to emit flammable or toxic gas or cause oxygen depletion, oxygen and other gas concentrations in the cargo area must be constantly monitored and gas measuring instruments suitable for calibration testing must be available on board.

When it is necessary to enter the cargo areas urgently, this should be ensured by trained personnel wearing pressure breathing apparatus and protective clothing.

Health hazards from dust

Exposure to the dust of some solid bulk cargoes can pose chronic and acute risks. In order to minimize this risk, those exposed to dust should use appropriate respiratory protection, protective clothing, and

DANGEROUS CARGO HANDLING

minimize the damage with skin protective creams.

Formation of flammable atmospheres

The dust of some solid bulk cargoes can pose an explosion hazard during loading, unloading, and cleaning. This risk is minimized by ventilating to prevent the formation of a dust-laden atmosphere and by hose down rather than vacuuming.

Considering that some solid bulk cargoes emit enough flammable gases to pose a fire and explosion hazard, there is a need to ventilate the cargo spaces effectively. The atmosphere in the cargo spaces must be monitored with a suitable gas detector. Care should be taken to ventilate and monitor the atmosphere of enclosed spaces adjacent to cargo spaces.

Aeration

Unless expressly stated otherwise, mechanical or natural ventilation must be provided in the cargo spaces when transporting cargo that may emit toxic gases. When cargoes that may emit flammable gases are transported, mechanical ventilation of cargo spaces must be provided.

If maintaining ventilation would make the vessel or cargo dangerous, this may be interrupted unless there is a risk of an explosion.

If the information about the cargo provided by the carrier (cargo concerned) shows the need for continuous ventilation, ventilation will be continued unless a situation develops in which ventilation endangers the ship.

Ventilation should be such that hazardous concentrations of hazardous gas or dust cannot enter living quarters or indoor spaces. Adequate precautions must be taken to ensure that hazardous gases, vapours or dust do not reach confined spaces and to protect personnel in the work area.

It will be ensured that the degazinating operations of the cargoes under fumigation are carried out by the authorized fumigation operator agricultural engineers from the Agricultural Quarantines. For this process, the permits to be obtained from the port authority and the Provincial Directorate of Agricultural Quarantines will be submitted to the coastal facility.

1.2.2.3. *Shipping information*

The shipper (cargo owner) must provide the captain or his representative with the necessary information about the cargo before loading in order to ensure that the measures that may be necessary for the proper stowage and safe transport of the cargo are put into effect. Shipping information should include.

- Proper shipping name (BCSN) when listed on IMSBC and, if applicable, additional secondary name
- Cargo group (A, B, A, and B or C)
- IMO class, if applicable (classification is as in IMDG 2)
- Un number, if applicable
- Total quantity
- Stacking factor
- Cropping and trimming procedures
- Possibility of displacement, including the angle of stance
- Certificates for the moisture content of the cargo and the portable humidity limit
- Possibility of wet base formation (IMSBC 7.2.3)
- Production of toxic, flammable or asphyxiating gases that may be caused by the load, if any
- If the load is flammable, toxic, corrosive and has a tendency to deplete oxygen
- Features of self-heating of the load and the need for trimming, if any
- Characteristics of the emission of flammable gases when in contact with water, if any
- Radioactive properties, if any

DANGEROUS CARGO HANDLING

- Up-to-date documents requested by the administration

An additional declaration must be submitted to the information provided by the carrier (cargo concerned). The cargo declaration form is given below. Formoslem may also be of different types of information requested for island green, provided that the requirements of this paragraph are met.

DANGEROUS CARGO HANDLING
KAGRO FACT SHEET

Full Shipping Name (BCSN)	
Sender	Transport document number
Buyer	Carrier
Name / means of transport	Instructions or other matters
Port / place of departure	
General description of the cargo(Material type / particle size)	Gross mass (kg/ton)
Characteristics of bulk cargo, if any:Stacking factor:Stop angle, if any:Trimming procedures:Chemical properties in case of possible danger * : *eg. Class and UN No. or "MHB"	
Cargo group <input type="checkbox"/> Group A and B * <input type="checkbox"/> Group A * <input type="checkbox"/> Group B <input type="checkbox"/> Group C * For cargoes that can liquefy (Group A and Group A and Group B cargoes)	Portable humidity limit Moisture content at the time of shipment
Relevant special properties of the cargo (e.g., highly soluble in water)	Additional certificates * <input type="checkbox"/> Moisture content and portable humidity limit <input type="checkbox"/> certificate Segregation certificate <input type="checkbox"/> Exemption certificate <input type="checkbox"/> Other (specify) * If necessary
I hereby declare that the sender has been fully and accurately identified and that the test results and other specifications provided are correct to the best of my knowledge and may be Accepted as representative for the cargo to be loaded.	Name/status of the signatory, company/organization Place and time Signature on behalf of the sender

1.2.2.4. IMSBC Code dangerous goods list

The following list is intended to be comprehensive, and when a cargo that is not listed in the code is presented, the shipper must provide valid and up-to-date information about the physical and chemical properties of the cargo. Permission must be obtained from the port authority before starting the handling operation of the subject cargoes.

DANGEROUS CARGO HANDLING

HAZARDOUS SOLID BULK CARGOES (IMSBC CODE)		
UN NO	NAME	NAME
1350	SULPHUR (crushed lump and coarse grained)	Crushed lump and coarse-grained sulfur
1363	COPRA (dry)	Desiccated Coconut
1376	IRON OXIDE, SPENT	Iron Oxide
1376	IRON SPONGE, SPENT	Iron Sponge
1386	SEED CAKE, containing vegetable oil (a) mechanically expelled seeds, containing more than 10% of oil or more than 20% of oil and moisture combined	Seed Meal
1386	SEED CAKE, containing vegetable oil (b) solvent extraction and expelled seeds, containing not more than 10% of oil and when the amount of moisture is higher than 10%, not more than 20% of oil and moisture combined	
1395	ALUMINUM FERROSILICON POWDER	Aluminum Ferrosilicon Powder
1398	ALUMINUM SILICON POWDER, UNCOATED	Aluminum Silicon Powder
1408	FERROSILICON	Ferro Silicon
1435	ZINC ASHES	Zinc Ash
1438	ALUMINIUM NITRATE	Aluminum Nitrate
1446	BARIUM NITRATE	Barium Nitrate
1454	CALCIUM NITRATE	Calcium Nitrate
1469	LEAD NITRATE	Lead Nitrate
1474	MAGNESIUM NITRATE	Magnesium Nitrate
1486	POTASSIUM NITRATE	Potassium Nitrate
1498	SODIUM NITRATE	Sodium Nitrate
1499	SODIUM NITRATE AND POTASSIUM NITRATE MIXTURE	Sodium Nitrate-Potassium Nitrate Mixture
1759	METAL SULPHIDE CONCENTRATES, CORROSIVE	Metal Sulfide Mixtures, Abrasive
1942	AMMONIUM NITRATE	Ammonium Nitrate
2067	AMMONIUM NITRATE BASED FERTILIZER	Ammonium Nitrate Based Fertilizer
2071	AMMONIUM NITRATE BASED FERTILIZER	
2216	FISHMEAL, STABILIZED	Fish meal
2216	FISHSCRAP, STABILIZED	Fish Crumb
2217	SEED CAKE	Seed Meal
2793	FERROUS METAL CUTTINGS	Ferrous Metal Sawdust, Trimmings or Scraps, prone to self-heating
2793	FERROUS METAL SHAVINGS	
2793	FERROUS METAL BORINGS	
2793	FERROUS METAL TURNINGS	
2912	RADIOACTIVE MATERIAL, LOW SPECIFIC ACTIVITY (LSA-1)	Radioactive material, low specific activity
2912	SAND, MINERAL CONCENTRATE, RADIOACTIVE MATERIAL, LOW SPECIFIC ACTIVITY (LSA-1)	Sand, Mineral Mixed, Radioactive Material, Low Specific Activity
2913	RADIOACTIVE MATERIAL, SURFACE CONTAMINATED OBJECTS (SCO-1)	Radioactive material, objects contaminated with surface
2969	CASTOR BEANS	Castor Oil Seed or Castor Oil Meal or Castor Oil Pulp or Castor Oil Flake
2969	CASTOR FLAKE	
2969	CASTOR MEAL	
2969	CASTOR POMACE	
3170	ALUMINUM REMELTING BY-PRODUCTS	Aluminum Smelter By-Products or
3170	ALUMINUM SMELTING BY-PRODUCTS	Aluminum Remelting By-Products
3190	METAL SULPHIDE CONCENTRATES, SELF-HEATING	Self-heating metal sulfide mixtures

DANGEROUS CARGO HANDLING*1.2.2.5. Procedure for Safe Handling of Hazardous Solid Bulk Cargo**1.2.1.5.1. Purpose*

To ensure the safe handling of hazardous bulk solid cargoes.

1.2.1.5.2. General

- a) Information about the dangerous cargoes on board is sent to the container area planning unit by the ship agency at least 24 hours in advance, the personnel who will work in the operation are informed based on the information contained therein, and coordination is established with the relevant units to take the necessary occupational safety measures.
- b) In our port facility, dangerous cargoes in solid form are handled as suprane and will not be stored in our port area.
- c) Occupational safety in the working area, control of equipment, entry and exit of external persons, safe handling of cargo, environmental cleaning and control of the proper performance of these works are the responsibility of the Shift Supervisor and Ship Operations Officer, and their duties, powers and responsibilities in this regard have been notified to them in writing.
- d) Electrical equipment, equipment and equipment to be used in areas where hazardous substances are handled are ex-proof certified suitable for use in flammable, combustible or explosive atmospheres. Electric lamps other than arc lamps are used during cargo operations for dangerous solid bulk cargoes, and these lamps are gas-tight LED lamps.
- e) Storage of self-combusting but water-unaffected hazardous materials such as coal is not carried out in the port facility.

1.2.1.5.3. Operation

- a) Loading/unloading of dangerous bulk cargoes is carried out at pier no. 4 in the last 200 meters of our pier.
- b) Tarpaulins that will prevent solid bulk dangerous cargoes from falling into the sea during their discharge from the ship or loading on the ship will be kept between the ship and the dock during the operation.
- c) The ship master and the operations supervisor are responsible for the operations for the transportation, handling or loading/unloading of dangerous solid bulk cargoes within their areas of responsibility, in accordance with the "International Maritime Solid Bulk Cargo Code (IMSBC Code)", "Code of Practice for the Safe Loading and Unloading of Bulk Carriers (BLU Code)", "Regulation on the Safe Loading and Unloading of Bulk Carriers" published in the Official Gazette dated 31.12.2005 and numbered 26040 and "Terminal It shall ensure that it is carried out in accordance with the Manual for Loading and Unloading of Solid Bulk Cargo for Its Representatives (IMO MSC/Circ.1160, MSC/Circ.1230 and MSC.1/Circ.1356).
- d) The captain of the vessel who will load/unload dangerous solid bulk cargo will receive a detailed loading/unloading plan containing details about the location and quantities of the cargo on the ship by the operations officer before starting the loading/unloading process. An agreement will be reached between the ship's captain and the operations officer regarding the loading/unloading plan in question.
- e) The concentration of toxic or flammable gases and their possible emissions in the areas where dangerous solid bulk cargoes emitting toxic or flammable gases are handled will be regularly checked with gas measuring devices and measurements will be recorded.
- f) Necessary warnings are made so that the trucks do not load more than the restraint, and those responsible pay the necessary attention in this regard. After loading, the trucks must be covered.
- g) Drivers will be kept at the specified point away from the vehicle during vehicle loading and unloading. It will be checked that the driver has the necessary protective equipment.

DANGEROUS CARGO HANDLING

h) In the event that the discharge of the ship is partially completed, gas measurements will be made before the assignment is made for the evacuation of the cargo remaining in the hold of the ship.

1.2.1.5.4. Security

- a) While determining the areas where the dangerous cargo is handled according to the risks; administrative buildings, other facilities adjacent to the facility and the types of cargo handled in these facilities, the characteristics of other loads temporarily stored and handled in the facility, and the fastest and safest access opportunities for responding to emergencies will be taken into account.
- b) When the operation of temporary storage or handling of hazardous solid bulk cargo results in the spread of dust capable of ignition and explosion, all necessary practicable measures must be taken to prevent such ignition and explosion or, if it occurs, to minimize its effects.
- c) Dangerous solid bulk cargoes that may interact with each other must be transported and handled in a way that prevents them from interacting. This also applies to other hazardous cargoes with which hazardous solid bulk cargoes may interact.
- d) A sufficient number of appropriate personal protective clothing, equipment and equipment should be available to counter the characteristics of the dangerous solid bulk cargoes handled and the risks they may pose.
- e) Dangerous solid bulk cargoes, which emit flammable or toxic gas when in contact with water or can ignite on their own, should be kept as dry as possible. Such loads should be handled only in weather conditions without rain.
- f) Solid bulk cargoes with oxidizing properties should be temporarily stored, handled and kept away from heat or combustion sources in such a way as to prevent contamination with flammable or carbon-containing substances as much as possible.

DANGEROUS CARGO HANDLING**1.2.3. Scrap Loads**

Heavy metal scrap pieces can damage soft sidewalls and container floor when loaded as metal scrap of the wrong sizes or when the wrong loading method is used. It should also be borne in mind that scrap cargo contains radioactivity. This part of the guide is to ensure that metal scrap is properly packaged, declared and transported, and professional experience in working safely with scrap cargo is needed. This section is open to development and it is recommended to give preference to professional experiences if they coincide with professional experiences.

Scrap loads consist of recyclable materials left over from product manufacturing and consumption, such as vehicle parts, building materials, and surplus materials. Scrap has a value (monetary value), especially recovered metals, and it should be noted that non-metallic materials are also recovered for recycling.

The metal scrap industry, where a hazardous substance is present and can cause death, injury, limb rupture or environmental damage, involves a great potential risk of accidents. Examples are radioactivities found in scraps. Metals containing substances such as beryllium, cadmium and mercury can pose a hazard to personnel and constitute contaminating material for metal smelting plants.

Metal scrap is considered waste and the shipper is expected to be in full compliance with national legislation. Scrap loads can cause potential fire, automatic ignition, explosion, damage to the container, leakage (residual oils or liquids drained from engine parts).

Scraps can consist of turned, drilled, shredded, heavy mixed scrap, plate shaped, and engines and transmissions.

Metal scraps are usually shipped in standard dry cargo containers. Given the risk of damage to containers, it is recommended to choose old containers for transporting such cargo.

Container selection and loading

Metal scraps can be shipped in open-top containers. This will provide convenience for filling and emptying.

Metal scrap pressed in large bags, packets and bundles usually do not damage the containers if they are packed and secured correctly. However, it is seen in field applications where metal scraps are loosely loaded in bulk in containers.

Metal scrap, container walls and floor must be protected by plywood or similar, depending on the nature and shape of the scrap. During transport, it must be ensured that the load is not pushed towards the doors.

It is not recommended to fill the container by pouring scrap load into the container bent from the front end, as it will damage the containers. Scrap must be loaded in a horizontal position. The load must be loaded and secured in such a way that it cannot move during transport. The container must not be overloaded.

The container loader must comply with the following points.

- Classification of scrap should be done.
- It should be ensured that all liquids such as oil, fuel, water are discharged from loads such as transmissions and engines.
- Using plywood sheets or liners, the container floor and sidewalls must be protected.
- Before loading, make sure that the container is placed horizontally. Vertically rotated loading should not be allowed.
- No more scrap should be loaded than allowed. Gross weight must be verified.
- It is strictly forbidden to compress the scrap during loading into the container. This will damage the container sidewalls and frames.
- Larger scrap pieces must be fixed or trimmed to prevent any movement of the load.

DANGEROUS CARGO HANDLING

- It should be ensured that the cargo does not touch the container doors during all transportation. This ensures that it does not damage the doors and that the doors can be opened safely by the buyer and control authorities.

The loading operator must comply with the following points.

- It should be checked for leaks.
- Radioactivity must be controlled.
- The container walls should be checked for abnormal heat.
- Externally visible container damage should be checked.

1.2.3.1. Procedure for the Safe Handling of Scrap Cargo

Scrap cargoes are handled in our port facility. It will not be stored at the port facility.

1.2.3.1.1. Purpose

To ensure that the handling of scrap cargo is carried out safely.

1.2.3.1.2. Necessity

- a) Controlled access to the quarantine area will be provided, the entrance door of the area in question will be locked and warning signs will be placed on it.
- b) Hande ÇAKIR and İbrahim Anıl ZANA were assigned to be responsible for the handling of contaminated radioactive materials in the coastal facility, and these responsible persons received the Radiation Protection Officer course from TAEK and their duties were notified to them in writing.
- c) Radiation measurements of scrap cargoes in the coastal facility are carried out by means of fixed radiation detectors located at the entrance and exit of the port.

1.2.3.1.3. Handling Operation

- a) Radiation-contaminated dust accumulated in the collection pool in the shore facility will be measured and collected by TAEK.
- b) The radiation well, where the radioactive source and/or radiation-contaminated materials detected in the scrap load are temporarily stored, has been surrounded and limited in order to prevent the approach of unauthorized persons. Radiation wells shall be kept under constant surveillance during the temporary storage of the substances in question, and a control point shall be established at an appropriate distance.
- c) Vehicles loaded with scrap will be allowed to pass through the radiation measuring device at the port entrance at a speed of less than 10 km. A vehicle loaded with scrap that has not been measured will not be allowed to leave the facility. During the operation, it is the responsibility of the port scorer to go to the weighbridge area after the vehicles are loaded and to see that the measurement is made.
- d) In the event that the radiation level Level-3 is detected in a scrap-laden vehicle in the measurements; It will be ensured that the vehicle to be abandoned, including the driver of the vehicle, will be towed to the quarantine area, and the vehicle will be kept in the quarantine area until the necessary emergency response is completed. The area in question and its approaches will be marked with warning signs and people in the facility will be informed about this situation.
- e) In case of detection of radioactive sources and/or radiation-contaminated substances, the detected source and/or substances will be taken to the radiation well and the number, size and approximate weight of the radioactive sources will be reported to TAEK within 24 hours at the latest. Operators, facility employees or third parties who have not received training on radiation protection and do not have appropriate protective clothing, equipment, equipment and equipment will be prevented from entering the quarantine area.
- f) Radiation measurement of the radiation detection and quarantine area, radiation well, dust accumulated in the collection pool, water discharged from the collection pool and scrap-laden vehicles that will leave the port area will be made.

DANGEROUS CARGO HANDLING

DANGEROUS CARGO HANDLING**2. RESPONSIBILITIES**

All parties engaged in the transportation of dangerous goods; It has to take all necessary precautions to carry out transportation in a safe, secure and environmentally friendly manner, to prevent accidents and to minimize damage as much as possible when an accident occurs.

2.1. GENERAL RESPONSIBILITY (Regulation on the Carriage of Dangerous Goods by Sea and Loading Safety)

All parties engaged in the transportation of dangerous goods; They have to take all necessary precautions to carry out transportation in a safe, secure and environmentally friendly manner, to prevent accidents and to minimize the damage as much as possible when an accident occurs: In order to carry out the operations related to dangerous goods safely, the trainings specified in article 1.2 of this document are carried out, and all processes and documents prepared are applied in the field.

2.1.1. They are obliged to take all necessary measures to carry out transportation in a safe, secure and environmentally friendly manner, to prevent accidents and to minimize damage as much as possible when an accident occurs.

- It uses the roads reserved for all vehicles carrying the load transport units.
- When an emergency is required, the signs, labels and plates on the load transport units must remain visible.
- All vehicles must obey the in-port speed limit.
- Speed control is carried out in the port. All vehicles are expected to comply with speed limits.
- Vehicle personnel carrying cargo carrying units containing dangerous goods should have equipment in the vehicle against spills and scatterings.
- Personal protective equipment for each vehicle personnel should be available in accordance with the load and should be in fast access.
- Vehicles carrying dangerous goods must have at least 2 6 kg fire extinguishers and a 2 kg fire extinguisher in the driver's cabin.
- Smoking is prohibited in vehicles.
- Traffic signs and rules within the port must be followed.
- In the event of a vehicle breakdown, the shore facility should be informed immediately and assistance should be requested.
- No stranger should be allowed into the driver's cabin in the port, except for the vehicle crew.
- No waste should be thrown out of the vehicle while driving.
- Traffic instructions of shore facility officers must be followed.
- The vehicle should be used with caution in adverse weather conditions such as snow, rain, storms.
- The use of recreational drugs in the vehicle is prohibited.

2.1.2. In case of emergencies such as fire, leakage and spill that occur during the transportation of dangerous goods, they benefit from the EmS Guide, which includes Emergency Response Methods and Emergency Schedules for Ships Carrying Dangerous Goods.

EmS Guide, It contains guidance on Emergency Response Procedures for Ships Carrying Dangerous Goods, including emergency programs (EmS) to be followed in the event of incidents involving hazardous substances, materials or objects, or hazardous substances (marine pollutants). Accordingly;

In the event of a fire or spill incident, initial actions must be taken in accordance with the contingency plan on board. Separate methods of intervention are given in the guideline for certain dangerous goods, taking into

DANGEROUS CARGO HANDLING

account the type of vessel, the quantity and type of packaging, and whether the goods are stacked. Intervention on or under the deck differs.

The guide is for the use of packaged dangerous cargoes, Ro-Ro cargoes, vessels where the captain and crew must intervene against fires and spills without outside help.

For fires, the EmS fire schedule should be consulted. The table specifies the appropriate fire extinguishing method for each dangerous cargo.

2.1.2.1. *Special notes for classes of hazardous substances in fires*

2.1.2.1.1. Class 2

Gases are substances that are usually transported in cylinders, bottles, portable tanks, aerosols and bottles with varying degrees of pressure. Gases can be flammable, toxic, or corrosive and can be compressed, liquefied, or cooled.

Gases do not start burning unless there is an ignition source (e.g. fire or heat). It is necessary to determine the location of the burning gas, as it may be the center of the fire. Heating of the outlet is the most serious danger due to the possibility of breakage, ejection or explosion. In case of fire, containers with gas should be sprayed with plenty of water to keep them as cold as possible.

Non-combustible leaks from flammable gas containers can lead to the formation of explosive mixtures in the air. If a fire caused by the ignition of leaking gas is extinguished in the cargo area without stopping the leak, gas accumulation occurs. This will result in an explosive mixture or a toxic or suffocating atmosphere.

Leaks of some liquefied gases can emit extremely low temperatures around. These extremely low temperatures are an additional hazard other than flammability and toxicity, and emergency crews should avoid contact with such leaks and the immediate environment.

2.1.2.1.2. Class 3

It is dangerous to spray water on a fire that contains flammable liquids. Many flammable liquids float on the water, and the water jet spreads the liquid, posing a greater danger. Closed containers exposed to fire will be pressurized and rupture will occur.

The heated flammable liquid will emit vapors that can instantly begin to burn with explosive action. As a result, firefighting personnel must remain in a well-protected position and use water spray to the fire zone. This cools the temperature of the liquid and the air-vapor mixture.

2.1.2.1.3. Class 4.1

Flammable solids are self-reactive substances, desensitized explosives and polymerizing agents and include flammable solids, water-wetted explosives (i.e., desensitized explosives) and self-reactive substances.

Flammable solids can be easily ignited. In the event of a fire, water-soaked explosives (i.e. desensitized explosives) will effectively have class 1 product characteristics. In such a case, the dangerous goods safety advisor for class 1 explosives should be consulted.

Self-reactive substances are sometimes transported under temperature-controlled conditions, where the control temperature will depend on the specific properties of the conveyed substance. If the

DANGEROUS CARGO HANDLING

control temperature is exceeded, the refrigeration unit must be checked. If temperature control cannot be restored, the manufacturer should be consulted as soon as possible. If smoke is observed, the manufacturer should be consulted in a similar way. The cargo must then be kept under surveillance.

2.1.2.1.4. Class 4.2

Substances prone to spontaneous combustion include pyrophoric substances, which will burn instantly when in contact with air, and self-heating substances, which lead to spontaneous combustion.

Although the use of dry inert powder material to extinguish the fire is the preferred option, in most cases such a procedure may not be possible. Two methods of dealing with such fires are possible. These;

- I. Controlled burning: stay in a well-protected position. Allow the goods to burn. Many products of this class react dangerously with water. In such cases, contact with water can exacerbate the burn. Therefore, it is not recommended to apply water directly on burning goods. When portable water monitors are available that provide a water shield function: create a water curtain to prevent the spread of fire. The fire in which the goods are involved must be left to be completely extinguished. If the fire has already spread to adjacent cargo that does not react with water, fight this fire from a safe distance.
- II. Fight fire from a safe distance. If the location of the fire makes it possible, plenty of water should be used immediately. Although the burning goods will react with the water and create heat, a large amount of water will cool the reaction and prevent further heat dissipation. However, water should not be used when the location of the fire makes it impossible to apply an abundance of water directly to the goods.

2.1.2.1.6. Class 4.3

Substances that emit flammable gases when in contact with water react violently with water to release flammable gases. The heat of the reaction is sometimes enough to start a fire. Sometimes the collateral danger can be the poisonous substance. In some cases, it can be seen as a collateral hazard of the toxic substance.

