MARMARA CEMENT PORT

GUIDE TO HANDLING DANGEROUS CARGO



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(PORT MANAGER)

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ABBREVIATIONS

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
AFAD: Presidency for Disaster and Emergency Management
BCSN: Bulk Cargo Shipping Name
BLU Code: Code of Practice for the Safe Loading and Unloading of Bulk Carriers
BLU Manual: Manual on the Loading and Unloading of Solid Bulk Cargoes for Terminal Representatives (IMO MSC/Circ.1160)
CB: Combustible Solid
CCTV: Closed-Circuit Television / Camera System
CR: Corrosive Solid
CSM: Cargo Securing Manual
CSS Code: Code of Safe Practice for Stowage and Security of Cargo
CTU: Cargo Transport Unit
CTU Code: Code of Practice for the Packaging of Cargo Transport Units
DBA: Verified Gross Mass (VGM)
Corrective and Preventive Actions
DRI: Direct Reduced Iron
EmS: Emergency Response Procedures and Emergency Lists for Ships Carrying Dangerous Goods
ETA: Estimated Time of Arrival
GHS: Globally Harmonized System
IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk
IGC Code: International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk
IMDG Code: International Maritime Dangerous Goods Code
IMO: International Maritime Organization
IMSBC Code: International Maritime Solid Bulk Cargoes Code
ISGOTT: International Safety Guide for Oil Tankers and Terminals
ISPS Code: International Ship and Port Facility Security Code
OSH: Occupational Safety and Health
PPE: Personal Protective Equipment
Accident Prevention Policy
QMS: Quality Management System
MARPOL: International Convention for the Prevention of Pollution from Ships
MC: Moisture Content
MFAG: Medical First Aid Guide
MHB: Materials Hazardous in Bulk
NDK: Nuclear Regulatory Authority
SCBA: Self-Contained Breathing Apparatus
SDS/GBF: Safety Data Sheet
SH: Self-Heating Solid
SOLAS: International Convention for the Safety of Life at Sea

TDC Code: Safe Handling Code for Timber Cargoes
TMGD: Dangerous Goods Safety Advisor
TMGDK: Dangerous Goods Safety Advisory Organization
TML: Transportable Moisture Limit
TMMOB: Union of Chambers of Turkish Engineers and Architects
TÜRKAK: Turkish Accreditation Agency
TYER: Dangerous Goods Handling Guide
TYUB: Port Facility Dangerous Goods Compliance Certificate
WF: Water-Reactive Solid
WT: Water-Reactive Toxic Solid

DEFINITIONS

Packaging: Refers to the transport container in which dangerous goods are placed, as defined in Chapter 6 of the IMDG Code.

Ministry: Refers to the Ministry of Transportation and Infrastructure.

BLU Code: Refers to the Code of Practice for the Safe Loading and Unloading of Bulk Carriers.

Bulk Cargo: Refers to solid, liquid, and gaseous substances that are part of the ship's structural components or are contained in a tank or hold permanently secured within or on the ship, and are intended to be transported without direct containment.

Handling: Refers to the loading and unloading, stowage, segregation, relocation, loading onto and unloading from a cargo transport unit, and the replacement or repair of cargo transport units and packaging, as well as similar operations related to transportation.

Temporary Storage: Refers to the temporary storage of dangerous goods intended for transport at a port facility.

Vessel: Refers to vessels covered by legislation or international treaties to which we are a party.

Ship's Interested Party: Refers to the owner, operator, charterer, captain, or their agents, as well as any natural or legal persons authorized to represent the owner.

Authority: Refers to the General Directorate of Maritime Affairs of the Ministry of Transport and Infrastructure.

Enclosed Area (Premises): Refers to an area not designed for continuous operation, having a fixed or portable roof or canopy (including tents, awnings, etc.), where all side surfaces—except for entry points (doors, windows, hatches, etc.)—are temporarily or permanently closed off, either entirely or by more than half, with restricted access, and where dangerous cargo is present or will be present.

Accident: Refers to an incident or series of incidents caused by or involving dangerous goods during their transport by sea or their handling and/or temporary storage at coastal facilities, resulting in harmful consequences such as death, injury, property damage, or environmental pollution.

Coastal Facility: Refers to a port, pier, wharf, berthing area, or storage area—including storage facilities—where ships or watercraft can safely load and unload cargo or anchor, as well as a buoy or platform for fuel, liquefied gas, or chemical pipelines.