Although the use of dry inert powder material to extinguish the fire is the preferred option, in most cases such a procedure may not be possible. Two methods of dealing with such fires are possible. These;

- I. Controlled burning: stay in a well-protected position. Allow the goods to burn. All goods of this class react dangerously with water: contact with water will exacerbate the combustion. Therefore, it is not recommended to apply water directly on burning goods. When portable water monitors are available that provide a water shield function: create a water curtain to prevent the spread of fire. The fire in which the goods are involved must be left to be completely extinguished. If the fire has already spread to adjacent cargo that does not react with water, fight this fire from a safe distance.
- II. Fight fire from a safe distance. Attention should be paid to this point, as fire extinguishing with water can intensify the fire and cause the appearance of flammable gases that can explode in mixtures with air.

2.1.2.1.7. Class 5.1

This class of substances tends to produce oxygen and, therefore, accelerate a fire. Although these substances are not necessarily flammable in themselves, they can cause other materials (e.g., sawdust or paper) to burn or contribute to a fire, resulting in an explosion.

Fires with these substances are difficult to extinguish because the ship's firefighting installation may not be effective. Everything possible should be done to prevent the fire from spreading to

DANGEROUS CARGO HANDLING

containers containing these hazardous substances. However, if the fire reaches the cargo, personnel should immediately retreat to a well-guarded position.

2.1.2.1.8. Class 5.2

This class of substances is prone to severe burning. Some substances have a low decomposition temperature and are transported under temperature-controlled conditions, where the control temperature will depend on the specific properties of the conveyed substance.

If temperature control cannot be restored, the manufacturer should be consulted as soon as possible, even if the smoke stops escaping. The cargo must then be kept under surveillance. The surrounding area should be kept isolated because liquid can gush out of the drain arrangements.

2.1.2.1.9. Class 6.1

Substances of this class are toxic by contact or inhalation, and therefore the use of self-contained respirators and firefighters' suits is mandatory.

2.1.2.1.10. Class 8

These substances are extremely dangerous to humans, and many of them can lead to the destruction of safety equipment. Burning cargoes of this class will produce highly corrosive vapors. As a result, it is essential to wear self-contained breathing apparatus.

2.1.2.1.11. Class 9

Miscellaneous hazardous substances and articles and substances harmful to the environment include substances, materials and articles that are considered to have some level of hazard, but are not classified in the criteria of class 1 to 8.

2.1.2.1.12. Marine pollutants

A number of substances included in all of the above classes have also been designated as marine pollutants. Packages containing these substances will bear a marine pollutant mark.

In the event of a leak from burning cargo, it is important to know that the spillage of any marine pollutants washed into the sea will pollute the sea. However, instead of preventing pollution of the sea, it is more important to respond to a fire on a ship.

2.1.2.2. Special classes for dangerous goods in spills**2.1.2.2.1. Class 2**

The release of a combustible gas (class 2.1) is the first step leading to a potential vapor cloud explosion. In order for an explosion to occur, the substance must mix with the air in such an amount that the mixture forms a cloud. As soon as friction (electrostatic potential) enters the explosive range, and with an ignition source, an explosion can occur with a flash fire, flash, and sometimes, even, catastrophic consequences. When dealing with gas leaks, allow the gas to evaporate and drift. Keep all ignition sources away. Water spray can reduce the ignition potential of the cloud.

Non-toxic, non-flammable gases (class 2.2) can displace oxygen and create a choking hazard. It is important to ventilate all relevant areas.

When toxic gases (class 2.3) are released, they can fill an area of the ship or a compartment with a toxic atmosphere. Therefore, it is important to close, seal and secure all ventilation supplying the living

DANGEROUS CARGO HANDLING

area, machine spaces and bridge to protect against such gases. Self-contained breathing apparatus is required for the emergency team.

Liquefied gases can cause the additional hazard of very low temperatures around the leak point. Such a leak would be dangerous, especially when there is a leak in the liquid phase from a container where very low temperatures will be experienced. If possible, the emergency team should avoid contact with liquefied gases.

Oxidizing gases can react violently with a number of organic materials. These reactions can generate heat, produce flammable gases, and ignite flammable materials.

2.1.2.2.2. Class 3

The release of vaporized flammable liquid is the first step, leading to a potential *vapor cloud explosion*. In order for an explosion to occur, the steam must mix with the amount of air that will allow the mixture to form a cloud. As soon as friction (electrostatic potential) enters the explosive range, and with an ignition source, an explosion can occur with a flash fire, flash, and sometimes, even, catastrophic consequences. Water spray will reduce the evaporation of the cloud and the potential for ignition. Keep all ignition sources away.

At high concentrations, many flammable liquids exhibit a narcotic effect (not labeled accordingly), a short-term potentially lethal effect (identified by a class 6.1 label), or a long-term toxic effect (unlabeled). . Therefore, it is recommended to use independent breathing apparatus in any case.

Some flammable liquids are corrosive to human skin, ship hull or normal personal protection equipment. Its vapors are toxic if inhaled. For this reason, washing the debris and throwing the vapors into the sea with a water spray is the preferred method. It is important to close all vents to protect the living and machine quarters and the bridge from vapors. Crew members should stay away from any wastewater.

Many flammable liquids are insoluble in water and float on water (e.g. mineral oil, kerosene, petroleum). In general, high concentrations of these substances are not lethal but exert a narcotic effect. The crew should be aware of this and stay away from highly concentrated vapors. Mineral oil is considered a marine pollutant, although it is not classified or labeled. Depending on the quantities, oil spilled overboard can cause problems and is often given a high profile by the media. In the event of spillage on board, the predominant danger is flammability. Keep all ignition sources away.

2.1.2.2.3. Class 4.1

Flammable solids, self-reactive substances, desensitized solid explosives and polymerizing agents include many different substances and varying hazards in their three subclasses. Many of them are not strict. Some of these materials require the use of special substances for cleaning/suction, as they react negatively with water, sand, or other inert materials. The procedures and materials to be used in the event of a spill are defined in ten different charts.

Spilled flammable solids can create an explosive environment that can easily ignite. Some solids (e.g. articles) can be repackaged, while others will contaminate the surfaces of ships, which must be thoroughly cleaned by launching the substances.

Few combustible substances are transported in molten form. To clean up contaminated areas, it is possible to use inert materials to allow emergency crews to shovel the spill and dump it overboard.

Flammable solids, which are explosive when poured from a package, should be kept wet and disposed of overboard. Ignition of the drying material (e.g. by heat or friction) will lead to an explosion.

DANGEROUS CARGO HANDLING

Temperature-controlled self-reactive substances are also classified as flammable solids under class 4.1. Spillage is often linked to failure of temperature control, which leads to a chemical reaction and creates a fire hazard. If it is not thrown into the sea, the relevant fire program should be consulted.

Many flammable solids, substances prone to spontaneous combustion, and many substances that are dangerous when wet, are harmful to health through skin contact or inhalation of dust. Therefore, it is recommended to use self-contained breathing apparatus and appropriate chemical protection (e.g. chemical suit) in all cases.

2.1.2.2.4. Class 4.2

Some self-flammable substances can react with water. Drowning with dry inert material and immediately throwing it overboard can limit the ignition hazard. Others will ignite within minutes, and firefighting will be required.

2.1.2.2.5. Class 4.3

Depending on their chemical properties, substances that are dangerous when wet (class 4.3) can be collected and thrown overboard, even if they react with water, or they can be kept dry and thrown overboard. In case of the occurrence of flammable gases, it is recommended to use a water spray.

2.1.2.2.6. Class 5.1

Class 5.1 charges contain oxygen, and some ignite flammable materials on contact. In general, contact with substances of this class will be harmful to the skin, eyes and mucous membranes. It is therefore advisable to use self-contained breathing apparatus and appropriate chemical protection (e.g. chemical suit).

Spilled oxidizing agents (class 5.1) can ignite or destroy flammable materials due to their chemical reactions (e.g. personal protection). Such debris should be washed in the sea. All team members should stay away from wastewater.

2.1.2.2.7. Class 5.2

Organic peroxides (class 5.2) are highly reactive and some may explode when ignited. Class 5.2 liquids are flammable liquids that must be kept away from all sources of ignition. These substances instantly destroy the eyes. Some substances are transported under temperature control, which is necessary to prevent the reaction that can lead to a fire (often noticed as smoke formation) and the development of heat.

2.1.2.2.8. Class 6.1

The effects of toxic substances (class 6.1) may occur immediately upon exposure to them or may be delayed until after exposure. Inhalation is the main route for vapors, gases, mists and dusts. Skin and eye contact is a concern for the emergency team. In all cases, it is recommended to use self-contained breathing apparatus and appropriate chemical protection (e.g. chemical suit). Vapors of toxic liquids can fill an area of the ship or an area with a toxic atmosphere. Therefore, in the event of steam formation, it is important to close, seal and insulate all ventilation leading to living and machine quarters and the bridge.

Some toxic substances are also flammable. In this case, safety recommendations for both flammable and toxic liquids should be followed.

DANGEROUS CARGO HANDLING**2.1.2.2.9. Class 8**

Corrosive solids and liquids can permanently damage human tissue. Some substances can corrode steel and destroy other materials (e.g. personal protective equipment). Corrosive vapors are highly toxic and often lethal by destroying lung tissue. All corrosive chemicals will be dangerous (toxic) to human health. Avoid direct contact with skin, protect against inhalation of vapors or mists.

In all cases, it is recommended to use self-contained breathing apparatus and appropriate chemical protection (e.g. chemical suit). Washing the spills and throwing the vapors into the sea with water spray is the method applied in all cases. It is important that all ventilation leading to the preferred layout, engine rooms and bridge is closed, sealed and secured. All personnel should stay away from wastewater.

Some corrosive substances are also flammable. In these cases, safety recommendations for both flammable and corrosive substances should be followed. It is recommended to use plenty of water and water spray. In general, the hazard of ignition is more important to the safety of the ship and crew than the corrosive properties (see, eg.

2.1.2.2.10. Class 9

This class includes a variety of hazardous substances that do not easily fit the criteria of other hazard classes. However, these substances represent dangers. There are no common features that apply to all goods of this class.

2.1.2.2.11. Marine pollutants

A number of substances in all classes have also been designated as marine pollutants because they are dangerous to marine life. Packages containing these substances will bear a Marine Pollutant mark.

Instead of preventing pollution of the sea by marine pollutants, it is more important to ensure the safety of the crew and the integrity of the loaded vessel.

2.1.3. They benefit from the Medical First Aid Guide (MFAG) in the annex of the IMDG Code in order to provide the necessary medical first aid to the people affected by the damages of dangerous loads and the health problems that occur as a result of accidents involving these loads.

Information on medical first aid is provided in the IMO/WHO/ ILO Medical First Aid Guide for Use *in Accidents Involving Hazardous Substances (MFAG) published by IMO.*

Contamination with any hazardous substances should be immediately removed from the skin, and then washed off, for example, with plenty of water.

In case of spillage of toxic substances, MFAG should be used.

Most of the toxic substances and many infectious substances are also toxic to marine animals. If necessary, consult the safety data sheets or experts for individual specifications.

2.2. Responsibilities of the cargo person

The responsibilities of the cargo owner are as follows:

DANGEROUS CARGO HANDLING

- a) It prepares and has prepared mandatory documents, information and documents related to dangerous goods and ensures that these documents are present with the cargo during the transportation activity.
- b) It ensures that dangerous goods are classified, packaged, marked, labeled and signed in accordance with their type.
- c) It ensures that dangerous goods are loaded, stacked and securely tied to approved packaging and load transport units in accordance with the rules and safely.

2.3. Responsibilities of the carrier

The responsibilities of the carrier are as follows:

- a) It requests mandatory documents, information and documents related to dangerous goods from the cargo concerned and ensures that they are present with the cargo during the transportation activity.
- b) It checks the compliance of dangerous goods classified, packaged, marked, labeled and plated by the cargo concerned.
- c) It checks that dangerous goods are properly packaged, safely loaded and securely fastened to the load transport unit using approved packaging and load carrying units.

2.4. Responsibilities of the onshore facility operator

The responsibilities of the shore facility operator are as follows:

- a) It does not dock ships carrying dangerous cargoes without the permission of the port authority.
- b) It provides written information to the ship that will dock at its facility within the scope of facility rules, cargo handling rules and relevant legislation.
- c) It does not handle dangerous cargoes for which it has not received a handling permit from the administration, and in this context, it does not victimize the ships that will dock by planning.
- d) It ensures that the mandatory documents, information and documents related to dangerous goods are found with the cargo by requesting them from the cargo concerned. In the event that the relevant documents, information and documents cannot be provided by the cargo concerned, it is not obliged to accept or handle the dangerous cargo to its facility.
- e) It shares all the data that may be required according to the nature of the cargo with the ship's person and performs the loading or unloading operation according to the agreement to be reached. The ship does not make changes in the operation without the knowledge of the person concerned.
- f) It determines the operating limits, taking into account the safe working capacity of the facility and the weather forecasts, and takes the necessary measures to keep the ship safely tied up and handled at the dock.
- g) It checks the transport documents containing information that the dangerous goods arriving at the facility are properly classified, packaged, marked, labeled, signified and safely loaded into the load transport unit.
- h) It ensures that the personnel involved in the handling of dangerous goods and the planning of this handling are certified by receiving the necessary training, and does not assign undocumented personnel to these operations.
- i) It ensures that the dangerous goods handling equipment in its facility is in working order and that the relevant personnel are trained and documented in the use of these equipment.
- j) By taking occupational safety measures in the coastal facility, it ensures that the personnel use personal protective equipment suitable for the physical and chemical properties of the dangerous cargo.
- k) It carries out activities related to dangerous goods in docks, piers and warehouses established in accordance with these works.
- l) It equips the docks and piers reserved for ships that will load or unload dangerous liquid bulk cargoes with installations and equipment suitable for this job.
- m) It keeps an up-to-date list of all dangerous cargoes on the ships berthed at its facility and in the closed and open areas of its facility and provides this information to the relevant persons upon request.
- n) It notifies the port authority of the instant risk posed by the dangerous cargoes it handles or temporarily stores in its facility and the measures it takes for this.
- o) It notifies the port authority of accidents related to dangerous cargoes, including accidents at the entrance to closed areas.
- p) It provides the necessary support and cooperation in the controls and inspections carried out by the administration and the port authority.
- q) It ensures the transfer of Class 1 (except Class 1 Compliance Group 1.4 S), Class 6.2 and Class 7 dangerous cargoes that are not allowed to be temporarily stored out of the coastal facility as soon as possible without waiting, and applies to the Administration for permission in cases where it is necessary to wait.
- r) It takes fire, environmental and other safety measures in accordance with the class of the dangerous cargo in the temporary warehouses and storage area in accordance with the separation and stacking rules of the cargo transport units where dangerous goods are transported. It keeps fire extinguishing systems and first aid units ready for use at any time in areas where dangerous goods are handled and periodically carries out the necessary controls.

DANGEROUS CARGO HANDLING

- s) It obtains permission from the port authority before hot working works and operations to be carried out in areas where dangerous cargoes are handled and temporarily stored.
- t) It prepares an emergency evacuation plan for the evacuation of ships from coastal facilities in case of emergency, submits it to the port authority and informs the relevant persons about the plan approved by the port authority.
- u) It ensures that the internal loading of the load transport units is carried out in accordance with the loading safety rules in its facility.

DANGEROUS CARGO HANDLING**2.5. Responsibilities of the ship's owner**

The responsibilities of the ship's concerned are as follows:

- a) It ensures that the cargo to be carried by the ship is certified to be suitable for transportation and that cargo holds, cargo tanks and cargo handling equipment are suitable for cargo transportation.
- b) It requests all mandatory documents, information and documents related to dangerous goods from the cargo concerned and ensures that they are present with the cargo during the transportation activity.
- c) It ensures that the documents, information and documents that must be included in the ship regarding dangerous goods within the scope of legislation and international conventions are appropriate and up-to-date.
- d) It checks the transport documents containing information that the cargo transport units loaded on the ship are properly marked, signposted and loaded safely.
- e) It informs the relevant ship personnel about the risks of dangerous cargoes, safety procedures, safety and emergency measures, intervention methods and similar issues.
- f) It keeps up-to-date lists of all dangerous cargoes on board and declares them to the relevant persons upon request.
- g) It ensures that the loading program, if any, on board is approved and documented and kept in working order.
- h) It notifies the port authority and the coastal facility of the instant risk posed by the dangerous cargoes on the ship docked at the shore facility and the measures taken for this.
- i) In case of leakage or possibility of leakage in the dangerous cargo, it does not accept to carry the dangerous cargo.
- j) It notifies the port authority of dangerous cargo accidents that occur on its ship during the cruise or while at the shore facility.
- k) It provides the necessary support and cooperation in the controls and inspections carried out by the administration and the port authority.
- l) It does not accept to carry dangerous cargoes that are not included in the ship certificates issued by the relevant institutions and organizations.
- m) It ensures that the seafarers in charge of the handling of dangerous goods use personal protective equipment suitable for the physical and chemical properties of the cargo during handling.
- n) It provides the requirements for the loading safety of the cargoes loaded on their ships.

2.6. Education

- 1) The procedures and principles regarding the training to be received by the personnel working in coastal facilities are determined by the Administration.
- 2) The Administration carries out the necessary studies for the implementation of IMO trainings, which are mandatory by IMO or, if deemed appropriate by the Administration, advisory.
- 3) If it is determined that the knowledge and skills of the personnel are insufficient during the inspections carried out in the coastal facilities, the Administration may request the repetition of the trainings.

DANGEROUS CARGO HANDLING**2.7. LOADING SAFETY**

- 4) The port authority stops the handling operation at the shore facility when it sees any risk and does not start it until the risk is eliminated.
- 5) In order to ensure the safe loading of the cargo on the ship, the provisions of the BLU Code and BLU Manual, the Safe Practice Code for Cargo Stacking and Safety (CSS Code), the Code of Practice for the Packaging of Cargo Carrying Units (CTU Code) and the Code of Safe Practices for Ships Carrying Timber on Deck (TDC Code) are complied with, depending on the type of cargo.
- 6) The stacking of loads is carried out in accordance with the relevant legislation and international conventions to which we are a party.
- 7) The vessel cannot be loaded more than the loading limit, taking into account the brand of the loading limit. If such a situation is detected, the ship is not allowed to sail and administrative action is taken against the ship's person within the scope of Article 22.
- 8) Before the handling operation, the loading-unloading plan and the results of the draft survey or weighbridge survey to determine the amount of cargo loaded before the ship departs are submitted to the port authority by the ship's owner. The authority or port authority may request that the draft survey or weighbridge survey report be obtained from an authorized inspection firm.
- 9) Measures are taken to prevent the stability of the ship from being adversely affected by ensuring that the cargo on bulk carriers, especially bulk carriers with a single hold, is loaded in such a way that it spreads to the bottom of the hold (by pilling).
- 10) It is ensured that the load and ballast water arrangement is monitored throughout the loading or unloading operation so that the structure of the ship is not subjected to excessive stress.
- 11) Care is taken to ensure that the vessel is uninclined, but if a tilt (tilt) is required during loading, it is ensured that this is as short as possible. In order to avoid structural damage to the vessel, it is ensured that it is loaded and unloaded evenly in accordance with the approved stability curl.
- 12) In adverse meteorological and oceanographic conditions that may affect the cargo handling operation, the handling operation is stopped by the captain until the conditions improve.
- 13) In order to prevent situations such as placing the heavy load on the light load, placing the liquid load on the dry load, and the smell of foul-smelling loads from spreading to other loads, loads with properties that may damage other loads are loaded in accordance with the separation rules.
- 14) In order to ensure the full implementation and maintenance of safety measures related to the loading, stowage, sorting, handling, transportation and unloading of cargoes on board, all cargoes, cargo units and cargo transport units, except solid and liquid bulk cargoes, are loaded in accordance with the Cargo Securing Manual approved by the Administration or authorized classification societies on behalf of the Administration in accordance with Rule 5.6 of SOLAS Chapter VI Part A, It is stacked and secured.

2.8. Loads covered by the IMDG Code

- 1) Substances and objects that are prohibited to be transported in the IMDG Code cannot be transported by sea.
- 2) Parties involved in the transportation of dangerous goods transported in packages shall take measures in accordance with this Regulation and the provisions of the IMDG Code, taking into account the nature and extent of foreseeable risks in order to prevent damage and injury and to minimize their impact.
- 3) In the transportation of dangerous goods by sea, it is obligatory to use packages defined in Section 6 of the IMDG Code and tested and given a UN certificate by the Ministry or by the competent administration of a country party to SOLAS.
- 4) The Container/Vehicle Packaging Certificate in IMDG Code Rule 5.4.2 is completed and signed by the persons loading the dangerous goods into the cargo transport unit (excluding tank containers). They receive the relevant training in Rule 1.3 of the IMDG Code. The Container/Vehicle Packaging Certificate is presented to the port before the cargo arrives at the port or at the entrance with the cargo. A copy of this certificate is placed on the inner wall of the right door of the container.
- 5) The documents specified in Rules 5.4.3, 5.4.4 and 5.4.5 of the IMDG Code shall be carried on board each vessel carrying dangerous goods in packages.
- 6) Pursuant to SOLAS Chapter II-2 Section G Rule 19.4, ships shall have a Document of Compliance issued by the competent authority to prove that the ships are of suitable construction and equipment to carry dangerous cargo. Certification is not required for IMDG Code Class 6.2, Class 7 and

DANGEROUS CARGO HANDLING

dangerous cargoes that can be transported in limited quantities, with the exception of dangerous solid bulk cargoes.

2.9. Weighing full containers

- 1) **It is obligatory to determine and verify the gross weights of the full containers to be loaded on ships to be transported by sea:** In our coastal facility, the gross weights of full containers containing dangerous cargo are determined. After the payload overload is re-laid and brought to the appropriate weighing level, it is stacked and then the ship is planned.
- 2) **Real and legal persons who will determine the gross weights of full containers are authorized by the Administration by issuing a Full Container Gross Weight Determination Authorization Certificate:** Our coastal facility has a "Full Container Gross Weight Determination Authorization Certificate" numbered BKN.22642.Y-1.34.41.

DANGEROUS CARGO HANDLING**3. RULES AND PRECAUTIONS TO BE FOLLOWED/APPLIED BY THE COASTAL FACILITY****3.1. Measures taken by the shore facility operator**

- a) It does not allow ships carrying dangerous cargoes to dock at its facility without the permission of the port authority:
Towage service is obtained from Uzmar, which is authorized by the administration for the safe docking and mooring of ships carrying dangerous cargo. All ships docking at the port receive a berthing approval certificate from the Port Authority before docking and a separate approval when leaving.
- b) It provides written information to the ship that will dock at its facility within the scope of facility rules, cargo handling rules and relevant legislation.
Each ship docking at the port facility is informed by giving the Akçansa Operation Procedure, which includes the rules to be followed when they are in the port.
- c) It does not handle dangerous cargoes for which it has not received a handling permit from the administration, and in this context, it does not victimize the ships that will dock by planning.
- d) Your permission from the administration; Dangerous cargoes for which handling permission is obtained within the scope of the IMDG Code;: Class 2 (gases), Class 3 (flammable liquids), Class 4.1, Class 4.2, Class 4.3 (Flammable solids, self-reactive substances, polymerizing agents and susceptibility solid explosives), Class 5.1 (oxidizing-oxidizing-substances), Class 5.2 (organic peroxides), Class 6.1 (toxic substances), Class 8 (corrosive substances), Class 9 (various dangerous goods and articles) We also have scrap cargoes and dangerous solid bulk cargoes business. It is stated in the "Dangerous Goods Handling Guide" and "Dangerous Goods Conformity Certificate" published on our website that only those with permission are handled.
- e) It ensures that the mandatory documents, information and documents related to dangerous goods are found with the cargo by requesting them from the cargo concerned. In the event that the relevant documents, information and documents cannot be provided by the cargo concerned, it is not obliged to accept or handle the dangerous cargo to its facility.
The necessity of mandatory documents, information and documents that should be related to dangerous goods is published on our website and it is ensured that the cargo interested parties who bring dangerous cargo to the port or receive dangerous cargo from the port are informed.
It shares all the data that may be required according to the nature of the cargo with the ship's person and performs the loading or unloading operation according to the agreement to be reached. The ship does not make changes in the operation without the knowledge of the person concerned.
- f) Planning for ship loading and unloading is made as a result of negotiations between the Planning Department and the Ship Captain or his agent. Loading and unloading are monitored by the field operations team.
- g) It determines the operating limits, taking into account the safe working capacity of the facility and the weather forecasts, and takes the necessary measures to keep the ship safely tied up and handled at the dock.
Weather forecasts are followed on a daily basis, and our machines have an automatic stop system for cranes in adverse weather conditions. In addition, no work is carried out in adverse weather conditions and operations are stopped by informing the ships in the port.
- h) It checks the transport documents containing information that the dangerous goods arriving at the facility are properly classified, packaged, marked, labeled, signified and safely loaded into the load transport unit.
At the entrance and exit of the port facility; Plates, plates and signs that must be present in vehicles, containers/tanks and transport documents are checked.
- i) It ensures that the personnel involved in the handling of dangerous goods and the planning of this handling are certified by receiving the necessary training, and does not assign undocumented personnel to these operations.
Employees assigned to the handling and planning of Akçansa Ambarlı Terminal work area; Training and re-training are provided on "IMDG CODE Training".