Coastal Facility Operator: Refers to natural persons, as well as legal entities under public or private law, that operate a coastal facility by obtaining a permit from the Ministry.

Coastal Facility Dangerous Goods Compliance Certificate (TYUB): Refers to the certificate issued by the Administration that must be obtained by coastal facilities handling dangerous goods, whether in packaged or bulk form.

Container: Refers to cargo transport equipment that holds a certificate conforming to the applicable standards under the International Convention for Safe Containers (CSC Convention).

Moisture Content (MC): Refers to the amount of water, ice, or other liquids in a sample of bulk solid cargo, expressed as a percentage of the total liquid mass.

Hot Work: Refers to the use of open flames and fires, electrical tools, or hot rivets, as well as grinding, soldering, burning, cutting, welding, or any other operations that involve, emit, or produce sparks.

Maximum Transportable Moisture (TML): Refers to the maximum amount of moisture that a liquefiable solid bulk cargo carried on vessels not meeting the specifications set forth in IMSBC Code Section 7.3.2 may contain without impeding its safe transport.

Carrier: The actual carrier who receives, submits, or accepts an offer regarding the transport of any type of dangerous cargo on its own behalf or on behalf of third parties, broker, shipowner, freight forwarder, freight broker, shipping agent, and any natural or legal person conducting the transport of dangerous goods by sea, road, or rail as part of multimodal transport.

Dangerous Goods Safety Advisor (DGSA): Refers to dangerous goods safety advisors authorized by the Ministry under the IMDG Code.

Dangerous Goods:

- Petroleum and petroleum products listed in Annex I, Appendix 1 of MARPOL 73/78,
- packaged substances and articles listed in Section 3 of the IMDG Code,
- bulk cargoes (e.g., coal) listed in Appendix 1 of the IMSBC Code with the designation “B” or “A and B” in the group box of the characteristic table,
- liquid substances listed in the table in Section 17 of the IBC Code, in the “d” column titled “hazards,” with the designation “S” or “S/P,”
- and gaseous substances as defined in Chapter 19 of the IGC Code.

Hazardous Cargo Handling Guide (TYER): Refers to the guide prepared by port facilities that contains procedures explaining how all operations involving hazardous cargo are carried out and how the responsibilities and precautions specified in the regulations are fulfilled, as well as the safety plan for hazardous cargo.

Shipper: Refers to the sender, recipient, representative, or freight forwarder of the dangerous goods.

Cargo Transport Unit (CTU): Refers to units designed and manufactured for the transport of packaged or bulk dangerous goods, including road trailers, semi-trailers, and tankers; portable tanks and multi-element gas containers; rail cars and tank cars; and containers and tank containers.

Loading Safety: Refers to the secure lashing and stowage of a cargo transport unit or cargo loaded into a ship’s hold or on the ship’s deck, as well as the secure lashing and stowage of cargo to be loaded onto a cargo transport unit.

REVISION PAGE

Serial No.	Revision No.	Revision Content	Revision Date	Name of Person Who Made the Revision	
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1. INTRODUCTION

1.1. General Information About the Facility

FACILITY INFORMATION FORM				
1	Name/Title of Facility Operator	YD Mining Corporation		
2	Facility Operator's Contact Information (Address, phone, fax, email, and website page)	Kıran Village, Merkez District, Merkez Cluster Houses, No. 79, Alaplı/ZONGULDAK Phone: (372) 502 58 23 Fax: (372) 502 56 49 Email: info@marmaracimento.com		
3	Facility Name	Marmara Cement Port		
4	Province where the facility is located	ZONGULDAK		
5	Facility contact information (address, phone, fax, email, and website)	Kıran Village, Merkez District, Merkez Cluster Houses, No. 79, Alaplı/ZONGULDAK Phone: (372) 502 58 23 Fax: (372) 502 56 49 Email: info@marmaracimento.com		
6	Geographic region where the facility is located	Western Black Sea		
7	Port Authority to which the facility is affiliated and contact details	Black Sea Ereğli Regional Port Authority Süleymanlar Neighborhood, İstasyon Street, No. 14, Kdz. Ereğli, Zonguldak Phone: (372) 316 10 07 Email: eregli.liman@uab.gov.tr		
8	Municipality to which the facility is affiliated and contact details	Alaplı Municipality Merkez Mah. İskele St. No. 27, Alaplı/ZONGULDAK Phone: (372) 378 04 44 Email: baskan@alapli.bel.tr		
9	Name of the Free Zone or Organized Industrial Zone Where the Facility Is Located	-		
10	Validity date of the Coastal Facility Operating Permit/Temporary Operating Permit	March 12, 2027		
11	Facility's Operational Status	Own cargo and additional third-party cargo (…)	Own cargo (X)	Third party (…)
12	Name and surname of the facility manager, contact details	İlker ARI Phone: (531) 790 33 09 Email: ilker.ari@marmaracimento.com		
13	Name and surname of the facility's dangerous goods operations manager, contact details (phone, fax, email)	Polat KARAGÜZEL (Port Director) Phone: (534) 688 12 11 Email: polat.karaguzel@marmaracimento.com		
14	Name and surname of the facility's Dangerous Goods Safety Advisor, contact details (phone, fax, email)	-		
15	The facility's maritime coordinates	41° 10.168'N - 31° 21.732'E		
16	Types of hazardous cargo handled at the facility	Hazardous cargo handling is conducted at the facility in accordance with the IMSBC Code.		
17	Dangerous goods handled at the facility	Coal		
18	Cargoes subject to the IMDG Code that are handled	-		
19	Groups in the characteristic table for cargoes subject to the IMSBC Code that are handled manually	B (and A)		

20	Types of ships that can berth at the facility	General Cargo, Dry Bulk
21	Distance from the facility to the main road	300 meters
22	Distance of the facility from the railroad (kilometers) or railroad connection	90 km
23	Name of the nearest airport and distance to the facility (kilometers)	Zonguldak Airport 101 km
24	The facility's cargo handling capacity (metric tons/year; TEU/year; vehicles/year)	Total Handling Capacity: 2,020,000 metric tons/year **Outbound Cargo:** Clinker (Bulk): 400,000 metric tons/year Cement (Bulk): 450,000 metric tons/year Cement (Bagged-Sling): 700,000 metric tons/year **Incoming Cargo:** Imported Coal (Bulk): 200,000 metric tons per year Iron Ore (Bulk): 45,000 metric tons per year Bauxite (Bulk): 90,000 metric tons per year Silica Sand (Bulk): 135,000 metric tons per year The total annual cargo to be shipped from the pier is 1,550,000 metric tons, and the total annual cargo to be loaded (incoming) at the pier is 470,000 metric tons.
25	Is scrap handling performed at the facility?	No
26	Is there a border crossing?	No
27	Is there a customs area?	Yes
28	Cargo handling equipment and capacities	Tadano ATF 220G-5 Mobile Crane (220,000 kg) Lonking LG100DT Forklift (10,000 kg)
29	Storage tank capacity (m^3)	None
30	Open storage area (m^2)	34,500 m^2
31	Semi-enclosed storage area (m^2)	None
32	Indoor storage area (m^2)	6,266 m^2
33	Designated fumigation and/or degassing area (m^2)	None
34	Pilotage and towing services Name, title, and contact details of the operator	Ereğli Iron and Steel Works Inc. Uzunkum St. No. 7, Kdz. Ereğli/ZONGULDAK Tel: (372) 323 25 00 Email: iletisim@erdemir.com.tr
35	Has a safety plan been developed?	Yes
36	Waste reception facility capacity	-
37	Characteristics of wharf/pier, etc. areas	

Quay/Pier No.	Length (meters)	Width (meters)	Maximum Water Depth (meters)	Minimum Water Depth (Meters)	Maximum tonnage and length of vessels that can berth (DWT/GT/meters)
1	147	12	4.40		2,300/1,200/75
2	175	12	6.20		5,300/3,990/101
3	146	10	4.20		2,000/1,000/70

1.2. Loading, unloading, handling, and storage procedures for hazardous cargoes handled and/or temporarily stored at the port facility