DANGEROUS CARGO HANDLING

- j) It ensures that the dangerous goods handling equipment in its facility is in working order and that the relevant personnel are trained and documented in the use of these equipment.
Periodic, planned and unplanned maintenance of the equipment used in the facility is carried out. Maintenance plans are available. Employees who use the equipment have certificates.
- k) By taking occupational safety measures in the coastal facility, it ensures that the personnel use personal protective equipment suitable for the physical and chemical properties of the dangerous cargo.
The use of personal protective equipment in accordance with the specifications specified in the "PPE Equipment Instruction" is provided.
- l) It carries out activities related to dangerous goods in docks, piers and warehouses established in accordance with these works.
In our facility, dangerous cargo handling activities are carried out at piers 3 and 4.
- m) It equips the docks and piers reserved for ships that will load or unload dangerous liquid bulk cargoes with installations and equipment suitable for this job.
- n) Hazardous liquid bulk cargo is not handled in our port area.
- o) It keeps an up-to-date list of all dangerous cargoes on the ships berthed at its facility and in the closed and open areas of its facility and provides this information to the relevant persons upon request.
Dangerous cargoes at the port and on the ships berthed at the facility are monitored instantly.
- p) It notifies the port authority of the instant risk posed by the dangerous cargoes it handles or temporarily stores in its facility and the measures it takes for this.
Emergencies and instantaneous risks for dangerous cargoes in the port are reported to the Port Authority.
- q) It notifies the port authority of accidents related to dangerous cargoes, including accidents at the entrance to closed areas.
Accidents related to dangerous cargoes at the facility are reported to the port authority. "Dangerous Cargo Accident and Incident Notification Form" is used for accidents.
- r) It provides the necessary support and cooperation in the controls and inspections carried out by the administration and the port authority.
All necessary support is provided by accompanying the inspections of the administration and port authority, and the requests for the requested information and documents are met.
- s) It ensures the transfer of Class 1 (except Class 1 Compliance Group 1.4 S), Class 6.2 and Class 7 dangerous cargoes, which are not allowed to be temporarily stored, out of the coastal facility as soon as possible without waiting (if permitted by the Administration), and applies to the Administration for permission in cases where it is necessary to wait.
If the Administration permits, the cargoes belonging to the relevant classes are allowed to leave the port without being kept at the shore facility.
- t) It takes fire, environmental and other safety measures in accordance with the class of the dangerous cargo in the temporary warehouses and storage area in accordance with the separation and stacking rules of the cargo transport units where dangerous goods are transported. It keeps fire extinguishing systems and first aid units ready for use at any time in areas where dangerous goods are handled and periodically carries out the necessary controls.
According to the characteristics of the dangerous cargo containers, which ones can be stored side by side and how much distance should be left during storage, the stacking distances of the containers are determined with the "Separation Table" of the port areas used within the scope of IMDG CODE and the planning department ensures storage according to this table.
- u) It obtains permission from the port authority before hot working works and operations to be carried out in areas where dangerous cargoes are handled and temporarily stored.
Work is carried out with the permission of the port authority for hot works to be carried out in areas where dangerous cargoes are handled and on ships.
- v) It prepares an emergency evacuation plan for the evacuation of ships from coastal facilities in case of emergency, submits it to the port authority and informs the relevant persons about the plan approved by the port authority.
Emergencies on ships are monitored and recorded with the studies to be carried out using the Ship Emergency Evacuation Control Form.
- w) It ensures that the internal loading of the load transport units is carried out in accordance with the loading safety rules in its facility.
It is ensured that the cargo transport units are carried out safely in the internal fillings carried out at the

DANGEROUS CARGO HANDLING

port.

3.2. Loading protection

- 1) The Port Authority stops the handling operation at the shore facility when it sees any risk and does not start it until the risk is eliminated: Operations are carried out in accordance with the instructions of the Port Authority.
- 2) In order to ensure the safe loading of the cargo on the ship, the provisions of the BLU Code and BLU Manual, the Safe Practice Code for Cargo Stacking and Safety (CSS Code), the Code of Practice for the Packaging of Cargo Transport Units (CTU Code) and the Code of Safe Practices for Ships Carrying Timber Cargo on Deck (TDC Code) are complied with, depending on the type of cargo: The internal filling of the cargo transport units carried out at the port is carried out in accordance with the rules of CTU CODE.
- 3) The stacking of cargoes is carried out in accordance with the relevant legislation and international conventions to which we are a party: The stacking of dangerous goods is carried out according to the IMDG CODE separation rules.
- 4) The vessel cannot be loaded more than the loading limit, taking into account the brand of the loading limit. In case of detection of such a situation, the ship is not allowed to sail and administrative action is taken by the administration against the person concerned with the ship: The departure of the ship from the port is provided with the approval of the Port Authority. In such cases, our facility acts in accordance with the instructions of the Administration.
- 5) Before the handling operation, the loading-unloading plan and the results of the draft survey or weighbridge survey to determine the amount of cargo loaded before the ship departs are submitted to the port authority by the ship's owner. The administration or the port authority may request that the draft survey or weighbridge survey report be obtained from an authorized inspection firm: Actions are taken in accordance with the requests and instructions from the Port Authority.
- 6) Measures are taken to prevent the stability of the ship from being adversely affected by ensuring that the cargo on bulk carriers, especially bulk carriers with a single hold, is loaded in such a way that it spreads to the bottom of the hold (by pilling): Dangerous bulk cargo handling is not carried out in our facility.
- 7) In order to ensure that the structure of the ship is not subjected to excessive stress, it is ensured that the cargo and ballast water arrangement is monitored throughout the loading or unloading operation: In case of non-compliance, the instructions of the Administration are followed.
- 8) Care is taken to ensure that the vessel is uninclined, but if a tilt (tilt) is required during loading, it is ensured that this is as short as possible. In order to avoid structural damage to the ship, it is ensured that it is loaded and unloaded evenly in accordance with the approved stability curl: The loading and unloading operations of the ships are carried out together with the captain of the ship.
- 9) In adverse meteorological and oceanographic conditions that may affect the cargo handling operation, the handling operation is stopped by the captain until the conditions improve: In adverse weather conditions, the work in our facility is stopped. If the conditions improve, the work starts again. Planning is carried out together with the captain of the ship.
- 10) In order to prevent situations such as placing the heavy load on the light load, placing the liquid load on the dry load, and preventing the smell of foul-smelling loads from spreading to other loads, cargoes with properties that may damage other loads are loaded in accordance with the separation rules: Loading and storage are carried out in a way that minimizes risks according to the IMDG CODE separation rules.
- 11) In order to ensure the full implementation and maintenance of safety measures related to the loading, stowage, sorting, handling, transportation and unloading of cargoes on board, all cargoes, cargo units and cargo transport units, except solid and liquid bulk cargoes, are loaded in accordance with the Cargo Securing Manual approved by the Administration or authorized classification societies on behalf of the Administration in accordance with Rule 5.6 of SOLAS Chapter VI Part A, stacked and secured: In case of non-compliance, the instructions of the Administration are followed.

3.3. Loads covered by the IMDG Code

It is given in Section 1.2.1.

DANGEROUS CARGO HANDLING

3.4. Payloads covered by the IMSBC Code

It is given in section 1.2.2.

3.5. Scrap loads

It is given in Section 1.2.3.

DANGEROUS CARGO HANDLING

4. CLASSES, TRANSPORTATION, HANDLING/DISCHARGE, HANDLING, SORTING, STACKING AND STORAGE OF DANGEROUS GOODS

The transport of dangerous and marine polluting substances by ships transporting at sea is regulated by the International Convention for the Safety of the Life at Sea (SOLAS) and the International Convention for the Prevention of Pollution from Ships (MARPOL).

In the relevant sections of SOLAS and MARPOL, the necessary regulations of the International Maritime Dangerous Goods (IMDG) Code are explained in detail and they have taken the force of law on the transport of these substances by sea. As of January 1, 2004, the IMDG Code has been made mandatory.

Classification and risk definitions of dangerous goods for all types of transport (sea, air, train, land and inland waterways) are also made by the UNITED NATIONS Committee of Experts on the Transport of Dangerous Goods (UN).

Transportation, loading/unloading and handling of Packaged Dangerous Cargoes, Scrap Cargoes, Dangerous Solid Bulk Cargoes, including cargoes in Ro-Ro transportation, are carried out at Akçansa Port areas. Materials covered by IMDG that are not transported, loaded/discharged, handled and stacked are Class 1, 6.2 and Class 7.

4.1. Dangerous Goods Classes

The classifications of dangerous goods defined within these regulations are as follows.

CLASSES

CLASS	PART	CLASS NAME
Class 1		Explosive substances and objects
Class 2		Gases
Class 3		Flammable liquids
Class 4	4.1	Flammable solids, self-reactive substances, polymerizing agents and desensitized solid explosives
	4.2	Substances prone to spontaneous combustion
	4.3	Substances that release flammable gases when in contact with water
Class 5.1		Oxidizing agents
Class 5.2		Organic peroxides
Class 6.1		Toxic substances
Class 6.2		Infectious substances
Class 7		Radioactive materials
Class 8		Corrosive substances
Class 9		Miscellaneous dangerous goods and articles

Table 4.1: Dangerous Goods Classes

DANGEROUS CARGO HANDLING

4.1.1. CLASSIFICATION CODES

Class 1 Subgroups	1.1	Substances and objects that are in danger of explosion in mass (An explosion in mass is an explosion that can affect almost the entire charge at once).
	1.2	Substances and objects that are in danger of ejection but are not in danger of explosion in mass.
	1.3	Substances and articles that are fire hazard or a slight explosion hazard or a slight ejection hazard, or both, but are not a mass explosion hazard. These substances and objects are:
		(a) They cause a significant amount of radiant heat when they burn, or
		(b) They burn one after the other, creating a slight explosion or ejection effect.
	1.4	Substances and objects with only a low risk of explosion in the event of ignition or the initiation of a reaction during transport. Their impact is, to a large extent, confined to the packaging, and particles that are too large to be considered are not expected to be ejected to negotiable distances. An external fire will not cause almost the entire contents of the packaging to explode at once.
	1.5	Insensitive substances that are in danger of mass explosion, but which, under normal transport conditions, are very unlikely to start a reaction or to pass from a combustion state to an explosive state. As a minimum requirement, they must not explode in an external fire test.
1.6	Objects with an extremely low level of sensitivity, which are not explosive in mass. These objects contain predominantly extremely insensitive substances, and the probability of accidental ignition or dissemination is negligible. The risk posed by objects in Subgroup 1.6 is limited to the explosion of a single object only.	
Class 1 Compliance Groups	A	Primary explosive material.
	B	An object containing a primary explosive material and lacking two or more effective protective properties. Although they do not contain primary explosives, detonating detonators, detonation detonators, and detonatory detonators with detonation detonators fall into this group.
	C	An explosive substance containing propellant fuel or other graded combustion explosive or an object containing a similar explosive substance.
	D	In each case, a secondary explosive substance without an ignition device and propellant, an object containing black powder or a secondary explosive substance, or an article containing a primary explosive substance and having two or more active protective properties.
	E	An object with a propellant (other than flammable liquid or containing gel or hypergolic liquid) without an ignition device, containing a secondary explosive substance.
	F	An object containing a secondary explosive material with a self-ignition device, with or without a propellant (other than containing flammable liquid or gel or hypergolic liquid).

DANGEROUS CARGO HANDLING

	G	An object containing a pyrotechnic substance or a pyrotechnic substance, or an object containing both an explosive substance and an illuminating, incendiary, tear-formative or smoke-producing substance (other than an object activated by water or an object containing white phosphorus, phosphides, pyrophoric substance, flammable liquid or gel or hypergolic liquid).
	H	Object containing both explosive material and white phosphorus.
	J	Object containing both explosive material and flammable liquid or gel.
	K	Object containing both an explosive substance and a toxic chemical substance.
	L	Object containing an explosive substance or explosive substance and that carries a particular risk (for example, due to activation with water or the presence of hypergolic liquids, phosphides or a pyrophoric substance) and therefore requires the isolation of each type.
	N	Predominantly objects containing extremely insensitive substances.
	S	A substance or object that is packaged or designed in such a way that the hazardous effects that may occur as a result of its accidental functionality are limited to the packaging; If the packaging is damaged by fire, all explosion or ejection effects are limited so as not to significantly impede firefighting or other emergency response efforts in the immediate vicinity of the packaging.
Class 2 Subgroups	1	Compressed gas: Substances that are completely gaseous at -50 °C when packed under pressure for transport; All gases with critical temperatures less than or equal to -50 °C are included in this category.
	2	Liquefied gas: A gas that is partially liquid at temperatures above -50 °C when packaged under pressure for transport. A distinction is made between:
		High-pressure liquefied gas: Gas with a critical temperature above -50 °C and equal to or less than +65 °C; Low pressure liquefied gas: Gas with a critical temperature above +65 °C.
	3	Refrigerated liquefied gas: A gas that, when packaged for transport, is partially liquefied due to its low temperature.
	4	Dissolved gas: It is a gas dissolved in a liquid-phase solvent when packaged under pressure for transportation.
	5	Small, gas-containing, aerosol sprayers and containers (gas cartridges).
	6	Other objects containing gases under pressure.
	7	Non-pressurized gases (gas samples) subject to special conditions.
	8	Chemicals under pressure: liquids, pastes or powders, and mixtures thereof, which are pressurized with a propellant that meets the definition of a compressed or liquefied gas.

DANGEROUS CARGO HANDLING

	9	Adsorbed gas: A gas adsorbed onto a solid porous material to give an inner vessel pressure of less than 101.3 kPa at 20 °C and less than 300 kPa at 50 °C when packaged for transport.
	A	Sultry
	He	Oxidizer
	F	Flares up
	T	Poisonous
	C	Corrosive (UN 1950 and for chemicals under pressure)
	CO.	Corrosive, oxidizing (for UN 1950)
	FC	Flammable, corrosive (UN 1950 and for chemicals under pressure)
	TF	Poisonous, flares up
	TC	Toxic, corrosive
	CTR	Poisonous, oxidizing
	TFC	Toxic, flammable, corrosive
	TOC	Toxic, oxidizing, corrosive
	2.1	Flammable gases (corresponding to groups denoted by a capital letter F).
2.2	Non-flammable, non-toxic gases (corresponding to groups denoted by capital letters A or O).	
2.3	Toxic gases (corresponding to groups denoted by a capital letter T; Such as TT, TF, TC, TO, TFC and TOC).	
Class 3 Subgroups	F	Flammable liquids, objects that have no secondary risk and contain these substances:
		F1 Flammable liquids, with a flash point of 60 °C and below;
		F2 Flammable liquids, with a flash point greater than 60 °C, transported at or above a temperature at or above the flash point (high-temperature substances) or transferred for transport;
		F3 Objects containing flammable liquids;
	FT.	Flammable liquids, poisonous:
		FT1 Flammable liquids, toxic;
		FT2 Pesticides;
	FC	Flammable liquids, corrosive;
	FTC	FTC Flammable liquids, toxic, corrosive;
D	Desensitized liquid explosives.	
Class 4.1 Subgroups	F	Flammable solids, with no secondary risk:
		F1 Organic;
		F2 Organic, molten;
		F3 Inorganic;
		F4 Objects;
	FO	Flammable solids, oxidizing;
	FT.	Flammable solids, toxic
		FT1 Organic, poisonous;
		FT2 Inorganic, toxic;
	FC	Flammable solids, corrosive;
FC1 Organic, corrosive;		
FC2 Inorganic, corrosive;		

DANGEROUS CARGO HANDLING

	D	Desensitized solid explosives with no secondary risk;
	DT	Desensitized solid explosives, toxic;
	SR	Self-reactive substances:
		SR1 Those who do not require temperature control;
		SR2 Temperature control requirements.
	PM	Polymerizing agents
		PM1 Temperature control is not required;
PM2 Temperature control required.		
Class 4.2 Subgroups	S	Substances prone to spontaneous combustion, with no secondary risk:
		S1 Organic, liquid;
		S2 Organic, solid;
		S3 Inorganic, liquid;
		S4 Inorganic, solid;
		S5 Organometallic;
	SW	Substances prone to spontaneous combustion, which release flammable gases when in contact with water;
	SO	Substances prone to spontaneous combustion, oxidizing;
	ST.	Substances prone to spontaneous combustion, poisonous:
		ST1 Organic, toxic, liquid;
		ST2 Organic, toxic, solid;
		ST3 Inorganic, toxic, liquid;
		ST4 Inorganic, toxic, solid;
	SC	Substances prone to spontaneous combustion, corrosive:
		SC1 Organic, corrosive, liquid;
		SC2 Organic, corrosive, solid;
SC3 Inorganic, corrosive, liquid;		
	SC4 Inorganic, corrosive, solid;	
Class 4.3 Subgroups	W	Objects containing substances and similar substances that do not have a secondary risk that release flammable gases when in contact with water:
		W1 Liquid;
		W2 Floor;
		W3 Objects;
	WF1	Substances that release flammable gases when in contact with water, liquid, flammable;
	WF2	Substances that release flammable gases when in contact with water, solid, flammable;
	WS	Substances that release flammable gases when in contact with water, solid, self-heating;
	WO	Substances that release flammable gases when in contact with water, oxidizing, solid;
	WT	Substances that release flammable gases when in contact with water, toxic:
		WT1 Liquid;
	WT2 Solid;	
WC	Substances that release flammable gases when in contact with water, corrosive:	

DANGEROUS CARGO HANDLING

		WC1 Liquid;
		WC2 Floor;
	WFC	Substances that release flammable gases when in contact with water, flammable, corrosive.
Class 5.1 Subgroups	He	Oxidizing substances, articles that are not of secondary risk and contain substances such as:
		O1 Liquid;
		O2 Solid;
		O3 Objects;
	OF	Oxidizing substances, solid, flammable;
	OS	Oxidizing substances, solid, self-heating;
	OW	Oxidizing substances are solids that release flammable gases when they come into contact with water;
	GRASS	Oxidizing substances, poisonous:
		OT1 Liquid;
		OT2 Solid;
	OC	Oxidizing agents, corrosive:
OC1 Liquid;		
OC2 Solid;		
OTC	Oxidizing substances, toxic, corrosive.	
Class 5.2 Subgroups of Organic Peroxides	P1	Organic peroxides, which do not require temperature control
	P2	Organic peroxides, which need temperature control.
Class 6.1 Subgroups	T	Toxic substances, without secondary risk:
		T1 Organic, liquid;
		T2 Organic, solid;
		T3 Organometallic substances;
		T4 Inorganic, liquid;
		T5 Inorganic, solid;
		T6 Liquid, used in pesticides;
		T7 Solid, used in pesticides;
		T8 Samples;
	T9 Other toxic substances;	
	TF	Toxic substances, flammable:
		TF1 Liquid;
		TF2 Liquid, used in pesticides;
		TF3 Solid;
	TS	Toxic substances, self-heating, solid;
	TW	Toxic substances, which release flammable gases when in contact with water:
		TW1 Liquid;
	TW2 Floor;	
CTR	Toxic substances, oxidizing:	
	TO1 Liquid;	
	TO2 Layer;	
TC	Toxic substances, corrosive:	

DANGEROUS CARGO HANDLING

		TC1 Organic, liquid;
		TC2 Organic, solid;
		TC3 Inorganic, liquid;
		TC4 Inorganic, solid;
	TFC	Toxic substances, flammable, corrosive;
	TFW	Toxic substances, flammable, release gases when in contact with water.
Class 6.2 Subgroups	I1	Infectious substances affecting humans;
	I2	Infectious substances that affect only animals;
	I3	Clinical waste;
	I4	Biological substances.
Class 8 Subgroups	C1-C4	Acidic substances
		C1 Inorganic, liquid;
		C2 Inorganic, solid;
		C3 Organic, liquid;
	C5-C8	C4 Organic, solid;
		Basic substances:
		C5 Inorganic, liquid;
		C6 Inorganic, solid;
	C9-C10	C7 Organic, liquid;
		C8 Organic, solid;
		Other corrosive substances:
	C11	C9 Liquid;
		C10 Solid;
	CF	C11 Objects;
		Corrosive substances, flammable:
		CF1 Liquid;
	CS	CF2 Solid;
		Corrosive substances, self-heating:
		CS1 Liquid;
	CW	CS2 Solid;
Corrosive substances, which release flammable gases when in contact with water:		
CW1 Liquid;		
CO.	CW2 Solid;	
	Corrosive substances, oxidizing:	
	CO1 Liquid;	
CT	CO2 Solid;	
	Corrosive substances, toxic substances and objects containing these substances:	
	CT1 Liquid;	
	CT2 Solid;	
CFT	CT3 Objects;	
	Corrosive substances, flammable, liquid, toxic;	
COT	Corrosive substances, oxidizing, toxic.	
Class 9 Subgroups	M1	Substances that can endanger health when inhaled in the form of fine dust;

DANGEROUS CARGO HANDLING

	M2	Substances and objects capable of forming dioxins in the event of a fire;	
	M3	Flammable vapor-emitting substances;	
	M4	Lithium batteries;	
	M5	Life-saving tools;	
	M6-M8	Substances harmful to the environment:	
		M6	Polluting the aquatic environment, liquid;
		M7	Polluting the aquatic environment, solid;
	M9-M10	M8 Genetically modified microorganisms and organisms;	
		High-temperature substances:	
		M9	Liquid;
		M10	Solid;
M11	Other substances and articles that do not meet the definitions of another class but pose a hazard during transport		

Table 4.2 Classification Codes

DANGEROUS CARGO HANDLING

4.2. Packages and Packaging of Dangerous Goods

✓ **Package & Packaging Coding**

Sıvı tehlikeli madde ambalajı	3H1/X1.2/250/14/TR57WL28
Kombine ambalaj/Katı tehlikeli yükler için ambalaj	1H2/Y250/S/14/TR56W1B9

Figure 4.1 Package and Packaging Coding

3H1	: Package identification code
3	: Package type
H	: Material
1	: Category
X	: Packing Group
1.2	: Specific Gravity
250	: Hydrostatic test pressure
14	: Package production date (year)
TR57WL28	: Country code of the certifying institution that tested the package
1H2	: Package identification code
Y	: Packing Group
250	: Maximum gross mass
S	: For solids
14	: Package production date (year)
TR56W1B9	: Country code of the certifying institution that tested the package

The meaning of the various numbers and letters on the label of the packaged products in the container is shown in the figure on the side. All dangerous goods transported by sea in packaging are marked according to the UN packing code.

DANGEROUS CARGO HANDLING

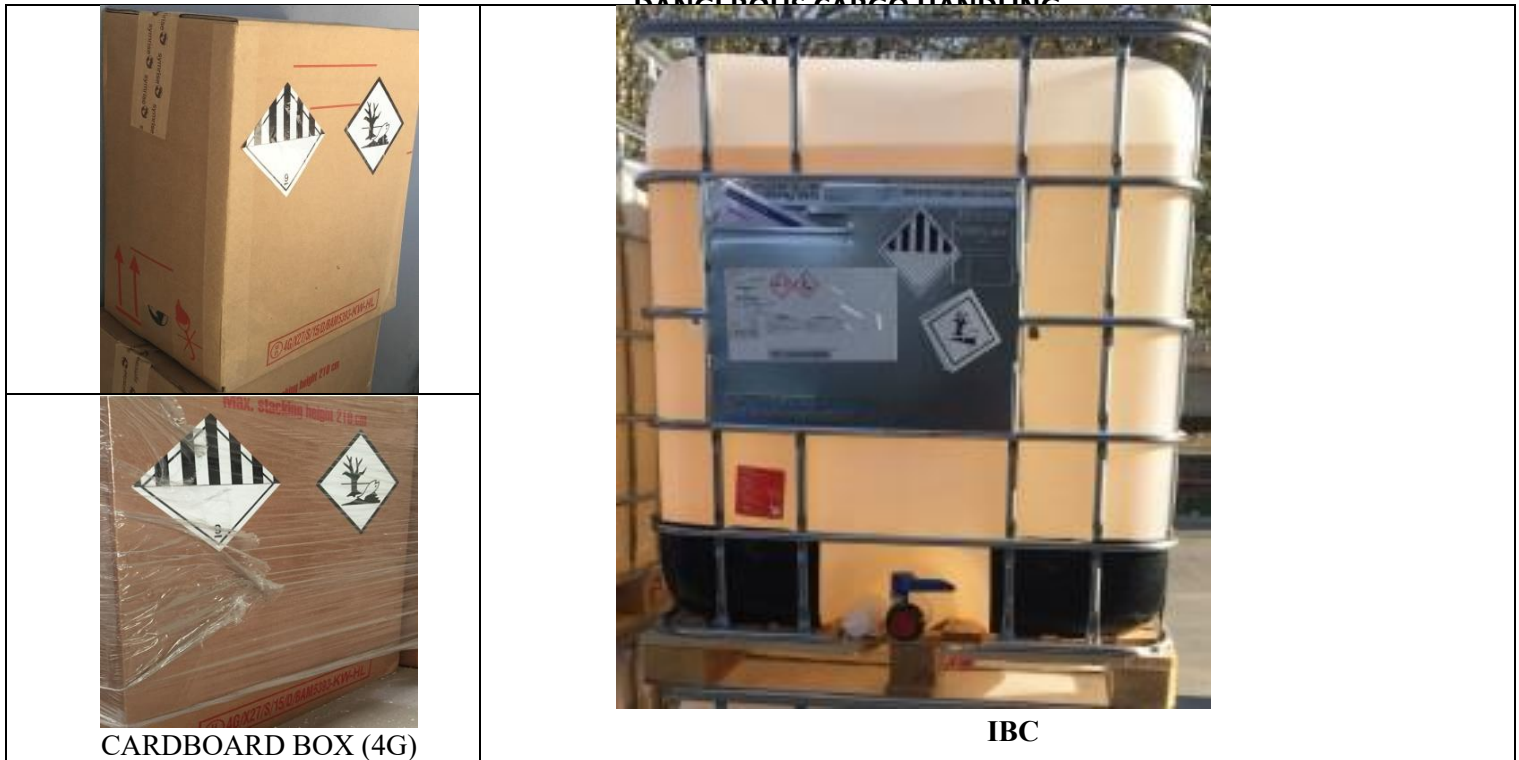
4.2.1. Package & Packaging Types

Dangerous cargoes arriving at the port facility will be packed and packaged under IMDG Code Section 4. All packages containing dangerous goods must have United Nations (UN) Type Approval, even if they are in any Load Carrier (CTU).