1.2.1. Cargo Classification and Basic Hazards

- **IMSBC Code Classification:** Coal (COAL) is classified as Group B (or Groups A and B, depending on particle size and test results) under the International Maritime Solid Bulk Cargoes (IMSBC) Code.
- Dangerous Goods (MHB) **Properties**: Coal, which falls under the category of dangerous goods in bulk (MHB), may possess the hazard properties of Combustible Solid (CB), Self-Heating Solid (SH), Solid Emitting Flammable Gas When Wet (WF), and Corrosive Solid (CR).
- **Methane Gas (CH_4) Emissions:** Coal can emit flammable methane gas, which creates an explosive atmosphere when its volumetric concentration in the air is between 5% and 16%.
- **Oxidation and Oxygen Depletion:** The oxidation of coal leads to oxygen depletion in storage areas and adjacent enclosed spaces, resulting in the accumulation of toxic and odorless carbon monoxide (CO) and carbon dioxide ($_{CO_2}$) gases.
- **Spontaneous Heating and Combustion:** The oxidation process can cause spontaneous heating and spontaneous ignition within the hold.
- **Risk of Corrosion:** Some types of coal can react with water to produce acid, causing corrosion damage to the steel structures of the ship and the facility.
- **Risk of Liquefaction (Group A):** In fine-grained coal cargoes, dynamic separation or liquefaction may occur if the moisture content exceeds the Transportable Moisture Limit (TML).

1.2.2. Pre-Berthing Information Exchange and Planning

- **Cargo Declaration and Information:** Prior to arrival, the shipper must provide the captain and the shore facility representative with a written declaration containing the cargo's Bulk Cargo Sea Name (BCSN), cargo group (A and B; or B), quantity, stowage factor, moisture content, sulfur content, particle size, and tendency to emit methane or generate heat.
- **Vessel and Terminal Information Exchange:** Information regarding the estimated time of arrival (ETA), berthing depth, air draft, loading/unloading rates, ballast capacity, and mooring arrangement must be confirmed between the vessel and the facility.
- **Joint Operation Plan:** Before loading or unloading begins, a plan showing the hold operating sequence, pour rates, ballast filling/discharge rates, and the vessel's structural limits must be prepared and signed by the captain and the terminal representative.
- **Ship/Shore Safety Checklist:** Prior to the operation, the Ship/Shore Safety Checklist must be jointly completed and signed by the captain and the terminal representative.

1.2.3. Loading and Unloading Operation Safety Rules

- **Hold and Bilge Preparation:** Holds must be clean, dry, and free of any residual cargo from previous loads; removable hold planks must be removed. Bilge wells must be covered with burlap to prevent coal particles from entering.
- **Prevention of Ignition Sources and Electrical Installations:** All electrical cables in the holds and adjacent areas must be explosion-proof or positively isolated. "NO SMOKING" signs must be posted on deck and around the cargo holds; open flames, welding, cutting, and hot work are strictly prohibited.

- **Gas and Temperature Monitoring:** Calibrated detectors to measure methane (CH_4), oxygen (O_2), carbon monoxide (CO), and bilge pH, as well as temperature measurement equipment, must be kept on hand throughout the facility and on the vessel, and measurements must be recorded.
- **Trimming:** The coal hold should be trimmed to a reasonable level up to the hold boundaries; this prevents vertical cracks that could allow air circulation and the formation of gas pockets.
- **Weather Conditions Precautions:** If rain occurs during the loading of Group A coal, operations must be suspended, and any non-operational hold hatches must be kept closed.
- **Coordination with Ballast Operations:** The loading/unloading rate must be balanced with the rate of ballast loading or unloading; if the ballast operation falls behind, the loading operation must be stopped immediately.
- **Ventilation Management:** For methane-emitting coal, adequate surface ventilation must be provided to prevent accumulation in the upper region of the hold. For self-heating coal, holds must be closed immediately after loading and sealed with tape, and ventilation must be limited to the minimum time necessary to vent accumulated methane.
- **Unloading Area Precautions:** An atmospheric test must be conducted before opening the bin hatches (O_2< 21%, CO < 50 ppm). A fine water spray may be used for dust control during unloading. If hot spots are observed, they must be isolated, immediately doused with water, and removed. If unloading is interrupted for more than 8 hours, the holds must be closed.