Packaging Types:



DANGEROUS CARGO HANDLING



CARDBOARD BOX (4G)

IBC

IBCs

They are rigid or flexible portable packages

- Capacity up to 3.0 m3 (Packing group II and III)
- Capacity up to 1.5 m3 (Packing group I)
- They are made ready-made from wood, cardboard, plastic, metal and cloth.
- Their capacity ranges from 450-3000 liters.

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

4.3.1. Dangerous goods placards

Class 1				
	1.1. Explosive	1.2 Explosive	1.3 Explosive	1.5 Explosive
			* Compatibility group location	
Class 2				
	2.1 Flammable Gas		2.2 Asphyxiating Gas	2.3 Poisonous Gas

DANGEROUS CARGO HANDLING

Class 3				
	Flammable Liquid			
Class 4.1 Class 4.2 Class 4.3				
	4.1 Flammable solids -Self-reactive substances -Polymerizing agents -Desensitized solid explosives	4.2 Substances prone to spontaneous combustion	Substances that emit flammable gases due to contact with water	
Class 5.1 Class 5.2				
	5.1 Oxidizing Agents	5.2 Organic peroxides		
Class 6.1 Class 6.2				
	6.1 Toxic substances	6.2 Infectious Substances		
Class 7				
	Radioactive Materials			
Class 8				
	Corrosive Substances			
Class 9				
	Miscellaneous Dangerous goods and articles	Lithium Batteries (9A)		
	Limited Quantity	Exceptional quantity		

Table 4.3 Dangerous goods plaques, labels and signs

4.3.2. Dangerous Goods Plates

- Safety approval plate
- IBC plate

DANGEROUS CARGO HANDLING

- Portable tank plate
 - T1-T23
 - T50
 - T75
 - MEGC
- Road tankers license plate
 - IMO 4 type
 - IMO 6 type
 - IMO 8 type
 - IMO 9 type



 <p>CSC SAFETY APPROVAL A/CS-1234 - 123 / 2013</p> <table border="1"> <tr> <td>DATE MANUFACTURED</td> <td>09/2013</td> </tr> <tr> <td>IDENTIFICATION NO.</td> <td>CMCL 13 123456</td> </tr> <tr> <td>MAX OP GROSS MASS</td> <td>32,500 KGS 71,650 LBS</td> </tr> <tr> <td>ALLOW STACK LOAD FOR 1.8g</td> <td>192,000 KGS 423,280 LBS</td> </tr> <tr> <td>RACKING TEST LOAD VALUE</td> <td>15,240 KGS 33,600 LBS</td> </tr> <tr> <td>ALLOW STACK LOAD ONE DOOR OFF FOR 1.8g</td> <td>61,000 KGS 134,480 LBS</td> </tr> <tr> <td>RACKING TEST LOAD ONE DOOR OFF VALUE</td> <td>5,650 KGS 2,460 LBS</td> </tr> </table>	DATE MANUFACTURED	09/2013	IDENTIFICATION NO.	CMCL 13 123456	MAX OP GROSS MASS	32,500 KGS 71,650 LBS	ALLOW STACK LOAD FOR 1.8g	192,000 KGS 423,280 LBS	RACKING TEST LOAD VALUE	15,240 KGS 33,600 LBS	ALLOW STACK LOAD ONE DOOR OFF FOR 1.8g	61,000 KGS 134,480 LBS	RACKING TEST LOAD ONE DOOR OFF VALUE	5,650 KGS 2,460 LBS	 <p>IBC Plate (6.5) showing hazard symbols and technical details for AMMONYX LO.</p>
DATE MANUFACTURED	09/2013														
IDENTIFICATION NO.	CMCL 13 123456														
MAX OP GROSS MASS	32,500 KGS 71,650 LBS														
ALLOW STACK LOAD FOR 1.8g	192,000 KGS 423,280 LBS														
RACKING TEST LOAD VALUE	15,240 KGS 33,600 LBS														
ALLOW STACK LOAD ONE DOOR OFF FOR 1.8g	61,000 KGS 134,480 LBS														
RACKING TEST LOAD ONE DOOR OFF VALUE	5,650 KGS 2,460 LBS														
<p>Safety Approval Plate (1.1)</p>	<p>IBC Plate (6.5)</p>														
 <p>Portable Tank Plate (6.7.3) with detailed technical specifications and inspection records.</p>	 <p>Portable Tank Plate (6.7.2) with technical specifications and inspection records.</p>														
<p>Portable Tank Plate (6.7.3)</p>	<p>Portable Tank Plate (6.7.2)</p>														

Table 4.4 Dangerous goods plates

4.3.3. Dangerous goods brands

DANGEROUS CARGO HANDLING




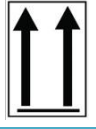


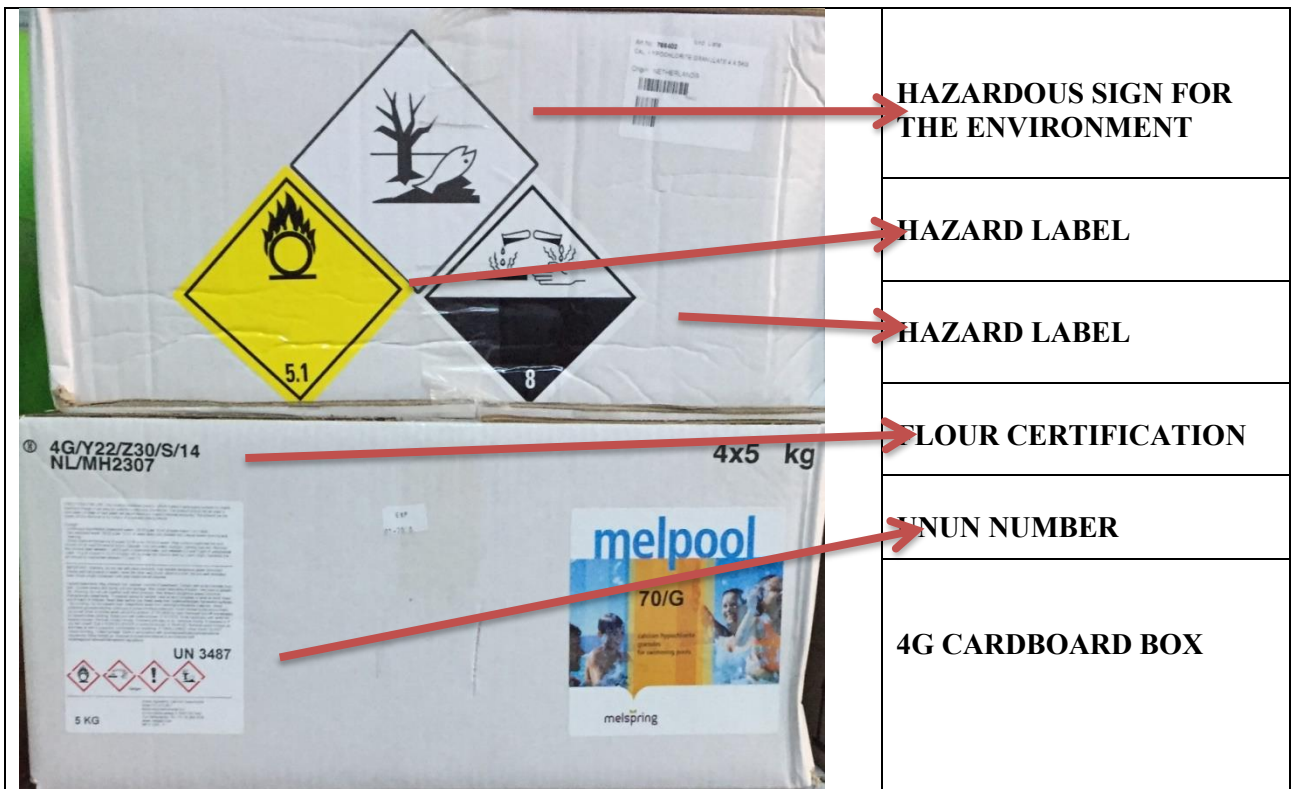
		
Suffocating danger	Marine pollutant and hazardous to environment sign	
		
Directional arrow	Fumigation sign	High temperature hazard

Table 4.5 Dangerous goods brands

4.3.4. Dangerous goods labels

✓ **Packaging Labeling**



DANGEROUS CARGO HANDLING

✓ IBC labeling – marking

	<p>31HA1 COMPOSITE IBC</p>
	<p>FLOUR CERTIFICATION</p>
	<p>HAZARD LABEL</p>
	<p>HAZARDOUS SIGN FOR THE ENVIRONMENT</p>
	<p>UNUN NUMBER</p>
<p>IBC AND LARGE PACKAGES OVER 450 LITERS ARE MARKED AND LABELED ON BOTH SIDES.</p>	

IBC (OHK) Labeling

DANGEROUS CARGO HANDLING

4.4. Dangerous goods markings and packing groups

4.4.1. Dangerous goods signs




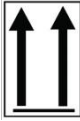


		
Suffocating danger	Marine pollutant and hazardous to environment sign	
		
Directional arrow	Fumigation sign	High temperature hazard

Table 4.4 Dangerous goods signs

4.4.2. Packing assemblies of dangerous goods

Hazard labels are divided into 9 within themselves. Although the signs are in the form of labels and plates; Labels are kept on the packaging, and the plates are kept on the container or vehicle.

Dangerous goods transported in containers must be packed & packaged according to appropriate standards.

Dangerous goods are transported under three types of packing and packaging groups.

I Low-hazard substances

II Dangerous goods

III It is in the form of high-hazard substances.

Self-reactive substances of classes 1, 2, 5.2, 6.2, 7 and 4.1 do not have a packaging group.

Note: The meanings of the X, Y and Z codes in the UN certification on the packaging;

Packages with X code; packing groups I, II and III

Packages with Y code; packing group II and III

Packages with Z code; for packing group III substances.

DANGEROUS CARGO HANDLING

4.5. PORT SEPARATION TABLES ACCORDING TO CLASSES OF HAZARDOUS SUBSTANCES

4.5.1. Segregation of dangerous goods on board

In order to determine the separation conditions of two or more dangerous cargoes, the separation conditions, the Separation Table given in IMDG Code Volume I, 7.2.4 and the provisions of Column 16(b) of the IMDG Code Volume II Dangerous Goods List (DGL) shall be consulted. In the event of any conflict, the provisions of Column 16(b) of the Dangerous Goods List (DGL) shall take precedence.

Dangerous cargoes in different cargo transport units or packaged in the port area will be stacked based on the distances in the separation table below:

Class	2.1	2.2.	2.3	3	4.1	4.2	4.3	5.1	5.2	6.1	6.2	7	8	9
Flammable gases	X	X	X	2	1	2	2	2	2	X	4	2	1	X
Flammable and non-toxic gases	X	X	X	1	X	1	X	X	1	X	2	X	1	X
Toxic gases	X	X	X	2	X	2	X	X	2	X	2	1	X	X
Flammable liquids	2	1	2	X	X	2	2	2	2	X	3	2	X	X
Flammable solids	1	X	X	X	X	1	X	1	2	X	3	2	1	X
Substances prone to spontaneous combustion	2	1	2	2	1	X	1	2	2	1	3	2	1	X
Substances that release flammable gases in contact with water	2	X	X	2	X	1	X	2	2	X	2	2	1	X
Oxidizing agents	2	X	X	2	1	2	2	X	2	1	3	1	2	X
Organic peroxides	2	1	2	2	2	2	2	2	X	1	3	2	2	X
Toxic substances	X	X	X	X	X	1	X	1	1	X	1	X	X	X
Infectious substances	4	2	2	3	3	3	2	3	3	1	X	3	3	X
Radioactive material	2	1	1	2	2	2	2	1	2	X	3	X	2	X
Corrosive substances	1	X	X	X	1	1	1	2	2	X	3	2	X	X
Miscellaneous hazardous substances and articles	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Table 4.8 Port Area Dangerous Goods Separation Table

- In the matching structure seen in this table, the distance between the containers for IMDG codes is given in numbers from 1 to 4. Accordingly, the distance between the loads is:

Figure

Don't understand

- 1 Should be kept away
- 2 It should be separated
- 3 It must be kept separate by means of a whole compartment or compartment.
- 4 It must be separated longitudinally by means of a whole compartment or partition passing through it
- X Exceptions should be checked in the IMDG code list.

DANGEROUS CARGO HANDLING

4.5.2. Separation of dangerous cargo at the shore facility

CLASS	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	X	X	X	2	1	2	X	2	2	X	1	X
Non-toxic and non-	X	X	X	1	X	1	X	X	1	X	X	X
Toxic gases 2.3	X	X	X	2	X	2	X	X	2	X	X	X
Flammable liquids 3	2	1	2	X	X	2	1	2	2	X	X	X
Flammable solids (including self-reactive substances)	1	X	X	X	X	1	X	1	2	X	1	X
Substances prone to	2	1	2	2	1	X	1	2	2	1	1	X
Substances that emit	X	X	X	1	X	1	X	2	2	X	1	X
Oxidation agents	2	X	X	2	1	2	2	X	2	1	2	X
Organic peroxides	2	1	2	2	2	2	2	2	X	1	2	X
Toxic substances 6.1	X	X	X	X	X	1	X	1	1	X	X	X
Corrosive	1	X	X	X	1	1	1	2	2	X	X	X
Miscellaneous	X	X	X	X	X	X	X	X	X	X	X	X

Figure 4.9 Separation Distances of Hazardous Materials in Warehouse Storage

4.6. Separation distances and terms of dangerous goods in warehouse warehouses

The separation in the warehouse warehouses is as shown in Figure 4.9 and the table of meanings of the symbols is as follows.

Meaning of Symbols

Symbol	Packages / IBCs / trailers / platform containers	Sealed containers / portable tanks	Open road vehicles / railway wagons / open top containers
X	No Need or IMDG DGL Column 16b	No Need	No Need
1	It should be separated by at least 3 m.	No Need	It should be separated by at least 3 m.
2	A minimum separation of 6m is required in open areas, hangars or warehouses, a minimum of 12m should be reserved unless separated by an approved fire wall.	In open areas, a minimum separation of 3m longitudinally and laterally, longitudinally and laterally of hangars or warehouses is required, unless separated by an approved fire wall, a minimum separation of 6m is required.	In open areas, a minimum separation of 6m longitudinally and laterally, longitudinally and laterally of hangars or warehouses is required, a minimum separation of 12m is required, unless separated by an approved fire wall.

Figure 4.10 Separation Distances of Hazardous Goods in Warehouse Storage Meanings of Symbols

- The stacking area of the IMDG coded container in the port area is the G7 field. According to the separation table in the port

DANGEROUS CARGO HANDLING**5. HANDBOOK ON HAZARDOUS CARGOES HANDLED AT SHORE FACILITY**

Akçansa Port, which carries out dangerous cargo loading/unloading, handling and temporary storage activities, in order to contribute to the safe fulfillment of these activities; It has prepared an IMDG Code Handbook that can be carried in the pocket, including dangerous goods classes, packages, packages, labels, signs and packaging groups of dangerous goods, separation tables on ships and ports according to the classes of dangerous goods, separation distances of dangerous goods in warehouse storage, separation terms, dangerous goods documents, dangerous goods emergency response action flow diagram and made available to those concerned.

DANGEROUS CARGO HANDLING**6. OPERATIONAL CONSIDERATIONS****6.1. Procedures for the safe berthing, mooring, loading/unloading, sheltering or anchoring of ships carrying dangerous goods day and night**

1. Marine Tug provides services for the suitable, sheltered and safe docking of ships carrying dangerous goods during the day and at night.
2. Procedures for the additional measures to be taken according to the seasonal conditions for the unloading, evacuation and limbo operations of dangerous goods: Weather conditions are reported from Altaş Port Facilities before air-related emergencies, and salting/cleaning activities are carried out on the floors where containers carrying dangerous goods are transported, taking into account the daily weather reports, when necessary.
3. Containers carrying dangerous goods are stacked at the IMO site. There are health and safety signs in order not to smoke in the dangerous goods area and to keep flame sources that may cause sparks away from the site and not to enter the relevant area without the permission of the Port Facility Security Officer.
4. At Akçansa Port, the in-container disinfection process is carried out by the container owner agency, and fumigation, gas measurement and gas purification operations are not carried out in the port area.

Anchorage Location of Ships Carrying Dangerous Goods:

It will be handled within the scope of the Regulation on the Amendment of the Ports Regulation No. 28572 dated February 27, 2013.

AMBARLI PORT AUTHORITY

The port administrative area of Ambarlı Port Authority is the sea and coastal area within the line formed by the following coordinates.

- a) 41° 02' 54" N – 028° 24' 00" E (Cape Güvercinlik)
- b) 40° 43' 30" N – 028° 24' 00" E
- c) 40° 43' 30" N – 028° 43' 24" E
- d) 40° 58' 18" N – 028° 43' 24" E (Cape Kefaldalyan)

ANCHORAGE POSITIONS

a) Anchorage area no. 1: The anchorage area of ships that do not carry dangerous cargo smaller than 1600 GT is Büyük Çekmece Bay, which is north of the line connecting the coordinates below. Ships; In accordance with their height and draft, they may not anchor in this anchorage area closer than 4 gominas from the shore.

- 1) 40° 59' 06" N – 028° 32' 32" D (Father's Nose)
- 2) 40° 57' 42" N – 028° 37' 18" E (Mill Nose)

b) Anchorage area no. 2: The anchorage area of military ships is the sea area formed by the following coordinates.

DANGEROUS CARGO HANDLING

- 1) 40° 58' 00" N – 028° 32' 33" E
- 2) 40° 57' 06" N – 028° 32' 33" D
- 3) 40° 56' 45" N – 028° 34' 00" E
- 4) 40° 58' 00" N – 028° 34' 30" D

c) Anchorage area no. 3: The anchorage area of ships carrying dangerous goods, nuclear-powered military ships and ships to be quarantined and ships to be degassed is the sea area formed by the following coordinates.

- 1) 40° 57' 30" N – 028° 35' 30" D
- 2) 40° 56' 24" N – 028° 35' 30" D
- 3) 40° 55' 54" N – 028° 37' 30" D
- 4) 40° 57' 15" N – 028° 37' 30" D

ç) Mooring area no. 4: The anchorage area of ships that do not carry dangerous cargo of 1600 GT and above is the sea area formed by the following coordinates.

- 1) 40° 57' 15" N – 028° 37' 30" D
- 2) 40° 55' 54" N – 028° 37' 30" D
- 3) 40° 55' 18" N – 028° 40' 00" E
- 4) 40° 56' 30" N – 028° 40' 00" D
- 5) 40° 57' 24" N – 028° 39' 18" D

PICK-UP AND DROP-OFF PLACE FROM THE PILOT CAPTAIN

40° 56' 00" N – 028° 40' 39" D

DANGEROUS CARGO HANDLING

Port berths where dangerous cargo will be handled:

Since all hazard classes except Class 1, Class 6.2 and Class 7 will be handled, all piers and berths of the facility where such vessels will dock are in a status to handle dangerous goods.

6.2. Procedures for the safe berthing, mooring, loading/unloading, sheltering or anchoring of ships carrying dangerous cargo day and night:

Pilotage service is provided from Arpaç for the safe mooring of ships carrying dangerous cargo at the pier. In addition, in order for the employees who perform mooring services at Akçansa piers to work safely, the Çımacı (Mooring) Safe Work Instruction is available and presented to the employees.

6.3. Procedures regarding the additional measures to be taken according to seasonal conditions for the loading and unloading of dangerous goods:

Weather conditions are reported from Altaş Port Facilities before air-related emergencies, and salting activities are carried out on the floors where containers carrying dangerous goods are transported when necessary, taking into account the daily weather reports. As a port operator, meteorological conditions are constantly monitored. In case of severe storm reports, operations employees, operators and on-duty personnel of vessels attached to the dock are informed. The priority is to increase the ropes of the ship under all circumstances and to ensure that the ship's machinery is always ready for action as quickly as possible according to the severity of the coming storm. When the wind reaches a severity that prevents the safe operation of the coastal cranes, the wind alarm of the crane is activated and the operation is stopped and the cranes are secured. In the event that the ship attached to the dock cuts the rope and starts to leave the dock before the operation stops or is in progress, the following processes are followed:

- If the loading or unloading of the ship is in progress and there is a container connected to the spreader of the crane in the hold of the ship, the crane operator is informed by radio/telephone as soon as possible that the ship has left the dock.
- The operator moves the cabin of the crane in the direction of movement to coincide with the speed of movement of the ship, and at the same time starts to move the container in the hold in the fastest and safest way.
- After the container is removed from the ship, it is left at the nearest dock and the safety of the crane is ensured.
- Although the ship pilotage and tugboat organization has informed through the VHF call channel, the port operator is also requested to reach the location of the ship leaving the dock by making an emergency call by radio or telephone.
- Based on the decision of the captain of the ship, a new rope may be given to the dock and the ship will be re-tied

or existing ropes are also fored to ensure that the ship is separated from the dock.

- In the event that the ship under operation leaves the dock for compulsory reasons before the operation is completed, both the Port Authority and the Customs Directorate are informed.
- Dangerous goods that require temperature control are detailed in the Temperature Controlled Dangerous Cargo Operation Procedure.

DANGEROUS CARGO HANDLING**6.4. Procedures for keeping flammable, combustible and explosive materials away from processes that create/may cause sparks, and not operating tools, equipment or tools that create/may cause sparks in dangerous goods handling, stacking and storage areas:**

In order to work safely with dangerous goods, the Procedure for Loading, Unloading and Transporting Dangerous Goods in the Port is available and presented to the employees. Apart from this procedure; On-the-job trainings, IMDG Code Awareness and IMDG Task-Oriented Trainings are provided for employees from authorized organizations. In addition, in the Safe Working Instruction with IMDG Coded Containers, it is stated that the containers should not be around the containers with flames, sparks or fire sources such as cigarettes in the stacking area where IMDG coded containers are stored and in the IMO-CFS areas. Necessary safety and health signs are kept in these areas.

DANGEROUS CARGO HANDLING**7. DOCUMENTATION, CONTROL AND REGISTRATION****7.1. What are all mandatory documents, information and documents related to dangerous goods, and the procedures for their supply and control by the relevant persons**

The documents to be kept at the port facility for dangerous goods handling are listed below:

1. IMDG Code (with fixes)
2. The EmS Guide: Emergency Response Procedures for Ships Carrying Dangerous Goods, (with corrections)
3. Medical First Aid Guide for Use in Accidents Involving Dangerous Goods (MFAG), (with corrections)
4. United Nations Recommendations on the Transport of Dangerous Goods – Model Regulations, (with corrections)
5. United Nations Recommendations on the Transport of Dangerous Goods – Manual of Tests and Criteria, (with corrections)
6. IMO/ILO/UNECE Guidelines for Packing of Cargo Transport Units (CTUs)
7. Recommendations on the Safe Transport of Dangerous Cargoes and Related Activities in Port Areas
8. Code of Safe Practice for Cargo Stowage and Securing (CSS Code), (with attachments)
9. Recommendations on the Safe Use of Pesticides in Ships, (with attachments)
10. International Convention for the Safety of Life at Sea (SOLAS) 1974, (with attachments)
11. International Convention for the Prevention of Pollution from Ships 1973 as modified by the Protocol of 1978 (MARPOL 73/78), (with annexes)
12. Relevant laws, statutes, regulations, circulars, communiqués, directives and implementation instructions.

Possession or access to these documents will be provided as a book when updated as specified by the regulation or, as far as possible, with encrypted entries on the web.

7.2. Procedures for maintaining an up-to-date list of all hazardous materials and other relevant information at the shore facility site in a regular and complete manner.

With the port operation recording system used in the port facility, the lists of import and export cargoes that have entered the port are recorded as of the date of entry and exit. The report, which will be prepared regularly on a monthly basis, includes the regime (category) of the cargo, the appropriate transport name of the dangerous goods, the hazard class, the packing group and the UN number.

Information of dangerous goods at different times and in different locations is

DANGEROUS CARGO HANDLING

accessible.

➤ *Information on dangerous goods arriving by ship*

Before the ship arrives, the information about which dangerous goods are in total and in what tonnage is obtained with the evacuation manifest within the information received from the agency. Confirmation of this information and the holds on board the ship are obtained from the evacuation list and evacuation plan. In addition to the cargoes to be evacuated, the tonnage of the cargoes to be left on the ship in transit and in which warehouses they will remain are also included in the loading plan (general stowage plan).

➤ *Information on dangerous cargo that is unloaded and stored and/or stowed in the port area*

Site planning is carried out before evacuation for all hazardous materials. During the evacuation operation, solid bulk cargoes are weighed on the scale and taken to the previously planned site. Information about the amount of dangerous cargo in the field at any given time can be obtained by querying the port information system (oracle-based). The sites where they are located are determined within the framework of the pre-made field allocation.

When the cargoes whose evacuation has been completed and customs clearance has been obtained go out of the port area, the amount is deducted from the system.

7.3. Procedures for checking that dangerous goods arriving at the facility are properly identified, that the correct shipping names are used, that they are certified, packaged/packaged, labelled and declared, that they are safely loaded and transported in approved and compliant packaging, containers or cargo transport units, and that the results of the inspection are reported

The following notification rules apply to dangerous goods entering the port facility. When the cargoes arrive at the port, checks will be carried out at the checkpoints within the scope of Akçansa Ambarlı Port operational procedures. Controls to be carried out regarding dangerous substances will cover all matters written within the framework of international and national conventions and regulations. It is imperative that those concerned are aware of these rules.

Before arriving at the port by land:

Before the dangerous cargoes enter the Akçansa Ambarlı Port Terminal, the shipping agency will send a loading list. If there is any dangerous cargo in this list, its characteristics will be indicated. For this dangerous cargo, the operation planner will determine a suitable location for the load in the field and inform the other relevant operation units to unload the load at the determined location.

At the stage of entry to the port from the land:

When the driver arrives at the main gate of the terminal, he will stop at the Security stage and provide information about the dangerous cargo. The driver will then hand over his documents to the operations officer after entering through the terminal gate.

DANGEROUS CARGO HANDLING

If it is a cargo subject to weighbridge operation, the operation of unloading the cargo to the site or loading it directly on the ship will be continued after entering the port scale.

Based on the information given in advance at the checkpoint, a physical check will be made of the correct placarding according to the IMDG rules, other IMDG signs and, where mandatory, the UN Number.

Before arriving at the port by ship:

Before arriving at the port with the ship, the operations planner will determine the dangerous cargo based on the ship's loading plan. For packaged or packaged dangerous goods, the appropriate transport name, hazard class, packing group and UN number shall be defined.

Dangerous cargoes arriving at Akçansa Ambarlı Port facility packaged other than bulk cargo are checked at the port entrance in accordance with the provisions of IMDG and ADR. Cargoes that are not properly packaged, marked and labeled are not allowed to enter the port.

7.4. Procedures for the provision and possession of dangerous goods safety data sheet (SDS)

In addition to the measures taken within the scope of the general hazard class at Akçansa Ambarlı Port facilities, a Safety Data Sheet is requested from the cargo concerned regarding the dangerous cargo or dangerous goods or cargo with dangerous content coming to each port facility from sea or land. It is a general standard that every cargo with dangerous content entering the port facility must have a Safety Data Sheet. The precautions specified in the Safety Data Form in case of storage, transportation and emergencies are taken immediately by Akçansa Ambarlı Port authorities.

7.5. Procedures for keeping records and statistics of dangerous goods

As stated in Article 7.2, information on dangerous goods is kept regularly and statistical information is prepared and reported as requested by the competent authorities.

Reports are stored in a soft environment so that they can be accessed at any time.

DANGEROUS CARGO HANDLING**8. EMERGENCIES, EMERGENCY PREPAREDNESS and RESPONSE****8.1. Procedures for responding to dangerous situations involving dangerous goods and dangerous loads involving life, property and dangerous goods that pose/may pose a risk to life, property and/or the environment**

Loading/unloading, handling, transportation, relocation of dangerous goods are carried out in containers, tanks (portable tank/tank container) and packaged for services such as detection, inspection, sampling, internal filling/unloading.

Information on liquid bulk dangerous cargoes that are not covered by the Akçansa Ambarlı Port operating permit is not included in the procedure.

8.1.1. Information about IMDG Code

General information about the code is as follows.

- General provisions
- List of definitions
- Classification
- Physical – chemical properties of these products
- Specifications required for packaging and classification into categories I, II and III
- List of classification of dangerous goods
- Full List of Dangerous Goods, *including UN number of goods, proper shipping name, class/division, secondary risks, packing groups, etc.*
- Provisions on limited and excluded quantities
- The dangers they present
- Labeling and signage system that is easy to understand and allows the identification of possible hazards of products
- Recommendations for stowage on board
- Separation tables
- Product or item United Nations Identification Number (UN Number)
- Documents that must accompany the goods
- Rules for preventing marine pollution
- Provisions relating to packaging/containers and tanks
- Procedures for the shipment of dangerous goods, labeling, signage and documents required for transportation
- Construction and test tests for packaging/bottles/containers, medium bulk containers (IBCs) and tanks, and road tank vehicles
- Provisions relating to transport, stacking and sorting operations
- Special provisions, fire precautions and transport of waste in case of accidents
- Other

It also contains the following supplement (annex-3).

- Emergency response, fire and spill procedures
- Medical first aid guide
- Notification procedure in the event of an accident with dangerous goods
- Stacking in transport units

DANGEROUS CARGO HANDLING

- Risk-free use of pesticides
- INF Code (International Code for the Safe Transport of Irradiated Nuclear Fuel, Plutonium and Senior Radioactive Wastes Packaged on Ships)

8.1.2. Load characteristics

The cargoes included in the IMDG Dangerous Goods List are filled and packaged in solid, liquid and gaseous cargo transport units.

It should be considered that there may be significant changes in the load if the temperature of the load itself **and** the pressure **to which it is subjected** change. For example, spontaneously reactive substances and organic peroxides tend to undergo strong exothermic degradation without the participation of oxygen (air) and their temperature is not constant. The same is true for the critical temperature at which the substance cannot remain in a liquid state when exceeded.

In addition to temperature and pressure changes, diluting the main substance of the load or turning it into a solution to obtain another product with the main substance can also cause changes in the load. The example of ammonia will be quite illustrative for the rule.

While 1005 AMMONIA has class 2.3 toxic gases and side hazard class 8 corrosive properties in the anhydrous state, Flour 1043 FERTILIZER obtained by using an amaniocizing solution with free ammonia is assigned to class 2.2 as dissolved gases, non-toxic and non-flammable. Again, ammonia solutions not exceeding 50% are assigned to Un 2073 and are subject to the classification of non-flammable and non-toxic as dissolved gases. The example of ammonia is very important for the understanding of this paragraph. When Flour 1005 AMMONIAC is diluted with water and is in the form of more than 10% and less than 35% solution, it ceases to be class 2 and is considered as Flour 2672 class 8 abrasives.

Reaction rates for chemicals should be defined as changes under varying conditions at a given time. Chemical reaction rates;

- The concentration of the chemical substance at a given moment
- Temperature/pre-assurance exposure
- Exposure time
- Quantity (kilograms or liters)

The consequences of a chemical reaction due to improper handling of dangerous goods can cause the following.

- Fire
- Explosion
- Loss
- Injury
- Death
- Contamination
- Marine life degradation
- Radioactive

8.1.3. Risks of dangerous goods classes

According to their characteristics, dangerous goods are classified as follows.

- **Petroleum by-products** – fire and explosion are the main risks. Such as diesel fuel, benzene, liquefied petroleum gas and other fuels.

DANGEROUS CARGO HANDLING

- **Chemical products** – (Industrial, pharmaceutical and agricultural) are produced and loaded as final products for consumption or as by-products for industrial use. The latter is the majority of dangerous goods that are transported, and if not handled properly, they can cause great harm to people, transport units, and the environment.
- **Minerals** – such as coal, sulfur, mineral concentrates, and other metals or asbestos that can cause different diseases, injuries, poisonings, or fires.
- **Products of animal or vegetable origin** - as pressed cakes from fish meal, oilseeds and cotton, can cause spontaneous combustion, fire or explosions
- **Radioactive materials** – used for a variety of industrial and medical processes, as well as military applications that can cause immediate harm in high doses or cause cancer and other diseases if exposed to humans for a long time, even in small doses.
- Most substances from Class 1 to Class 9 are considered marine pollutants. A marine pollutant is defined as "any substance that will degrade aquatic organisms."

8.1.4. Working with containers and tanks

- Portable tanks containing dangerous goods must have a plate with markings in accordance with the provisions of the IMDG Code below. These;
 - 6.7.2.20 (tanks used for all classes except class 2)
 - 6.7.3.16 (tanks used for liquefied gases and chemicals under pressure without refrigeration – T50 tanks)
 - 6.7.4.15 (tanks used for refrigerated liquefied gases – T75 tanks)
 - 6.7.5.13 (tanks used for multi-element gas containers)
- Box containers must have CSC safety approval on them.
- Periodic inspections of containers and tanks should be checked.
- Containers must have a plate, the appropriate shipping name if written, and a UN number if required.

The use of container lifting equipment and accessories, twist lock operations, tying at height operations should be kept in good repair. It should be ensured that the defects of the repaired containers are eliminated.

8.1.5. Things to consider and do when working with dangerous loads

8.1.5.1. Class 2 – Gases

THINGS TO CONSIDER

- All of them are asphyxanthi, especially and can also cause ice bites.
- All gases except Class 2.3 toxic gases have pressure relief valves.
- 2.3 Contact of toxic gases with the skin or inhalation of their mists may have a lethal, toxic or harmful effect. (Group measurements are given in Table 1.10).
- Gases are usually heavier than air and accumulate on the ground. Methane and Hydrogen are lighter than air.
- Gases can be collected in sewage, building basements or hollow areas, while light gases can be collected on the upper floors of buildings.
- Tanks and tubes may explode as a result of heat or fire.

DOS

- In the event of large-scale spills and leaks, such as a storage tank or tanker truck, the isolation distance (2.1 meters for 800 flammable gases, 100 meters for other classes) should be isolated.
- Entry into the area should be prohibited by applying evacuation in the area within the border.
- The Closed Circuit Clean Air Inhaler and personal protective equipment must be fully equipped.

DANGEROUS CARGO HANDLING

- Before entering the area, its closed areas should be ventilated.
- When the risk of spillage, scattering, leakage or fire in the box container is evaluated, the ventilation requirement should be checked before the intervention and the appropriate time for ventilation should be waited without intervention when necessary. For example, when it is determined that there is leakage in the packages of 6.1 toxic substances, the container lids should be opened first and the cargo should be ventilated for an appropriate time according to the hazard group, and then it should be intervened.
- In cases where it is safe to stop the leak, this option should be implemented quickly. If the packaging lids and valves are sufficient for this, the lids and valves should be closed immediately.
- Ignition sources must be turned off before the intervention.
- When gases come out of their container into the atmospheric environment, they can increase 250-300 times as they pass from liquid form to gaseous form. The isolated area must be kept safe until the gases dissipate.

*8.1.5.2. Class 3 – Flammable Liquids***THINGS TO CONSIDER**

- If there is a safety data sheet for the load, the flash point should be determined from Part 9.
- Regardless of the flash point, those with a boiling point of 35 °C and below are extremely flammable liquids and vapors that are assigned to the H224 hazard statement.
- Those with a flash point below 23 °C are highly flammable liquids and vapors that are assigned to the H225 hazard statement.
- Those with a flash point between 23 °C and 60 °C and a boiling point above 35 °C are flammable liquid vapors assigned to the H226 hazard statement.
- Some of them are carcinogenic.
- H350 hazard statement can lead to cancer.
- H351 is suspected of causing cancer.
- H350i harm expression can cause cancer by inhalation.
- Statements of health hazards should be checked against part 2 of the safety data sheets.
- Vapours of flammable liquids (PN<36) with a low flash point can be ignited by static electricity or an ignition source.
- The tank may explode as its internal pressure will increase as a result of heat or fire.
- Steam explosions can occur indoors, in open places, or in sewers.
- Discharge can cause contamination.
- Foam should be applied to prevent steam.

DOS

- Loads with H226 hazard expression When some loads encounter a flame source, immediate combustion does not occur. Such as, for example, diesel fuel. When such load is mixed with loads with the hazard designation H 224 or H225, the flash points and initial boiling points may change and combustion may occur.
- Static electricity should be combated for all loads with flammable harmful expressions.
- Interventions to load transport units such as box containers or IBC tanks should be considered as small-scale spills and leaks and the area should be isolated. Personnel trained in the use of portable fire extinguishers can intervene before the fire grows.
- Load carrying units with an average of 20-30 tons of actual load, such as portable tanks, should be considered as large-scale spills and leaks, and their entry into the area should be prohibited by unloading in areas within the limits of the isolation distance. In such fires, the behemehal fire brigade should be notified and any other flammable objects in the vicinity should be removed from the area.
- The personnel who will intervene must discharge the static electricity on them.
- Closed Circuit Clean Air Inhaler and personal protective equipment should be used for intervention.
- Before interfering with the load carrying units, the covers should be opened and ventilation

DANGEROUS CARGO HANDLING

should be ensured.

- In cases where it is safe to stop the leak, this option should be implemented quickly. If the packaging lids and valves are sufficient for this, the lids and valves should be closed immediately.
- Ignition sources must be turned off before the intervention.

8.1.5.3. Class 4 Loads

Loads belonging to this class should be evaluated separately as 4.1, 4.2 and 4.3.

- 4.1 loads; It consists of flammable solids, self-reactive substances, polymerizing agents and susceptibility reduced solid explosives.
- 4.2 loads; It consists of substances that are prone to spontaneous combustion and
- 4.3 loads; They are substances that emit flammable gases when they come into contact with water. When clauses 4.3 have a side hazard (e.g. 4.3 + 6.1) or are itself a side hazard of another class (8 + 4.3), they are generally considered to be highly dangerous substances and should be approached with caution. If there is a collateral hazard or collateral hazard, the precautions of the main hazard should be considered. For example, while Un 2011 MAGNESIUM PHOSPHIDE is a class 4.3 substance, it is also a 6.1 toxic substance with a side hazard and the dangers that may occur with inhalation should be taken into consideration.

THINGS TO CONSIDER

- The charge can be burned by heat and sparks, or by air.
- It can react violently with water. Class 4.3 clauses should not be interfered with.
- Attention should be paid to the side hazards. It should be considered that toxic gases may occur. The group dimensions in Table 1.10 should be taken into account.
- Discharge can cause contamination.

DOS

- Closed Circuit Clean Air Inhaler and personal protective equipment should be used for intervention.
- The danger area should be isolated and entry should be prohibited.
- Position should be taken in the opposite direction of the wind and stay away from low areas.
- Water should be prevented from entering the containers.
- Water or foam should not be used against class 4.3 loads as intervention equipment.
- For magnesium, dry sand should be used.
- In confined spaces or if the fire cannot be extinguished, it should be moved away from the area and left to burn.

8.1.5.4. Class 5 Loads

The charges belonging to this class are 5.1 oxidizing agents and 5.2 organic peroxides

THINGS TO CONSIDER

- Liquid oxygen can explode in contact with hydrocarbons such as asphalt, oils, fuels.
- Although they themselves are not flammable, they increase combustion and explosions.
- Oral, dermal and its mists have toxic and harmful effects if inhaled.
- Contact with eyes and skin can cause burning.
- The runoff can cause water contamination.
- These substances can ignite other flammable materials.
- Their reaction with fuels is severe.
- It can produce toxic fumes. The group dimensions in Table 1.10 should be taken into account.

DOS

DANGEROUS CARGO HANDLING

- The danger area should be isolated and entry should be prohibited.
- Position should be taken in the opposite direction of the wind and stay away from low areas for heavier than air substances.
- Before interfering with the load carrying units, the covers should be opened and ventilation should be ensured.
- Closed Circuit Clean Air Inhaler and personal protective equipment should be used for intervention.
- Flammable substances should be kept away from spilled, leaking or scattered materials.
- Loads in the danger zone should not be touched or walked on.
- A pit should be created to collect the scattered liquid for later disposal.
- Water should be prevented from entering the containers.

8.1.5.5. Class 6.1 Toxic Substances

THINGS TO CONSIDER

- Poisons can be in liquid, gaseous or solid form. (Extensive information on gases is given under the heading of class 2).
- If ingested or in contact with the skin, these types of substances may have lethal, toxic or harmful effects.
- Their containers can be very diverse, from paper bags to large tanks.
- Section 13 of the safety data sheet should be reviewed and attention should be paid to the LD50 oral and dermal toxicity data and LC50 toxicity data by inhalation of powders and mists.
- The table below is the measurements of the group through oral, dermal and mist inhalation with powders.

Oral toxicity LD50 (mg/kg)	Hazard Statement		Dermal toxicity LD50 (mg/kg)	Hazard Statement		Toxicity by inhalation of dusts and mists LC50 (mg/l)	Hazard Statement	
≤ 5.0	H300	Lethal if swallowed	≤ 50	H310	It is lethal in contact with the skin	≤ 0.2	H330	It is lethal if inhaled
>5.0 and ≤ 50	H301	Toxic if swallowed	50> and 200≤	H311	Toxic in contact with skin	>0.2 and ≤ 2	H331	Toxic if inhaled
50> and 300≤	H302	Harmful if swallowed	>200 and ≤ 1000	H312	Harmful in contact with skin	>2.0 and ≤ 4.0	H332	Harmful if inhaled

Table 1.10. Toxic substances, gases group sizes

DOS

- The danger area should be isolated and entry should be prohibited.
- Stand downwind.
- Stay away from low-lying areas.
- Closed Circuit Clean Air Inhaler and personal protective equipment should be used for intervention. Without a half face mask and google type goggles or a full face mask, loads with H330 and H331 hazard statements should not be interfered with.
- Boots, gloves, overalls, face masks and goggles must be used for cargo with H310, H311 and H312 hazard statements.
- An attempt should be made to extinguish the fire from a safe distance.
- Water used in fire extinguishing should be collected for disposal.
- If the fire cannot be intervened in the first 3 minutes or cannot be extinguished even though it is done, it should be considered as a big fire and the fire brigade should be informed and withdrawn and the load carrying unit or loads should be left to burn.
- Intervention in the danger zone: A position should be taken in the direction of the wind immediately, constantly observing the direction changes of the wind.

DANGEROUS CARGO HANDLING*8.1.5.6. Class 8 Corrosive Substances**THINGS TO CONSIDER*

- A significant majority of cargoes belonging to this class are diluted in water.
- Water can be used if the side hazard of these water-soluble substances is not class 4.3.
- A water curtain should be used to lower clouds of vapor in the air.
- The flow must be stopped, it can cause water pollution.
- When neutralization is used in the container, it is not recommended as it can turn into heat and pressure.
- Contact with eyes and skin can cause burning and permanent damage.
- Inhalation of fumes can be harmful and toxic.
- Some of these substances can ignite other flammable materials (wood, paper, oil).
- Although they are of the same class, loads with alkaline and acid properties must be separated from each other. For this, the pH values should be examined in Section 9 of the safety data sheet. Strong acids (below pH 3) and strong alkalis (above pH 11) should be prevented from coming into contact with each other in case of spillage, scattering or leakage.

DOS

- The danger area should be isolated and entry should be prohibited.
- Closed Circuit Clean Air Inhaler and personal protective equipment should be used for intervention.
- Loads in the danger zone should not be touched or walked on.
- If it can be done safely, the leak should be stopped.
- For subsequent disposal, the well must be drilled at a distant point of the liquid scattering.
- Response personnel should wear protective clothing.

*8.1.5.7. Class 9 Miscellaneous Dangerous Goods and Articles**THINGS TO CONSIDER*

- Some of the charges belonging to this class are combustible, but they do not ignite easily.
- When containers heat up, they may explode.
- Some of them can be carried hot.
- Inhalation of the substance can be harmful.
- Contact with the substance can burn the skin and eyes.
- Inhaling asbestos dust can cause damage to the lungs.
- Fire may produce irritants and/or toxic gases.

DOS

- The danger area should be isolated and entry should be prohibited.
- Closed Circuit Clean Air Inhaler and personal protective equipment should be used for intervention.
- Liquid leaks should be collected with sand or other absorbent.
- Loads in the danger zone should not be touched or walked on.

8.1.6. Things to consider and do when working with dangerous loads

The risk assessment must comply with the OCCUPATIONAL HEALTH AND SAFETY RISK ASSESSMENT REGULATION. The analysis should cover not only employees, but also non-permanent employees, crew of ships, visitors who will be affected by the activity. Collective protection measures should be taken into account before individual protection.

Risk assessments should be updated at the intervals specified in the aforementioned regulation and

DANGEROUS CARGO HANDLING

immediately after any incident or when there are significant changes in operations. Many accidents and losses can be prevented by appropriate and adequate assessment of the risks arising from the work and by adopting appropriate control methods.

The risk assessment should record the significant hazards and risks of the operation along with the relevant control measures. Risk assessments in port operations should take into account changes such as tidal changes, weather, trim, cargo list, cargo/cargo and ship dynamics.

8.2. Information on the facility's capabilities, capabilities and capacity to respond to emergencies.

8.2.1. Shore facility emergencies

Accordingly, coastal facility emergencies are as follows;

- Fire
- Explosion
- Hazardous chemical emission
- Natural disasters
- Incidents and accidents requiring first aid and evacuation
- Food poisoning and
- It is in the form of sabotage.

The spread of hazardous chemicals, which is the subject of the dangerous goods handling guide, will be discussed.

8.2.2. Contingency plan

The objectives of the coastal facility hazardous cargo contingency plan are as follows.

- Always be ready for emergencies related to dangerous goods,
- Rapid and effective isolation of emergencies caused by dangerous goods,
- Managing the dangerous situation until the emergency of fire, fire brigade, AFAD, health and law enforcement forces to the coastal facility is under control,
- Assisting incoming emergency service teams by providing information and equipment support,
- Protection of all employees and bystanders from the effects of the emergency

8.2.3. Emergency management

The management system for emergencies arising from dangerous goods is a tool used to solve them within the framework of a continuous improvement approach by addressing them systematically in accordance with the general strategies of the coastal facility and should follow the following processes. These;

- Prevention: Taking regulatory physical and operational measures to prevent emergencies caused by dangerous goods and to minimize their effects,
- Preparation: Mobilization of regulations and resources to prevent emergencies caused by dangerous cargoes,
- Intervention: Physical and operational activities carried out to minimize the effects of an emergency caused by dangerous goods after they occur,
- Refurbishment: Replacing the section(s) of the coastal facility affected by dangerous cargo as soon as possible and making arrangements for those exposed to recover from this situation as quickly as possible.

DANGEROUS CARGO HANDLING**8.2.4. Shore facility actual emergencies**

The following emergencies are possible in the coastal facility in cases of detection, inspection, sampling, loading/unloading and all kinds of handling, parking, parking, withdrawal of vehicles from the park.

- Accident involvement of cargo transport units containing dangerous goods
- Accidents that may occur during detection, inspection or sampling processes
- Possibility of fire
- Possibility of spillage, scattering and leakage of chemicals
- First aid
- Events that will require evacuation
- Determination of areas to be isolated
- Possibility of sabotage

8.2.5. Preventive measures*8.2.5.1. Fire precautions**Preventive measures*

- Periodic inspections of electrical installations are carried out. There are competent personnel to intervene in case of possible malfunctions.
- There are controlled restricted areas where smoking is allowed.
- Periodic inspections of gas cylinders used in the workshop are checked.
- There is a lightning rod and periodic inspections are complete.
- Electronic devices are unplugged when not in use and are not left unchecked.
- Periodic inspections of boilers are carried out.
- Entrances to the boiler room are limited and unauthorized personnel are not entered.
- The signs and labels of the chemicals that the coastal facility takes to the port for their own use are checked. Information about the content of any chemical packaging can be easily obtained from the signs and labels on the packaging.
- Chemical wastes also have a storage area and are landfilled.

Restrictive measures

- There is a firefighting team.
- The training of the members of the firefighting team is complete and is being renewed.
- Fire drills are held periodically.
- There are emergency exit doors and exit/exit warning signs for quick evacuation in case of fire.
- Fire extinguishing equipment is within immediate reach of the shore facility.
- Fire extinguishing equipment is checked regularly.
- Emergency valves are such that they are closed quickly to cut off the natural gas flow.

8.2.5.1.1. Ability and capacity of the shore facility to respond to the fire

- ❖ Automatically activated fire pumps
- ❖ 5 water cannon towers
- ❖ 7 fire cabinets
- ❖ 7 fire hydrants
- ❖ 8 fire hose nozzles
- ❖ 19 fire extinguishers

8.2.5.2. Precautions for explosion

DANGEROUS CARGO HANDLING*Preventive measures*

- The coastal facility does not have an explosion protection document.
- The lighting poles at the shore facility are over 20 meters high.
- Safety data sheets of the chemicals used are in easily accessible places.
- Presence of mechanical and natural ventilation.

Restrictive measures

- Evacuation plans, which also show emergency exits and portable fire extinguishers, are posted in visible locations of the shore facility.
- Fire extinguishing equipment is within immediate reach of the shore facility.
- Fire extinguishing equipment is checked regularly.
- Emergency valves are such that they are closed quickly to cut off the natural gas flow.

8.2.5.3. Measures for natural disasters

Restrictive and preventive measures are taken against the possibility that dangerous cargoes may cause dangerous situations as a result of natural disasters such as earthquakes, excessive rainfall, storms (over approximately 60 km/h), heavy snowfall in the coastal facility.

Preventive measures

- Maintenance and controls of rainwater channels around dangerous cargo stacking areas are carried out regularly.
- The gate entrance of the coastal facility is blocked against heavy rains and the flood is prevented.
- Snow fighting equipment is used to keep the roads open against excessive snowfall.
- In the event of storms, access to empty container sites is restricted.
- In cases where the wind reaches 24 knots by means of the wind gauges on the cranes, the work is stopped with automatic circuit breakers.
- The shore facility has a "Ship Emergency Abandonment Plan" and details about the ships are included in this plan.

Restrictive measures

- Ground reinforcement is carried out in case of deterioration of landforms that may occur on the ground during an earthquake of dangerous loads.
- Dangerous goods handling equipment is securely positioned against tipping over.
- Loads containing dangerous goods are prevented from being stacked near the building.
- A search, rescue and evacuation team has been formed.
- Training is provided to the teams.
- Drills are held at regular intervals.

*8.2.5.4. Measures for sabotage**Preventive measures*

- Entrances to the stacking area, warehouse and IMDG area are controlled.
- Dangerous cargo areas are constantly monitored by security cameras.
- Entrances to areas where flammable and combustible materials are stored for coastal facility needs are limited and unauthorized personnel are prevented from entering.
- A record of vehicle drivers entering the port is kept.

Restrictive measures

- The first thing to do in the detection of sabotage in dangerous cargo areas is to inform the law

DANGEROUS CARGO HANDLING

- enforcement officers.
- Emergency sirens should sound.
- Evacuation plans showing emergency exits should be in visible places in workplaces.

8.2.5.5. Precautions for dangerous goods

Preventive measures

- Whichever is possible for chemical spreads that may occur from load carrying units containing dangerous goods; valves must be closed, cargo lids must be closed, packaging must be closed.
- Loads are stacked according to the separation provisions of MSC.1/Circ.1216.
- There is natural ventilation for the cargo in the hold.
- Persons without permission are restricted from entering the warehouse, IMDG area and stacking area.

Restrictive measures

- Personnel and cargo interests who provide services such as detection, inspection and sampling use personal protective equipment suitable for their work.
- Personnel are trained in the use of appropriate personal protective equipment according to the hazard class.
- In case of fire caused by dangerous loads, those working in the field are capable of using portable fire extinguishers.
- There is an evacuation plan in order to evacuate quickly against possible chemical spread and leakage.
- Evacuation plans are posted in visible locations at the shore facility.

8.3. Regulations on the first response to accidents involving dangerous goods

(Methods of first intervention, first aid possibilities and capabilities, etc.).

Emergency response methods to be applied such as warning, search, rescue, evacuation, communication, first aid, fire fighting in case of emergencies caused by dangerous goods in the coastal facility; fire, explosion, natural disasters and sabotage.

When an emergency occurs due to dangerous loads, the negativities that may be encountered during the intervention are as follows.

- Difficult fighting conditions; inability to intervene closely, transportation difficulties, weather conditions, high risk of freight transport units.
- Emotional and psychological negativities; The fact that there is a time constraint in responding to the dangerous situation that arises as a result of emergencies caused by dangerous cargoes, being dead or injured, the deep responsibility felt to help.
- Physical fatigue; Heavy work for intervention, exhaustion as a result of long intervention periods.

8.3.1. Emergency response for fire

- It is at a height of 0.90-1.60 meters from the ground and there is a fire alarm button and an emergency warning sign every 60 meters.
- When a fire is detected, information such as the class, sub-class, side hazard, if any, packaging group, Flour number, full shipment name of the dangerous cargo will be determined and reported to the fire brigade by calling 110.
- In case of fires caused by dangerous cargo, the fire brigade will come to the coastal facility and make maximum use of the existing facilities of the facility until the time it takes for intervention.
- When there is a fire caused by dangerous goods in the warehouse, openings such as doors and

DANGEROUS CARGO HANDLING

windows that are kept open for ventilation will be closed to prevent the fire from growing.

- Emergency response teams will take the necessary actions for the evacuation of other employees and provide guidance for efficient use of the emergency exit.

8.3.2. Emergency response for explosion

- To the superior who quickly detects the explosion caused by dangerous loads; It should provide the area where the explosion occurred, the mark, label and orange plate information on the load carrying unit caused by the explosion, if any.
- After noticing an explosion, the nearest emergency button should be pressed.
- The fire brigade and other emergency services should be called and informed about the explosion and the injured, if any.
- In accordance with the instructions of the emergency teams, you should leave the emergency exit and go to the emergency assembly area. It should be included in the census to be made here.
- The personnel determined from the emergency teams should cut off the natural gas and electricity of the workplace. It should act by checking whether explosive chemicals pose a danger.
- The firefighting team must begin extinguishing operations with emergency equipment to prevent the fire from breaking out or growing after the explosion.
- The search and rescue and evacuation team must ensure that the employees are evacuated from the area where the explosion occurred and the entire workplace and reach a safe place. After helping the non-injured to find a safe place, the injured should start the search and rescue operations within the framework of the training they have received.
- The first aid team should provide first aid to the wounded.
- Officials should be informed about the explosion. Contributions should be made to the reports prepared afterwards.

8.3.3. Emergency response for natural disasters

AFAD resources can be used when dangerous cargoes are exposed to natural disasters such as earthquakes, excessive rainfall, storms (over approximately 60 km/h), and heavy snowfall in the coastal facility. Accordingly;

- Everyone should be notified with the emergency button. If this is not possible, bystanders should be warned audibly.
- Depending on the type of disaster, those who are in a closed area should prefer columns, beams, high places as the nearest first protection zone. Those who are in the open area should remain in the protection zone.
- The evacuation process should be started immediately and safe places should be visited.
- If there is an injured person, first aid teams should intervene.
- The valves should be checked for leaks.
- Natural gas and electricity installations should be turned off.

8.3.4. Emergency response requiring first aid and evacuation

- First aid teams should be informed quickly for situations that require first aid and evacuation caused by dangerous loads.
- First aid team members must respond to the injured and pass on information to higher superiors.
- If necessary, an ambulance should be used and even support should be called from 112.
- The directions of the workplace physician and occupational safety specialist should be followed.

DANGEROUS CARGO HANDLING

8.3.5. Emergency response in cases of sabotage

As soon as sabotage occurs in dangerous cargo storage areas, the superior must be informed immediately.

- Suspicious package detection
- Suspicious person detection
- Action or demonstration in hazardous cargo areas (transport vehicle drivers or employees should also be considered).
- Security guards should be notified.
- Emergency services should be informed.
- A safe area should be chosen and the position should be maintained.
- You should not be a spectator to the suspicious situation.
- Relevant emergency response procedures such as fire and explosion should be followed.

8.4. Notifications to be made on-site and off-site in case of emergency.

The coastal facility "EMERGENCY PLAN" is being implemented.

8.5. Procedures for reporting accidents

According to Article 11-(1) I of the Regulation on the Transport of Dangerous Goods by Sea and Loading Safety Responsibilities of the Coastal Facility Operator; Accidents related to dangerous cargo, including accidents at the entrance to confined spaces, should be reported to the port authority.

During the transportation of dangerous goods by sea or their handling and/or storage in coastal facilities; An incident or chain of events that have harmful consequences such as death, injury, property damage and environmental pollution, originated by hazardous substances or involving dangerous substances is defined as a directive accident. Accordingly, when there is an undesirable accident in the coastal facility, the following accident notification form will be filled out and submitted to the port authority.

In the Directive, it is not included in the accident notification form as it is considered as an event or series of events other than an accident that occurs in connection with the event, operation and activities and endangers the safety of people or other persons and the environment, which may be dangerous if not corrected, but the form can be used in both accident and incident reporting.

ACCIDENT REPORT FORM

S.No	Subject of notification	Explanation
1	At the time of the accident,	
2	If the accident is known, how it occurred and the cause,	
3	The place where the accident occurred (shore facility and/or vessel), its location and area of impact,	
4	Information of the ship involved in the accident, if any, (name, flag, IMO number, shipowner, operator, cargo and quantity, name of the captain and similar information),	
5	Meteorological conditions,	

DANGEROUS CARGO HANDLING

6	The UN number of the dangerous goods, the appropriate transport name (which will be based on the legislation specified in the definition of the dangerous goods) and the quantity,	
7	The hazard class of the dangerous substance or the sub-hazard section, if any,	
8	Packaging group, if any, of the dangerous substance,	
9	Additional risks of the hazardous substance, such as marine pollutants, if any,	
10	Details of the mark and label of the dangerous goods,	
11	The characteristics and number of the package, load transport unit and container in which the dangerous goods are transported, if any,	
12	The manufacturer, sender, carrier and recipient of the dangerous goods,	
13	The extent of the damage/pollution that has occurred,	
14	The number of wounded, dead and missing, if any,	
15	Emergency response practices by the shore facility for the accident.	

8.6. Method of coordination, support and cooperation with official authorities

All accidents related to Dangerous Goods will first be coordinated with the Port Authority. With the information of the Port Authority, support and cooperation will be provided with the aid units of the Hospital, Fire Brigade, AFAD and neighboring facilities.

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

- First of all, precautions will be increased at the facility,
- Teams will be prepared to assist the neighboring facility,

Considering the urgency of the situation and the extent of the danger, when it is assessed that there is no opportunity or time to ask for help, aid and support teams will be assigned to intervene in the incident.

By evaluating the class, quantity and hazard risk of the dangerous cargo area and the cargoes in the field, preparations will be made for measures such as evacuation and dilution of the cargoes, and if there is a ship at the interface, the removal of the ship to the anchorage.

Providing support for measures outside the shore facility

In order to provide support for the measures taken outside the coastal facility in case of emergency, the facility communication coordinator will be contacted for support from the Hospital, Fire Brigade, AFAD and neighboring facilities.

8.6.1. Emergency phone calls

Fire Brigade (Fire notification)	110
Altas fire brigade	0(212)875-2801

DANGEROUS CARGO HANDLING

Ambulance	112
Policeman	155
Gendarmerie	156
Natural gas	187
ISKI	185
BEDAŞ	186
HOSPITAL (Beylikdüzü State Hospital)	0(212)856-2740
Provincial Disaster and Emergency Directorate (AFAD)	0(212)600-0600
Fuzz	153
Electrical fault	186
Shore facility manager: Ibrahim Anil Zana	0(212)875-2700
Poison Advisory	114
Akçansa Port (neighbouring property)	0(212)875-2732
Akçansa Port (neighbouring property)	0(212)866-8300

8.7. Emergency evacuation plan for the removal of ships and marine vessels from the shore facility in case of emergency.

The coastal facility "SHIP EMERGENCY EVACUATION PLAN" is being implemented.

8.8. Procedures for the handling and disposal of damaged dangerous goods and wastes contaminated with hazardous cargo

There is a specially designated area for operations for damaged cargo transport units and packages containing dangerous goods. The facility has 2 seepage pools with a capacity of 40 feet containers. There is a suitable discharge system for the evacuation of cargo residues spilled into the leaching pools.

When the container containing such loads is ready for services such as detection, inspection or sampling with the discharge of the leak caused by the damaged packaging into the pool, it is cleaned before the process and service is provided after the laying process.

When the danger of leaking packages is minimized, the damaged cargo transport units that fulfill the port exit procedures are taken out of the facility by taking the necessary precautions for the environment, or the service is provided after the necessary precautions are taken for the provision of service.

In addition, there is a portable leakage pool with a capacity of 2 tons for damaged packages that do not cause any damage to the container, only due to the damage of the packaging itself and have the risk of contamination of other packages. It is used for packaging load damage that may occur during detection, inspection or sampling processes, and service is provided after the necessary minutes are prepared after the leak is finished and the package is cleaned.

Wastes remaining from the cleaning of load transport units containing damaged dangerous goods are considered as hazardous waste. These wastes are classified according to the hazard class of the cargo. Classification for hazardous wastes belonging to different hazardous classes that do not react with each other is made according to the provisions of IMDG Code 2.0.3.6 hazard priorities. This application also applies to sorbent material or sample container wastes that may occur after sampling dangerous goods.

Cargo transport units containing explosives shall not be loaded on board. When such cargoes are detected before the entrance of the facility, they will not be accepted to the shore facility, and when

DANGEROUS CARGO HANDLING

they are detected at the facility, they will be notified to the port authority without delay and removed from the facility.

When there is any damage to the packages or the cargo transport unit during the handling of cargo transport units containing explosives, the operation is stopped immediately and the port authority is notified. If it is possible to replace the packages for the damaged cargo that is noticed later in the facility or for the cargo damaged during handling, the renewal process can be carried out by taking the necessary safety and security measures under the supervision of the HSE unit and TMGD. This should be done in the area reserved for explosives.

8.9. Emergency drills and their records.

Workplaces are drilled at least once a year to prepare for emergencies. Before and after the exercise, dangerous cargoes and deficiencies in terms of emergency preparedness are identified, and these are corrected and carried out with preventive actions.

Personnel working with dangerous loads are made ready for a possible emergency by rehearsing emergencies with drills. All of the exercises are carried out with and without warning. After the exercise, the report is prepared and recorded. All drills are evaluated within the scope of the "REGULATION ON EMERGENCIES IN THE WORKPLACE" and there is no provision regarding the storage of records in the said Regulation. The shore facility keeps previous records until the current period of exercises.

Drills;

- In-port ISPS drills
- Practical exercise in the use of portable fire extinguishers
- Dangerous loads are in the form of spill and scattering drills.

8.10. Information on fire protection systems.

- There is a firefighting team at the shore facility.
- In the emergency plan, extinguishing teams were determined and their duties were communicated.
- The fire drills of the extinguishing team are up-to-date and the team members receive training on the development of their skills in the use of portable fire extinguishers once a year.
- For the extinguishing team, the facility includes firefighter suits, breathing tubes and overalls, boots and gloves against chemicals.
- There are various kilograms of dry chemical powder, carbon dioxide, foam portable fire extinguishers and fire blankets in the terminal.
- In addition, fire balls are available in the relevant work equipment for fire protection of work equipment.
- There are 32 fire cabinets, 8 hydrants, 5 water cannon towers in the facility.

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

- Periodic inspections of the fire systems of the coastal facility are regularly carried out by accredited organizations.
- The portable fire extinguishers detailed in the emergency plan are placed in the relevant areas of the terminal and their expiry dates and pressures are controlled by the HSE unit.
- The hydrant and its accessories are operated at regular intervals, hoses are laid and checked for any leaks.

8.12. Precautions to be taken in cases where fire protection systems are not working.

Failure of fire protection systems may be the result of the possibility that hydrants and hydrant

DANGEROUS CARGO HANDLING

accessories do not work in the terminal area. In cases where hydrants do not work, it is planned to intervene with sufficient dry chemical powder, foam and carbon dioxide portable fire extinguishers.

When there are liquid fires in fire response, it is necessary to resort to other measures automatically, since water will not be intervened.

8.13. Other risk control equipment.

The facility has an emergency plan in which the following risks are evaluated and precautions and intervention methods are determined. Identified risks;

- Accident at work
- Fire
- Explosion
- Electrical accident
- Earthquake
- Flooding and inundation
- Snow, ice and frost
- Storm
- Violence
- Suicide attempt
- Multiple poisoning
- Chemical spill, spill
- Infectious diseases
- Suspicious package, bomb alert
- Radiation hazard
- It is in the form of a gas leak.

DANGEROUS CARGO HANDLING**9. OCCUPATIONAL HEALTH AND SAFETY**

There can be no flexibility in the application of occupational health and safety provisions in the coastal facility and they are applied one-to-one. All personnel are expected to participate in the health and safety measures of the employees and the implementation should be done completely.

All employees must first consider and act on their own health and safety, then the health and safety of their colleagues, and then the safety of other living things. While doing these, they should comply with the rules within the facility and avoid prohibited attitudes and behaviors, and follow the coercive and guiding instructions.

Consumption of recreational drugs is strictly prohibited within the terminal. The use of tobacco and its products is strictly prohibited, except in areas where smoking is allowed.

9.1. MINIMUM GENERAL REQUIREMENTS FOR HEALTH AND SAFETY SIGNS USED IN THE WORKPLACE**9.1.1. General considerations**

Employees, emergency exit and first aid signs (emergency exit routes, signs providing information about first aid/rescue), information signs (prohibition signs, warning signs, mandatory signs, other signs that provide information other than emergency exit and first aid signs), additional information signs (signs providing additional information used in conjunction with a sign), hand signal (predetermined movement of hands and arms to direct operators who maneuver that may pose a danger to employees, and positions), imperative signs (sign that determines a mandatory behavior, safety color (color with a special meaning in terms of security), illuminated sign (sign assembly made of transparent/translucent material that has the appearance of an illuminated structure), sign sign (a sign that gives special information about a geometric shape, color, symbol or combination of a pictogram, made visible with sufficient illumination), marker (the person who gives the sign), operator (a person who uses the tool and equipment by following the sign, health and safety sign (signs warning of hazards that provide information or instructions about occupational health and safety through a special object, sign indicating an activity or situation, color, audible or light signal, verbal communication or hand-arm signal), symbol/pictogram (a form that describes a situation or induces a special behavior and is used on a sign or illuminated surface), verbal communication (a predetermined verbal message transmitted by the human voice or artificial human voice), a warning sign (a sign that warns of a source of danger or danger), a prohibition sign (a sign that prohibits a behavior that may cause or expose to danger) must be known and practiced.

9.1.2. Types of signsFixed and permanent signs

- Fixed and permanent signs; It will be used for prohibitions, warnings and mandatory tasks, as well as for the indication and recognition of the location of emergency escape routes and first aid sections.
- Locations of fire-fighting equipment shall be permanently marked with signage and red.
- The markings on the container must meet the provisions of the relevant transport codes.
- Places where there is a risk of hitting obstacles or falling will be permanently identified by the sign and safety color.
- Traffic routes will be permanently marked with the safety color.

Temporary signs

- Taking into account the possibility of using the signs together and interchangeably when necessary; Light signs, audible signals and/or verbal communication will be used to signal danger, to call the relevant person to take the necessary precautions, and for the emergency evacuation of employees.
- Where necessary, hand signals and/or verbal communication will be used to direct people who may

DANGEROUS CARGO HANDLING

cause danger or perform dangerous maneuvers.

9.1.2.1. Use of signs together and interchangeably

If it is just as effective, then any of the following signs can be used:

- In places where there is an obstacle or danger of falling; sign plate or safety color
- Light sign, audible signal or verbal communication
- Hand signals or verbal communication

The following signs can be used together.

- Illuminated sign and audible signal
- Illuminated sign and verbal communication
- Hand signals and verbal communication

9.1.3. The points in the table below apply to all signs that use security colors.

Colour	Meaning or Purpose	Instruction & Information
Red	Prohibition sign	Dangerous movement or behavior
	Hazard alarm	Stop, shut down, emergency stop mechanism, evacuate
	Fire-fighting equipment	Indication and identification of equipment location
Yellow	Warning sign	Be careful, take precautions, check
Blue (1)	Imperative sign	A specific behavior or action Wear personal protective equipment
Green	Emergency exit, first aid sign	Doors, exit locations and paths, equipment, facilities
	There is no danger	Back to normal
(1) Blue: (2) Bright orange:	It is considered a safety color only when used in a circular shape. It can be used instead of yellow, except for safety signs. This fluorescent color is very striking, especially in poor natural vision conditions.	

- Situations that will adversely affect the function of the signs should be avoided.
- A large number of signs will not be placed too close to each other.
- Two illuminated signs that may be confused shall not be used at the same time.
- An illuminated sign shall not be used too close to another illuminated sign.
- More than one audible signal shall not be used at the same time.
- In places with a lot of ambient noise, the audible signal will not be used.
- Signals or signaling devices; It will be ensured that it is properly designed, that it is in sufficient number, that it is placed appropriately, that it is well maintained and repaired, and that it works correctly.
- In order to maintain their characteristic features and/or functional qualities in the manufacture of signs and signaling devices, they shall be cleaned, checked, maintained and repaired at regular intervals and replaced when necessary.
- The number of signs and signaling devices and the places where they will be placed will be determined by the magnitude of the hazard and the area in which they will be applied.
- Any energy-powered signs shall be ensured to operate immediately with a backup energy source in the event that the energy is cut off and the danger cannot be avoided in any other way. The energy sources used shall be in accordance with the safety conditions.
- The start of the light sign and/or audible signals indicates that the work to be done or movement will begin. During the work or movement, the light sign or audible signal will continue to work. The light

DANGEROUS CARGO HANDLING

- sign and audible signal will be operable again immediately after they are used and stopped.
- Light signs and acoustic signals shall be checked before use and at sufficient frequent intervals throughout use to ensure their correct and effective operation.
 - If there is any issue that will prevent the vision and hearing of the employees, including the issues arising from the use of personal protection; Necessary measures will be taken to strengthen or replace the relevant signs.

9.1.4. MINIMUM REQUIREMENTS FOR SIGNAGE

According to their specific purposes; The forms and colors of prohibitions, warnings, orders, escape routes, emergency or fire-fighting equipment and similar signs are given in 9.2.4.1.

Pictograms will be as simple as possible and include only basic details.

Signs will be made of impact and weather resistant materials suitable for the environment in which they are used.

The dimensions of the signs, as well as their colorimetric and photometric properties, will ensure that they are easily visible and understandable.

Signs shall be placed in the immediate vicinity of places of special danger and dangerous objects, at the entrance of places of general danger, taking into account obstacles, at a height and position appropriate to the level of visibility, in a well-lit, easy-to-access and visible manner. Without prejudice to the provisions of the Regulation on Health and Safety Measures to be Taken in Workplace Buildings and Annexes, fluorescent colors, reflective material or artificial lighting will be used in places where natural light is weak.

When the situation indicated by the sign is removed, the sign will also be removed.

9.1.4.1. Signs to be used

Prohibitory signs; Circle, black pictogram on a white background, red frame and diagonal line (the red parts will cover at least 35% of the sign area).



No smoking



It is forbidden to smoke
and use open flames



Pedestrian can't enter



It is forbidden to
extinguish with water



Smoking



No unauthorized person
can enter

DANGEROUS CARGO HANDLING



Construction equipment is not allowed



Touch

Warning signs; Triangular shape, black pictogram on yellow background, black frame (yellow parts shall cover at least 50% of the sign area).



Flammable material or high heat



Explosives



Toxic (Poisonous) substance



Corrosive agent



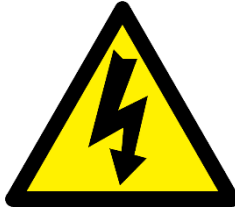
Radioactive material



Suspended load



Construction equipment



Electrical hazard



Danger



Laser beam



Oxidizing agent



Non-ionizing radiation



Strong magnetic field



Obstacle



Fall hazard

DANGEROUS CARGO HANDLING



Biological risk



Low temperature



Harmful or irritating substance

Imperative signs; A circle, white pictogram on a blue background (the blue parts will cover at least 50% of the sign area).



Wear glasses



Wear a hard hat



Wear gloves



Use a mask



Wear work shoes



Use the pedestrian path



Wear a protective suit



Use a face shield



Use seat belts



Wear ear protection

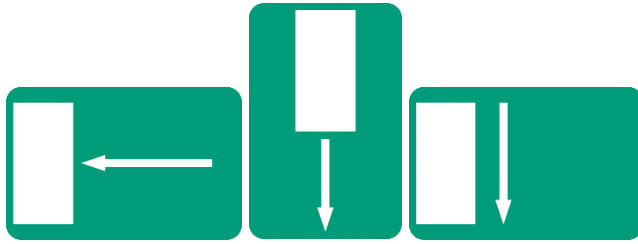


General preemptory sign (to be used in conjunction with other sign when necessary)

Emergency exit and first aid signs; Rectangular or square format, white pictogram on a green background (green parts will cover at least 50% of the sign area).



DANGEROUS CARGO HANDLING



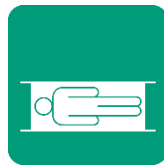
Escape and escape route



Directions (Auxiliary information sign)



First Aid



Stretcher



Safety shower



Eye shower



Emergency and first aid phone

Fire-fighting signs; Rectangular or square format, white pictogram on a red background (the red parts shall cover at least 50% of the mark area).



Fire Hose



Fire Escape



Fire Extinguisher



Emergency Fire Telephone



Directions (Auxiliary information sign)

9.1.5. MINIMUM REQUIREMENTS FOR SIGNS USED TO IDENTIFY OBSTACLES, DANGEROUS PLACES AND TRAFFIC ROUTES

Signs used in obstacles and dangerous places

Places where there is a danger of hitting obstacles, falling or falling objects, as well as the areas where employees move during their work within the operating facilities, are marked with alternating yellow and black or red and white color stripes.

The size of the signs is proportional to the size of the obstacle or danger zone.

DANGEROUS CARGO HANDLING

Yellow-black or red-white stripes are painted at an angle of approximately 45 degrees and the same size.

**Marking of traffic routes**

If the way the workplaces are used and the equipment requires the protection of employees; Roads open to vehicular traffic are clearly marked with continuous yellow or white stripes, taking into account the ground color.

Strips; It is drawn to indicate a safe distance between vehicles and objects that may be close to vehicles, and between vehicles and pedestrians.

Roads with continuous traffic in open areas of facilities shall be marked as indicated, to the extent applicable, if there are no appropriate barriers and sidewalks.

9.1.6. MINIMUM RULES FOR VERBAL COMMUNICATION

- In verbal communication between one or more persons; Short texts, sentences, words or groups of words in a specific form or coded form will be used.
- Verbal messages should be as short, simple and clear as possible. The speaker's ability to speak and the listener's ability to hear will be suitable for reliable verbal communication.
- Verbal communication shall be by direct human voice or by an appropriate human voice or artificial human voice.
- People involved in verbal communication will know the language used at a level that can pronounce and understand the verbal message correctly in order to perform the desired behavior in terms of health and safety.
- When verbal communication is used instead of or in combination with hand-arm gestures, the following commands will be used.
 - Start: To start a process or transaction
 - Stop: to stop or end a movement
 - OK: to end a process
 - Up: to lift up a load
 - down: to lower a load
 - forward – backward – right – left: (These commands will be used in coordination with appropriate hand movements.)
 - Cut: to stop urgently
 - Quick: to speed up a move for safety reasons

9.1.7. MINIMUM REQUIREMENTS FOR HAND SIGNALS

Hand signals will be precise, lean, easy to make and understand, and will be distinctly different from similar signs. If two levers are used at the same time, they will be moved symmetrically and only one signal will be given in one movement.

2. Special rules of use

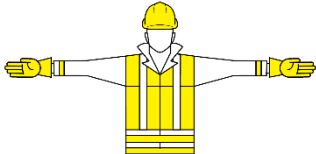


DANGEROUS CARGO HANDLING

- The operator will act on the instructions of the pointer (the person who gives the signals with hand-arm gestures).
- The pointer will use hand-arm gestures to give maneuvering instructions to the operator.
- The pointer must be able to visually monitor all maneuvers from his position so that he himself is not endangered.
- The main task of the pointer; directing maneuvers and ensuring the safety of employees in the maneuvering area.
- If a beacon cannot perform the safe maneuver, additional beacons will be deployed.
- In cases where the operator cannot safely fulfill the orders he has received, he will stop the maneuver he is carrying out and request a new instruction.
- The operator must be able to spot the pointer with ease.
- The signalman shall wear one or more of the distinguishing items such as a jacket, hard hat, armband, or armband, or carry an appropriate signaling tool.
- Distinctive items; It will be brightly colored, preferably all the same color, and exclusive only to markers.


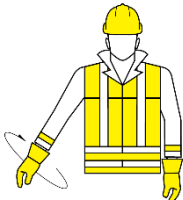
Coded signs.

The coded markings given below will be used for the same maneuvers in specific sectors.


A. General Signs

Don't understand	Recipe	Shape
START Ready Start command	Both arms parallel to the ground with palms facing forward	
STOP Interruption / break Stop movement	Right arm raised with palm facing forward	
OK End of process	Both arms are at chest level, hands clasped	



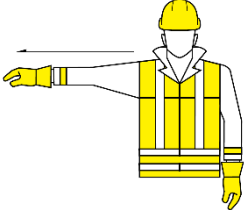
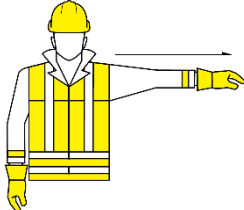

B. Vertical movements

Don't understand	Recipe	Shape
REMOVE	The right arm slowly circles with the palm raised facing forward	
DOWNLOAD	The right arm slowly circles with the palm lowered to the floor with the palm facing inward	

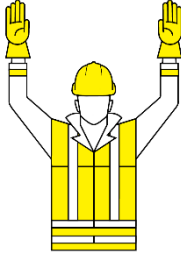
DANGEROUS CARGO HANDLING

VERTICAL DISTANCE	The distance is expressed by the space between both hands	
-------------------	---	---

C. Horizontal Movements

Don't understand	Recipe	Shape
FORWARD	Both arms are bent at waist level with palms facing up, while the arms bend at the elbow and move upwards	
BACK	Both arms are bent in front of the chest with the palms facing down, while the arms are bent at the elbow and slowly move away from the torso	
RIGHT Right of pointer*	Small movements slowly to the right, with the right arm extended parallel to the ground with the palm facing the ground	
LEFT Left of pointer*	Slowly small movements to the left while the left arm is extended to the left, parallel to the ground, with the palm facing the ground	
HORIZONTAL DISTANCE	The space between the hands refers to the distance	

D. Danger

Don't understand	Recipe	Shape
CUT Emergency stop.	Both arms raised with palms facing forward	
QUICK	All movements are faster	
SLOW	All movements are slower	

DANGEROUS CARGO HANDLING**9.1.8. MINIMUM REQUIREMENTS FOR HEALTH AND SAFETY MARKINGS WHEN HANDLING LIFTING VEHICLES**

- In lifting machines, the lifting, lowering or carrying of loads is done according to the hand and arm signals to be given by trained signalmen.
- Where more than one worker is on duty on a lifting machine, the operator of the lifting machine shall receive a signal from only one of the pointer or other officers, and the pointer shall stand in a place that is easily visible to the operator. The operator will always obey every stop sign, no matter who it is given.
- In order to warn workers during the movement of lifting vehicles or the lifted load, the operator signals with clearly audible bells, illuminated signals and the like, which operate continuously in motion.
- If repairs are being made to the vehicles, warning signs are placed on the vehicles and in appropriate places that the repair has been made.
- The heaviest loads to be lifted by the Lifting Vehicles are indicated as information signs inside or outside the cabs, and when more than the heaviest load that can be lifted is lifted, an automatic warning device with sound and light is provided to inform the situation.
- The ringtones and illuminated signs used in lifting vehicles should be different from other signal sounds and illuminated signs in the workplace, strong enough to suppress the noise generated by other machines, easily recognizable and the same for all lifting vehicles operating in the same workplace.
- In cases where heavy parts are lifted or transported as a team, the pre-specified coded movements and markings are used.

DANGEROUS CARGO HANDLING**9.2. Information on personal protective clothing and procedures for using them**

The types of personal protective equipment to be used to protect employees from hazards in the work environment and the dangers caused by the activity are as follows;

- Head protection equipment (Hard hat)
- Foot protective equipment (Steel Toe Shoes)
- Hand protective equipment (Gloves)
- Face shielding equipment (Face Shield)
- Ear protection equipment (Earplugs, Earmuffs)
- Respiratory system protector (Dust-Gas Masks)
- Body protector (Work clothes, Overalls)

The coastal facility implements the "PROCEDURE FOR THE MANAGEMENT OF PERSONAL PROTECTIVE EQUIPMENT, PPE and WORKWEAR".

DANGEROUS CARGO HANDLING**10. MISCELLANEOUS****10.1. Validity of the Dangerous Goods Certificate of Conformity**

In Port facilities that do not have a Dangerous Goods Conformity Certificate, transactions related to dangerous cargoes transported by sea and to be transported by sea cannot be carried out.

In case of temporary non-compliance with the provisions of the relevant directive, it is obligatory to obtain special permission from the Administration.

The shore facility does not operate under Class 1, Class 1, Class 6.2 and Class 7, except for cargoes with subdivision 1.4 and compliance group S (1.4S).

Obligation to Have a Dangerous Goods Conformity Certificate

Akçansa Ambarlı Port facility has a Dangerous Cargo Conformity Certificate (Document No: BKN.22642.TMUB.157).

Our port facility, which handles dangerous goods, has prepared a dangerous goods guide that includes the cargoes of each hazard class it handles commercially. This guide contains all the detailed information for the dangerous goods classes handled, emergency action plans, response procedures, medical first aid requirements when necessary, and with these plans, In accordance with the job description, all port facility and subcontractor employees dealing with dangerous goods have been made aware. When the detailed instructions regarding the Dangerous Goods Guide are announced by the Administration, the Dangerous Goods Guide prepared by Akçansa Ambarlı Port will be revised and approved within the scope of the instructions.

In case of a change in the relevant conditions, this change will be notified to the Administration in writing within 30 days at the latest and the necessary conditions will be provided again within 90 days.

Akçansa Ambarlı Port will act in accordance with the requirements of this Dangerous Goods Certificate of Conformity during its activities. Port facility users and cargo owners will also be expected and requested to act in accordance with the conditions.

10.2. Defined tasks for the Dangerous Goods Safety Advisor

The dangerous goods safety consultant (consultant for short) follows the provisions of both the REGULATION ON THE TRANSPORT OF DANGEROUS GOODS BY SEA AND THE SAFETY OF LOADING and the REGULATION ON THE TRANSPORT OF DANGEROUS GOODS BY ROAD.

The consultant provides guidance to the coastal facility regarding the relevant activity in matters where the port has an operating license. It provides guidance under the IMDG Code for the packed dangerous goods activity of the shore facility, the IMSBC Code and the BLU Code for the hazardous solid bulk cargo activity.

10.3. Issues for those transporting dangerous goods to come to/leave the coastal facility by road

(Documents that road vehicles carrying dangerous goods must have at the entrance/exit from the port or coastal facility area, the equipment and equipment that these vehicles must have; speed

DANGEROUS CARGO HANDLING

limits in the port area, etc.)

The provisions for the use of documents and license plates that must be complied with by the relevant parties during the transportation of dangerous goods are as follows.

1. Dangerous Goods Declaration
2. Dangerous Goods Transport Waybill
3. Multimodal Dangerous Goods Form
4. Dangerous Goods Manifest
5. Packaging and Container/Vehicle Loading Certificate
6. Safety Data Sheet
7. Transport document showing exemption for carriages under ADR/RID/IMDG Codes 3.4 and 3.5
8. Transport document showing exemption for carriages within the scope of ADR 1.1.3.6
9. In transports within the scope of ADR
 - a) SRC 5 certificate suitable for carriage and valid
 - b) ADR written instruction
 - c) Certificate of Conformity for Carriage and valid
 - d) Transport documents
10. Equipment required to be in the vehicle (according to the relevant class in accordance with ADR 8.1.5)
 - a) Wedge (all grades)
 - b) 2 sewnable warning signs (all classes)
 - c) Reflective vest (all classes)
 - d) Portable lighting tool (all classes)
 - e) Protective gloves (all grades)
 - f) Eye protection equipment (all classes)
 - g) Eye rinse fluid (all grades except class 2)
 - h) Paddle (solid and liquid class 3, class 4.1, class 4.3, class 8 and class 9 only)
 - i) Sewer cover (solid and liquid class 3, class 4.1, class 4.3, class 8 and class 9 only)
 - j) Collection container (solid and liquid class 3, class 4.1, class 4.3, class 8 and class 9 only)
 - k) Emergency mask (class 2.3 and class 6.1)
11. CSC Certificate for container shipments
12. If heat-treated wood is used in the load bearing unit (CTU) and for loading safety or transport, a certificate showing that the wood is suitable
13. Loading safety certificate showing that the cargoes in the container or vehicle are properly secured within the scope of the IMDG Code (except for parted loads with no gaps, no possibility of movement, and solid/liquid bulk cargoes)
14. Risk assessment result of those containing harmful gases or fumigated in the cargo transport units arriving at the port facility and the cargo transport units leaving the port facility, or if gas measurement has been made, the certificate of conformity for transportation
15. Certificate of professional competence in accordance with the class of the dangerous cargo carried by the vehicle drivers (SRC 5)
16. Cargo transport units that will continue their journey by road from the coastal facility must wear an orange plate and a hazard warning sign in accordance with the provisions of ADR 5.3. It is sufficient to have orange plates on the front and rear of vehicles carrying packaged dangerous goods. In addition, no hazard warning sign is required (this provision applies when class 1 and class 7 handling is not carried out at the port. In any case, these classes do not have an operating license. If there were Class 1 and Class 7 operating permits, it would be mandatory to install this hazard warning sign).

Dangerous cargoes arriving at Akçansa Ambarlı Terminal cannot be transported without the mandatory documents related to the transportation listed above, orange license plates and hazard warning signs. Loads that are not properly secured under the IMDG Code are also treated as dangerous cargo.

DANGEROUS CARGO HANDLING

The speed limit in the port area is set at 20 km/h.

10.3.1. Transport legislation requirements

Within the scope of Article 8-(2) of the regulation on the transport of dangerous goods by road, at the entrances and exits of coastal facilities;

- Transport documents in accordance with ADR 5.4.1
- Periodic inspections of load bearing units
- Hazard warning signs/signs and orange license plates are checked.

10.4. Issues for those transporting dangerous goods to come/leave the coastal facility by sea

(Day/night signs to be shown by ships and marine vehicles carrying dangerous cargo at the port or coastal facility, cold and hot working procedures on ships, etc.)

If a vessel is to participate in or participate in an operation related to the transport or handling of dangerous goods in the port area, a special type of signal will be used, which may appear during the day and at night. Dangerous goods also include the following loads:

- Bulk liquid loads in closed container with flash point below 60°C;
- Flammable and/or toxic bulk gases; and
- Liquid explosives that have lost their sensitivity allocated to Class 3 and solid explosives that have lost their sensitivity allocated to Class 4.1.

The reason for using the day or night signal is to inform maritime traffic and personnel within the port area about the increased danger due to the presence and handling of dangerous cargoes in the environment. The signals and signs to be used are as follows:

- Daytime: "B" pennant and



(Bravo: I am loading, unloading, or transporting dangerous cargo)

- At night, red light without strobes visible from 360°.

10.5. Additional Considerations to be Added by the Shore Facility

10.5.1. Prohibited activities

(Ports Regulation) ARTICLE 21 –

1) In the approach channels, breakwater mouths, berthing and mooring places and mooring areas of coastal facilities; It is forbidden to engage in any kind of aquaculture, sailing, rowing or other water sports activities, and swimming.

DANGEROUS CARGO HANDLING

- 2) Boats for sports, recreational and recreational purposes must sail in a way that does not interfere with the activities of other ships and marine vehicles in the port area, within the area limited by breakwaters and in the bays, and at a speed that does not cause harm. The Port Authority determines the appropriate speed limit where and where it deems necessary.
- 3) Ships and marine vessels arriving to or departing from the buoy and ships and marine vessels other than those used in coastal facilities services cannot pass between buoys and buoy lines.
- 4) Ships and marine vessels, other than those used in the service of aquaculture facilities and fish cages, may not approach more than two hundred meters from aquaculture facilities and fish cages.
- 5) Ships and marine vehicles cannot be moored or docked in places that do not have a coastal facility operation permit and in places that are not operated or owned by any institution/organization. However, in case of emergency, the Administration may make temporary arrangements for the facilities it deems appropriate.
- 6) Ships and marine vehicles with an excessive degree of trampling or a dangerous inclination, ships and marine vehicles that are at risk of environmental pollution due to any damage, ships and marine vehicles that do not have documents related to towing towing and carrying dangerous cargo, but carry dangerous cargo, cannot dock or leave the coastal facilities without the permission of the port authority.

10.5.2. Other matters subject to the permission of the port authority

ARTICLE 22 – (1) After obtaining the necessary permits and approvals from the relevant institutions/organizations, the relevant persons obtain permission from the port authority to start their activities before the construction of coastal structures and the establishment of aquaculture production areas.

- (2) It is obligatory to obtain permission from the port authority before buoying, diving, seabed and underwater studies, seabed dredging and similar activities. Ships and marine vehicles used in such activities show daylight and day signs in accordance with the legislation and give sound signals.
- (3) It is obligatory to make a request for permission to the port authority at least 15 days before for races that will start from one port administrative area and end in another port administrative area, and at least 7 days before for other competitions and activities. Unless permission is obtained from the port authority, races and similar activities or organizations cannot be organized in the port administrative area.
- (4) Water sports to be held in the port administrative area are carried out within the scope of the provisions of the Regulation on Sports Activities for Tourism and other relevant legislation published in the Official Gazette dated 23/2/2011 and numbered 27855. The powers of the port authority to ensure the safety and security of life, property, navigation and environment related to water sports for tourism purposes are reserved. The port authority is authorized to make all kinds of restrictions and stop these activities, taking into account the safety and security of life, property, navigation and the environment.
- (5) Unless permission is obtained from the port authority, other ships and marine vehicles cannot be aboard the ships and marine vehicles at anchor or in coastal facilities. Agency and food engines, public ships, refueling vessels, water tankers and coastal facilities service vessels are excluded from the scope of this paragraph, and such vessels carry out their services in coordination with coastal facilities operators, within the knowledge of the port president.
- (6) The captain or agent of the ship who will supply fuel, oil and water shall notify the relevant port authority before the supply operation.

DANGEROUS CARGO HANDLING

(7) Fishing boats and yachts; In coastal facilities, they can be aboard each other's boards, they cannot make double row moorings.

(8) Ships and marine vehicles in the port areas unless permission is obtained from the port authority; repair, scraping and painting, welding and other hot work, launching lifeboats and/or boats into the sea or other maintenance works. If the ships and marine vehicles that will carry out these works are in the coastal facility, they must coordinate with the coastal facility operation.

(9) Coastal facilities located in the port administrative area notify the Department of Navigation, Hydrography and Oceanography of the Naval Forces Command in order to record their geographical location on the relevant nautical charts.

(10) Ships and marine vessels cannot change their anchorage areas without permission from the port authority. However, those who are unable to stay where they are due to adverse weather and sea conditions can leave their places and anchor in safer anchorages. Their respective persons shall notify the port authority as soon as possible. The regulation regarding the implementation of this paragraph shall be made by the relevant port authority in places where there is a ship traffic services center.

(11) Ships and marine vessels that will not carry out any activities in coastal facilities, but anchor in the anchorage areas to take shelter due to force majeure such as weather conditions and situations that will endanger navigation, life, property, environmental safety and security, shall immediately notify the relevant port authority and/or pilotage organization. The arrangement regarding the implementation of this paragraph is made by the relevant port authority in places where there is a Ship Traffic Services Center.

(12) Ships and vessels cannot approach the bow of ships and marine vehicles docked at the stern.

(13) The floating equipment to be used to determine the boundaries of the swimming area in the beach areas within the boundaries of the port and in the coastal hotels, motels, holiday villages, in front of the sites, in sea areas up to 200 meters from the shore, are determined by the relevant persons and fully prepared and stored between April 1 and November 15 every year. Ships and vessels are not allowed in the designated bathing areas. The port authority is authorized to make changes in the boundaries of the swimming area based on navigation, life, property, environmental safety and security.

(14) Carrying out limbo activities in the port administrative area is subject to the permission of the port authority.

(15) The backup process is carried out by the port authority within the framework of the procedures and principles determined by the Administration.

(16) It is done with permission.

(17) Vaulting and mooring requirements and related arrangements in each port are made by the port authority, and the operating procedures and principles are determined by the Administration.

(18) Providing pilotage services to ships and marine vehicles that do not have a docking permit to coastal facilities and ships and marine vehicles that do not have a port exit certificate or anchorage order are subject to the permission of the port president.

(19) Recreational boats that make day trips; Issues related to the determination of mooring, accommodation and navigation routes are determined by the port authority and approved by the Administration, taking into account waste reception and other services. In case the capacity of the mooring and shelters is exceeded, the port head may impose restrictions on capacity, entry-exit and use.

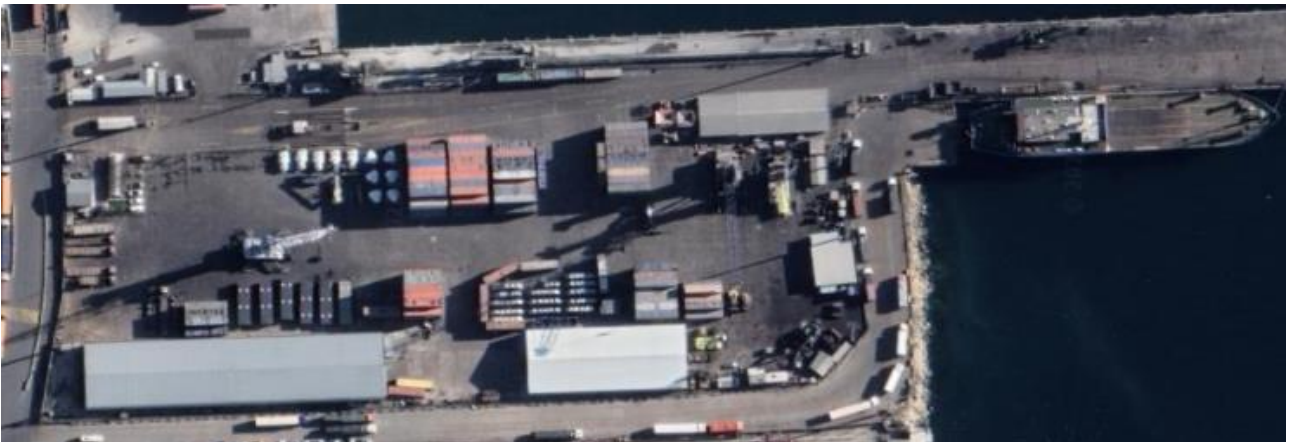
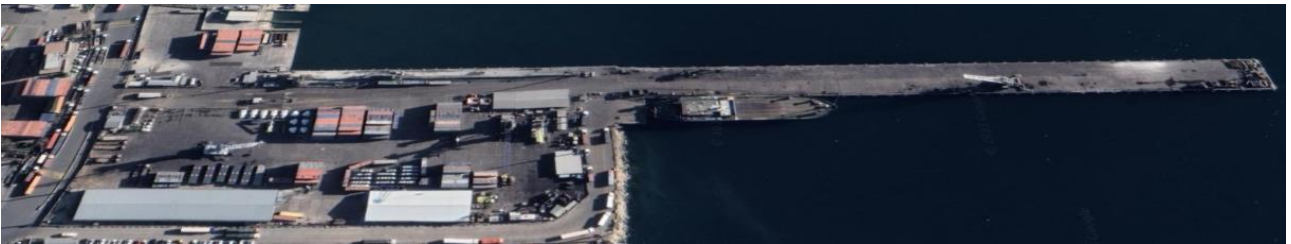
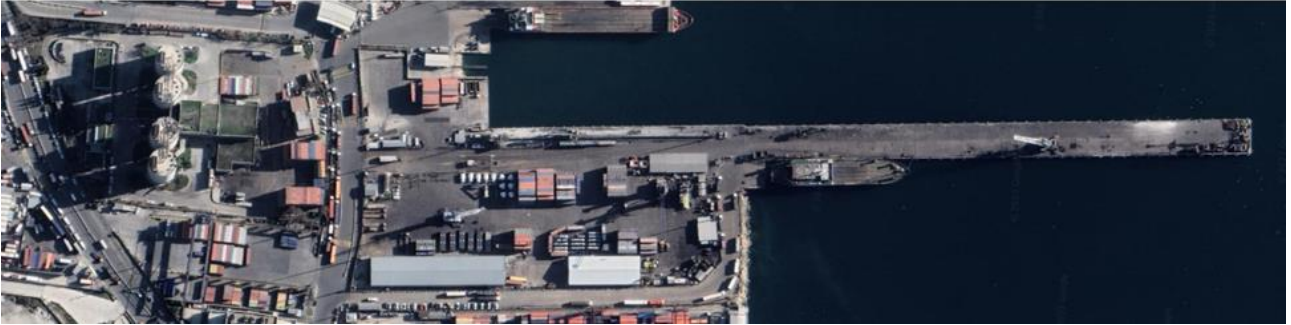
DANGEROUS CARGO HANDLING

DANGEROUS CARGO HANDLING**11. ECLAIR**

- 1- General site plan of the coastal facility
- 2- General view photos of the coastal facility
- 3- Emergency Contact Points and Contact Information
- 4- General Layout Plan of the Areas Where Dangerous Goods Are Handled
- 5- Fire Plan of the Areas Where Dangerous Goods Are Handled
- 6- General Fire Plan of the Facility
- 7- Contingency Plan
- 8- Emergency Gathering Places Plan
- 9- Emergency Management Scheme
- 10- Dangerous Goods Handbook
- 11- Leak areas and equipment for CTU and Packages, input/output drawings
- 12- Inventory of Port Service Vessels
- 13- Port Authority administrative boundaries, anchorages and pilot captain disembarkation/boarding points
Coordinates
- 14- Emergency response equipment against marine pollution in the coastal facility
- 15- Personal protective equipment (PPE) usage map
- 16- Dangerous goods incidents notification form
- 17- Control results notification form for dangerous goods transport units (CTUs)
- 18- Other attachments required
- 19- Dangerous Goods Handling Guide Additional Load Notification (When necessary)

DANGEROUS CARGO HANDLING

11.2. General View Photo of the Coastal Facility



DANGEROUS CARGO HANDLING

11.3. Emergency Touchpoints and Contact Information

AKÇANSA AMBARLI PORT EMERGENCY PHONE LIST	
PORT SECURITY (WIRELESS)	FREQUENCY NO. 1
EMERGENCY SECURITY	0212 875 2700 / 1111
SECURITY MANAGER DENİZ AKSU	0536 334 31 50
PORT DIRECTOR İBRAHİM ANIL ZANA	0533 355 6636
TERMINAL ENGINEER SAMET MUALLİMLER	0530 521 94 71
PORT OPERATIONS MANAGER GUNAY VATANSEVER	0539 234 70 80
PORT OPERATIONS SUPERVISOR ŞAHİN KOÇBİYİK	0546 624 90 67
OPERATIONS MANAGER YASEMİN EMER	0530 175 65 55
AKÇANSA OHS MANAGER MURAT GÜRBÜZ	0530 441 85 21
ELECTRICAL TECHNICIAN (RADIO)	FREQUENCY 4
FIRE BRIGADE	112
ALTAS FIRE BRIGADE	0212 875 5210
YAKUPLU FIRE BRIGADE	0212 875 3696
BEYLIKDUZU FIRE BRIGADE	0212 872 1687
AMBULANCE	112
ALTAŞ AMBULANCE	0212 875 5210
POLICEMAN	112
GENDARMERIE	112
WATER FAILURE	185
ALO ENVIRONMENT	181
SANITARY CONSULTATION	128

DANGEROUS CARGO HANDLING

ALO POISON	114
TAEK	0212 444 8235
NEAREST HOSPITALS	
Esenyurt State Hospital Address: Talatpaşa Mh. 34513 Esenyurt/ Istanbul Phone: (0212) 596 1999	ISU Liv Hospital Address: Aşık Veysel Mh. Süleyman Demirel St. No:1, 34517 Esenyurt/ Istanbul Phone: 444 66 23

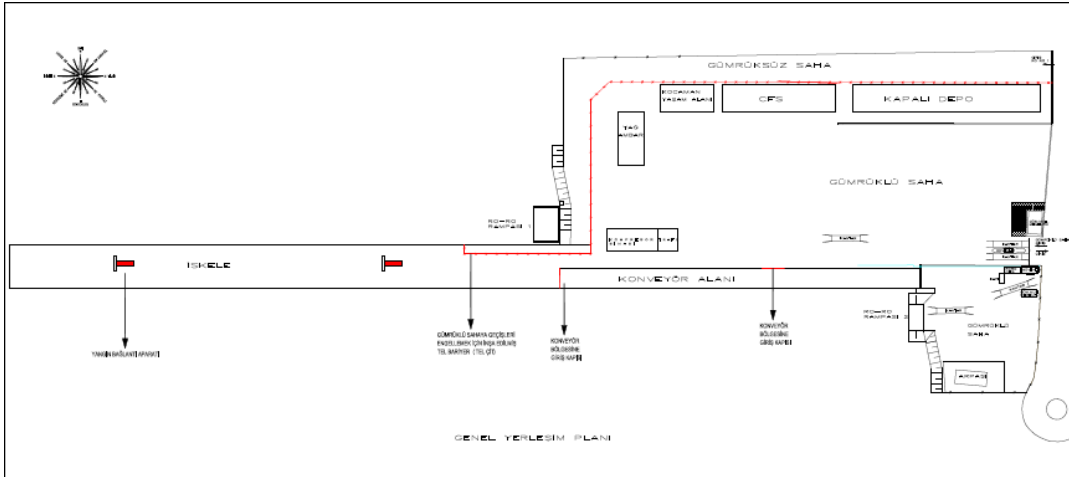
DANGEROUS CARGO HANDLING

11.4. General Layout Plan of the Areas Where Dangerous Goods Are Handled



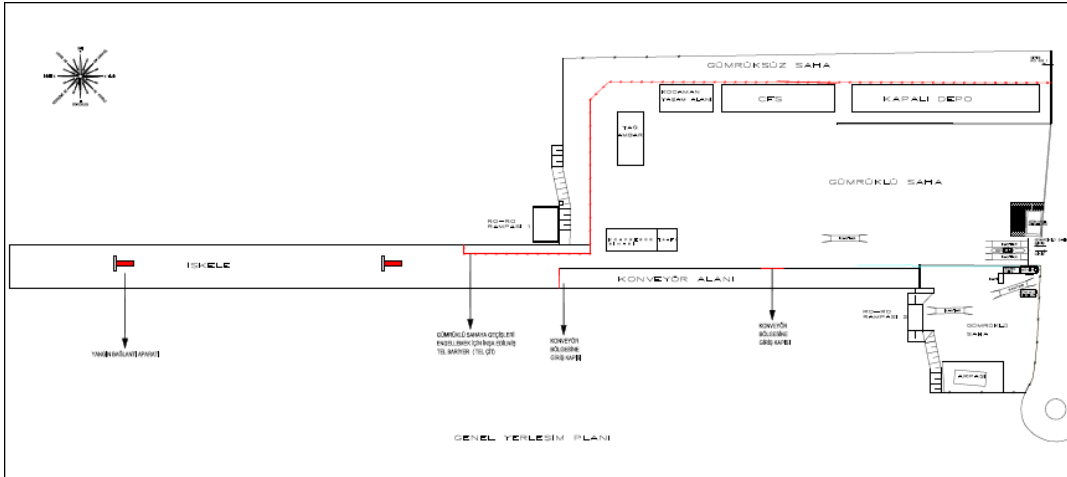
DANGEROUS CARGO HANDLING

11.5. Fire Plan of Areas Where Dangerous Goods Are Handled



DANGEROUS CARGO HANDLING

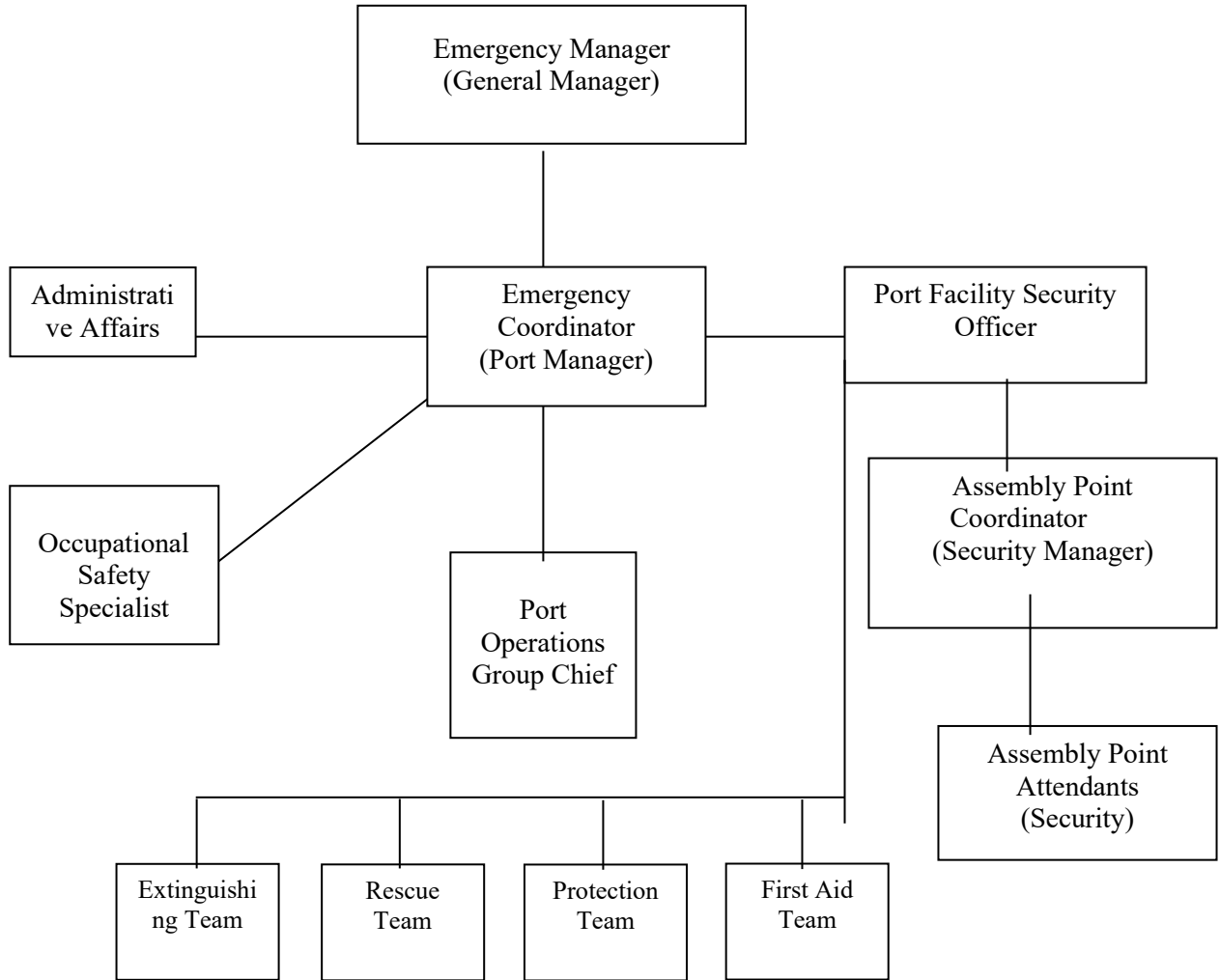
11.6. General Fire Plan of the Facility



DANGEROUS CARGO HANDLING

11.9. Emergency Management Scheme

In case of emergency, it is organized as shown in the diagram below.



DANGEROUS CARGO HANDLING

11.10.Dangerous Goods Handbook

The Dangerous Goods Handbook is provided as a separate document.

DANGEROUS CARGO HANDLING

11.11. Leakage Areas and Equipment Input/Exit Drawings for CTU and Packages

Leak Areas And Equipment For CTU And Packages

There are 2 seepage pools.

Dimensions of the pools:

- Width: 3 m,
- Length: 13 m,
- Altitude:

Pool 1: 40 cm

Pool 2: 60 cm

Photos of seepage basins are as follows:



DANGEROUS CARGO HANDLING

11.12.Inventory of Port Service Vessels

It is carried out in the form of service procurement.

Service company information: Marine Tug. Phone: 0 533 818 93 60

İNŞAA VE KLASI	
İnşaa yılı	1998
Klası	TL [+] 1A5 TUG [+] M
IMO numarası	8943686

ÇEKİ EKİPMANLARI	
Çeki kancası	Emniyetli çalışma yükü: 30 ton

TANKLARI	
Motorin	52 m ³
Tatlı su	11 m ³
Köpük	2 m ³

YANGINLA MÜCADELE EKİPMANLARI	
Yangın pompası	350 m ³ /h, 1 x su/köpük püskürtücü

TEMEL BİLGİLER	
Gros tonilatosu	167,52
Net tonilatosu	97,19
Tam boyu	21,3 m
Eni	7,8 m
Draftı	3,15 m
Bayrağı	T.C.
Çeki gücü	30,56 t
Maks. hızı	12 knot
Seyir sistemi tipi	Konvansiyonel

HABERLEŞME ve SEYİR EKİPMANLARI	
Radarı	
Otopilot	
Manyetik pusula	
GPS	
2 x VHF	
2 x VHF el telsizi	
AIS klas B	
Derinlik iskandil cihazı	

DANGEROUS CARGO HANDLING**11.13.Port Authority Administrative Boundaries, Anchorages and Sea Coordinates of Guide Captain Disembarkation/Boarding Points**

The port administrative area of Ambarlı Port Authority is the sea and coastal area within the line formed by the following coordinates.

- a) 41° 02' 54" N – 028° 24' 00" E (Cape Güvercinlik)
- b) 40° 43' 30" N – 028° 24' 00" E
- c) 40° 43' 30" N – 028° 43' 24" E
- d) 40° 58' 18" N – 028° 43' 24" E (Cape Kefaldalyan)

ANCHORAGE POSITIONS

a) Anchorage area no. 1: The anchorage area of ships that do not carry dangerous cargo smaller than 1600 GT is Büyük Çekmece Bay, which is north of the line connecting the coordinates below. Ships; In accordance with their height and draft, they may not anchor in this anchorage area closer than 4 gominas from the shore.

- 1) 40° 59' 06" N – 028° 32' 32" D (Father's Nose)
- 2) 40° 57' 42" N – 028° 37' 18" E (Mill Nose)

b) Anchorage area no. 2: The anchorage area of military ships is the sea area formed by the following coordinates.

- 1) 40° 58' 00" N – 028° 32' 33" E
- 2) 40° 57' 06" N – 028° 32' 33" D
- 3) 40° 56' 45" N – 028° 34' 00" E
- 4) 40° 58' 00" N – 028° 34' 30" D

c) Anchorage area no. 3: The anchorage area of ships carrying dangerous goods, nuclear-powered military ships and ships to be quarantined and ships to be degassed is the sea area formed by the following coordinates.

- 1) 40° 57' 30" N – 028° 35' 30" D
- 2) 40° 56' 24" N – 028° 35' 30" D
- 3) 40° 55' 54" N – 028° 37' 30" D
- 4) 40° 57' 15" N – 028° 37' 30" D

ç) Mooring area no. 4: The anchorage area of ships that do not carry dangerous cargo of 1600 GT and above is the sea area formed by the following coordinates.

- 1) 40° 57' 15" N – 028° 37' 30" D

DANGEROUS CARGO HANDLING

- 2) 40° 55' 54" N – 028° 37' 30" D
- 3) 40° 55' 18" N – 028° 40' 00" E
- 4) 40° 56' 30" N – 028° 40' 00" D
- 5) 40° 57' 24" N – 028° 39' 18" D

PICK-UP AND DROP-OFF PLACE FROM THE PILOT CAPTAIN

40° 56' 00" N – 028° 40' 39" D

DANGEROUS CARGO HANDLING

11.14. Marine Pollution Emergency Response Equipment Approved in the Port Facility

Acil Müdahale Ekipmanları		
Ekipman	Adet	Özellik
Bariyer	ALTAŞ'tan temin edecek. İsteğe bağlı olabilir. Diğer ihtiyaçlarına göre miktarını kendisi belirler	Fribord: En az 35 cm Su çekimi: 35 cm olmalı (en az) Sabit veya şişme tipinde bariyer Kaldırma Kuvveti /Ağırlık oranı 4:1 Gerilme Mukavemeti 22 kN ASTM-Z tipi bağlantısı bulunan
Emici ped (sorbent ped)	En az 500 tane	30x40 cm ve yukarısındaki boyutlarda
Emici Bariyer (sucuk- sorbent boom)	30 tane	En az 3 m uzunluğunda ve 10 cm çapında
Şamandıra	5 adet	İşaretleme amacıyla kullanılabilen çapaları ve zincir/ipleri ile takım olarak
Can yeleşti	5 adet	En az 100 Newton kaldırma kuvveti olan
Kıyı Temizleme Ekipmanları		
Kürek	10 adet	Standart
Kazma	5 adet	Standart
Tırmık	10 adet	Standart
El Arabası	5 adet	Standart
Su Jeti	1 adet	Standart

Kova	10 adet	Standart
İkaz şeridi	150 m	Standart
Fırça	10 adet	Standart
Haberleşme Ekipmanları		
Telsiz	5 adet	
İlk Yardım Ekipmanları		
İlk yardım çantaları	2 adet	standart
Yangın Söndürme Ekipmanları		
Yangın söndürme tüpleri	En az 4 adet	En az 10 kg
Kişisel Koruyucu Ekipmanlar		
Gaz maskesi	5 adet	Filtreli tam yüz maskesi
Tulum	10 adet	Standart
Çizme	10 çift	Standart
Eldiven	10 çift	Standart
Baret	10 adet	Standart
Gözlük	10 adet	Standart
Yağmurluk	10 adet	Standart
Kayıt Cihazları		
Fotoğraf makinesi	1 adet	Dijital en az 3.1 Mega piksel

DANGEROUS CARGO HANDLING

11.15. Personal protective equipment (PPE) usage map

UNIT NAME	PERSONAL PROTECTIVE EQUIPMENT
OVERHEAD CRANES	<ul style="list-style-type: none"> ● FFP1 DUST MASK (EN 149) ● HELMET (EN 397) (chin tied) ● EARPLUGS (EN 352) ● SAFETY DUST GOGGLES (EN 166) (unit use) ● LINED INSIDE AND OUTER COATED MOUNTING GLOVES (EN 388) ● STEEL TOE SHOES (EN 345)
ELECTRICAL MAINTENANCE	<ul style="list-style-type: none"> ● FFP1 DUST MASK (in the field) (EN 149) ● HELMET (EN 397) (chin tied) ● EARPLUGS (EN 352) ● SAFETY DUST GOGGLES (EN 166) ● LINED INSIDE AND OUTER COATED MOUNTING GLOVES (EN 388) ● LONG CONCH FOR LUBRICATION, PARTS WASHING, NITRILE OIL-PROOF PALM, GLOVES WITH SANDY FINGERTIPS (EN 388) ● INSULATED INSULATED ELECTRICIAN SHOES For High Voltage; ● 40,000 VOLT RESISTANT ELECTRICIAN GLOVE (unit use) For Medium Voltage; ● 30,000 VOLT RESISTANT ELECTRICIAN GLOVE (unit use) For low voltage; ● 2500 VOLT RESISTANT ELECTRICIAN GLOVE (unit use)
LABORATORY CHEMISTRY	<ul style="list-style-type: none"> ● HELMET (EN 397) (chin tied) ● INDOOR GOGGLE STYLE SAFETY GOGGLES (EN 166) ● ABE1 FILTER FULL DOUBLE FILTER IN ACCORDANCE WITH EN 141 STANDARD FACE SHIELD (To be used during treatment with organic and inorganic chemicals) (EN 140, 141) ● LONG CONCH, NITRILE ACID AND SOLVENT RESISTANT GLOVES ● NITRILE APRON (to be used during chemical unloading, filling, processing and storage/cabinet arrangement) ● STEEL TOE SHOES (EN 345) ● FIREPROOF GLOVES (EN 407:2004)
LABORATORY PHYSICS	<ul style="list-style-type: none"> ● HELMET (EN 397) (chin tied) ● EARPLUGS (EN 352) ● SAFETY DUST GOGGLES (EN 166) ● STEEL TOE SHOES (EN 345)

DANGEROUS CARGO HANDLING

<p>VISITORS</p>	<ul style="list-style-type: none"> • FFP1 DUST MASK (EN 149) • HELMET (EN 397) (chin tied) • EARPLUGS OR HELMET-MOUNTABLE HEADPHONES (EN 352) • SAFETY DUST GOGGLES (EN 166) • GLOVES (for safe walking, adhesion) (EN 388) • STEEL TOE SHOES (EN 345) <p>(These materials will be given according to the unit where the visitors will go in our workplaces.)</p>
<p>WHARF</p>	<ul style="list-style-type: none"> • FFP1 DUST MASK (EN 149) • HELMET (EN 397) (chin tied) • EARPLUGS (EN 352) • SAFETY GOGGLES (EN 166) • LINED INSIDE AND OUTER COATED MOUNTING GLOVES (EN 388) • STEEL TOE SHOES (EN 345)

- Seat belts will be available in all units except the Quality - Control Unit.
- The materials used in the unit will be in sufficient number.
- In our factories where a noise map has been prepared, ear cuffs will be given to the use of units in areas with a noise level of 85 decibels and above. (EN 352-3)
- Raincoats and rubber boots will be provided according to our workplaces' own conditions.
- The materials specified in the list are minimum and can be increased in accordance with the provisions of the Regulation on the Use of Personal Protective Equipment in Workplaces.

DANGEROUS CARGO HANDLING

11.16. Dangerous Goods Incident Notification Form

Port Facility Name	
Facility Authority	
1. Nature of the Event and Time of Occurrence	
2. Location/Exact Location of the Event	
3. Information about the Ship and its Captain, if any, Involved in the Accident	
4. Information on the Type, Quantity and Condition of the Cargo Affected by the Event	
5. Specific Existing Hazards/Marine Pollutants	
6. Details of Signs and Labels of Dangerous Goods	
7. The class of the dangerous goods involved in the accident, the sub-hazard section, if any	
8. Characteristics and Number of the Package, Load Transport Unit and Container in which the Dangerous Goods Involved in the Accident Are Transported, If Any	
9. If it is a cargo classified by IMDG Code, Proper Shipping Name, Class (1. Department of products and compatibility group for the class), UN number and Packing Group	
10. Dangerous Goods Producer, Shipper, Carrier and Recipient	
11. Current Weather Conditions	
12. Ratio of Damage/Pollution	
13. Sequencing of the Events Leading to the Event	
14. Number and Types of Injuries/Deaths	
15. Emergency Response	
16. Other Situations Requested to Be Specified	
17. Wants and Needs	
15. Informant (contact person) Position/Name and Surname/Signature Contact Numbers	

Note: In order to respond quickly and effectively, to treat injured personnel and to reduce the damage, it is extremely important to provide a short and accurate description of the incident to the emergency response units, the Port Authority, as soon as possible. If available, this definition should include the above details.

DANGEROUS CARGO HANDLING

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

AKÇANSA AMBARLI TERMINAL CFS SITE DANGEROUS CARGO HANDLING CONTROL FORM				
		SELECT	OPERATION	
Controlled by :				
Signature:				
Date : Container Number : UN No : Hazard Class(s) :				
NO	BEFORE OPERATION	APPROP RIATE	NOT ELIGIBLE	EXPLANATIO N
1	Are the containers in the field separated according to the IMDG Code general separation table?			
2	Is there a hazard label on the container?			
3	Is the hazard label read on the container?			
4	Is there a UN number of the dangerous goods on the container?			
5	Is the UN number of the dangerous goods read on the container?			
6	Do the necessary signs and labels on the containers comply with the relevant codes (IMDG, ADR/RID)? (Hazard class 250mmx250mm, UN label 120mmx300mm)			
7	If the container has been fumigated, has it been labelled and marked?			
8	If there is a secondary risk of the cargo in the container, is the secondary hazard label affixed?			
9	If the cargo in the container is a marine pollutant, is the marine pollutant label affixed?			
10	Is the label number on the container the same as the label number printed on the bill of lading?			
11	Is there a Turkish MSDS form and the signature of the company official for the container to be processed?			
12	Are all 16 items available in the MSDS form? Can it be read?			
13	Is there any damage to the package, tank, vehicle or container that will jeopardize the unloading-filling process before the CFS process?			
14	Are there PPE that should be used for hazardous cargo on the worker before work?			
15	Are the PPE that should be used for the hazardous load on the worker before work available?			
16	Has CFS touched the copper plate running before processing?			
17	Is there enough absorbent material in the defined areas?			
18	Are the absorbent materials in the work area suitable for use?			

DANGEROUS CARGO HANDLING

19	Is there a seal on the fire extinguishers indicating that they have not been used before?			
20	Does the fire extinguisher have an indication of the inspection date (month, year) and maximum period of use?			
21	Are the front of the fire extinguishers open?			
22	Are the fire extinguishers within easy reach?			
23	Are primary and secondary hazards kept free of grass or flammable material within 3 meters of tanks carrying Class 2.1, Class 3, Class 4.1?			
24	Are the devices and tools to be used in the tank installation of tanks with primary and secondary hazards Class 2.1, Class 3, Class 4.1 substances kept away from oil?			
25	Is the field protected from hazards that may cause fire and sparks such as cigarettes, mobile phones, non-ex-proof flashlights, lighters before the CFS procedure?			
26	Was the package, container, tank or vehicle information compared with the shipment information before unloading? Is it ensured that the correct load is unloaded?			
	DURING OPERATION	APPROP RIATE	NOT ELIGIBLE	EXPLANATIO N
1	Is the container ventilated for at least 15 minutes before handling?			
2	Is MSDS the same as the load inside the container?			
3	Are observers as well as employees using MSDS-compliant PPE?			
4	Are the loads in the container loaded according to the separation rules?			
5	Does the packaging have a marking?			
6	Is the packing mark UN approved?			
7	Are containers larger than 450 liters marked on both opposite sides?			
8	Is the label of the package appropriate? (100mmx100mm)			
9	Are the symbols, text and numbers on the packaging clearly legible?			
10	Is there more load on the packaging than it should be?			
11	Is there any hazard residue on the packaging?			
12	Is the packaging protected against spills? Is it ensured that there is no leakage or spillage?			
13	Is the packaging affected by the hazardous substance inside?			

DANGEROUS CARGO HANDLING

14	Is there any packaging that needs care?			
15	Is overpack packaging suitable to use?			
16	Are directional layout arrows convenient to use?			
17	Are precautions taken to prevent electrostatics in IBCs with a flash point of 60 °C and lower liquids?			
18	Are the IBC fill/drain valves visible?			
19	Is there any damage to the packaging loaded on the vehicle?			
20	Is the prohibition on smoking around the vehicle (at least 30 meters) and keeping away from sparking objects complied with when loading?			
21	Are the containers in the field separated according to the IMDG Code general separation table?			
22	Are restraint mechanisms such as wraps and straps fastened in such a way that they do not damage the packaging?			
23	Are the packaging under the stacked packaging prevented from being damaged?			
24	Are the loads correctly secured during loading and unloading?			
	AFTER THE OPERATION	APPROPRIATE	NOT ELIGIBLE	EXPLANATION
1	Has the container been treated in such a way that there is no damage after the CFS treatment?			
2	Has the pallet been treated in such a way that no damage occurs after the CFS treatment?			
3	Has the CFS treatment been carried out in such a way that there is no damage to the dangerous cargo after the treatment?			
4	Are the PPE used by workers after the CFS procedure reusable? Have the PPE that cannot be used been separated?			
5	If there is a transfer to another container, was this done in accordance with the IMDG In-Container Separation Table?			
6	Have the absorbents and fire extinguishers, if any, used after the CFS procedure been left in the redefined areas?			
7	Is the load secured with lashig after container handling?			
PREPARED BY occupational Safety Specialist		APPROVED BY Liman Vice President		

DANGEROUS CARGO HANDLING

11.19. Dangerous Goods Handling Guide Additional Cargo Notification (When Necessary)

Cargo notification that is not specified in the Dangerous Goods Guide in force 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 coastal facility must show that there is the equipment required to be in the facility according to the code to which the cargo in question is subject and the attached safety data sheet, that all necessary measures such as first aid, fire, safety, etc. have been implemented, and that the necessary updates have been made in the Dangerous Goods Handling Guide and other procedures.

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

TYPE OF CARGO AND CODE TO WHICH IT IS SUBJECT	Dangerous Liquid Bulk Cargoes (Petroleum and Petroleum Derivatives- MARPOL Annex-1)	
	Hazardous Liquid Bulk Cargoes (Chemical and Similar-IBC Code)	
	Hazardous Liquid Bulk Cargo (Liquefied Gas-IGC Code)	
	Packaged Dangerous Goods (IMDG Code)	
	Hazardous Solid Bulk Cargo (IMSBC Code)	