1.2.4. Handling and Storage Procedures at the Port Facility

- **Stockyard Management:** Storage areas must be monitored for temperature increases and gas emissions; measures must be taken to prevent spontaneous combustion; and drainage infrastructure must be provided to prevent rainwater accumulation.
- **Conveyor and Equipment Safety:** Conveyor belts must be completely emptied during and at the end of warehouse transfers. The facility's automatic weighing devices (scales) must be regularly calibrated to ensure 1% accuracy.
- **Dust Minimization and PPE:** Necessary measures must be taken at conveyor and discharge points to prevent dust formation. All personnel involved in material handling must be provided with protective dust masks, safety goggles, protective clothing, hard hats, safety shoes, and ear protection. Hygiene rules requiring personnel to wash their hands and clean their clothing must be enforced.

2. RESPONSIBILITIES

2.1. General Responsibilities

- All parties involved in the transport of hazardous cargo are obligated to take all necessary measures to ensure that transportation is conducted in a safe, secure, and environmentally sound manner, to prevent accidents, and to minimize damage in the event of an accident.
- In emergency situations such as fires, leaks, and spills that occur during the transport of dangerous goods, the EmS Guide (Emergency Response Procedures and Emergency Charts for Ships Carrying Dangerous Goods) is used.
- The MFAG (Medical First Aid Guide) is used to ensure that medical first aid is provided correctly to individuals affected by the hazards of dangerous goods and to address health issues resulting from accidents.

2.2. Responsibilities of the Cargo Owner

- Prepares or arranges for the preparation of all required documents, information, and records related to dangerous cargo (Cargo Declaration Form, TML/MC Certificates, etc.) and ensures that these documents are kept with the cargo throughout the transport.
- Ensures that dangerous goods are classified, packaged, marked, labeled, and placarded in accordance with their type.
- Ensures that dangerous goods are loaded, stacked, and securely fastened into approved packaging and cargo transport units in a safe and regulation-compliant manner.

2.3. Responsibilities of the Carrier

- Requests the required documents, information, and records related to dangerous goods from the shipper and ensures they are kept with the cargo throughout the transport operation.
- Verifies that dangerous goods classified, packaged, labeled, and placarded by the shipper comply with applicable regulations.
- Verifies that dangerous goods are properly packaged using approved packaging and cargo transport units, safely loaded onto the cargo transport unit, and securely fastened.

2.4. Responsibilities of the Port Facility Operator

- Does not allow ships carrying dangerous goods to berth at the facility without permission from the port authority.
- It provides written information to ships set to berth at its facility regarding facility rules, cargo handling rules, and relevant regulations.
- The operator shall not handle dangerous cargo for which it has not obtained a handling permit from the authorities, and shall not cause inconvenience to ships scheduled to berth by failing to plan accordingly.
- The operator requests the mandatory documents, information, and records related to dangerous cargo from the cargo owner and ensures that these are present with the cargo. If the cargo owner fails to provide the relevant documents, information, and records, the operator is not obligated to accept the dangerous cargo at the facility or to handle it.
- It shares all data that may be necessary based on the nature of the cargo with the ship's representative and conducts loading or unloading operations in accordance with the agreement reached. It does not make any changes to the operation without the ship's representative's knowledge.
- The facility determines its operational limits by taking into account its safe operating capacity and weather forecasts, and takes the necessary measures to ensure the vessel remains safely moored at the pier and that handling operations are conducted safely.
- The facility checks the shipping documents to ensure that hazardous cargo arriving at the facility is properly classified, packaged, marked, labeled, placarded, and safely loaded onto the cargo transport unit.
- Ensures that personnel involved in the handling of dangerous goods and the planning of such operations receive the necessary training and certification, and does not assign uncertified personnel to these operations.

- Ensures that dangerous goods handling equipment at the facility is in working order and that relevant personnel are trained and certified in the use of this equipment.
- The operator implements occupational safety measures at the coastal facility and ensures that personnel use personal protective equipment appropriate for the physical and chemical properties of the dangerous cargo.
- It conducts activities involving dangerous cargo at docks, piers, and storage facilities specifically equipped for such operations.
- It equips the berths and piers designated for ships loading or unloading hazardous liquid bulk cargo with facilities and equipment suitable for this purpose.
- It maintains an up-to-date list of all dangerous goods on vessels berthed at its facility and in both enclosed and open areas within the facility, and provides this information to the relevant parties upon request.
- It reports to the port authority the immediate risk posed by hazardous cargoes handled or temporarily stored at its facility, as well as the measures taken to address this risk.
- It reports accidents involving dangerous cargo, including those occurring at the entrance to enclosed areas, to the port authority.
- It provides the necessary support and cooperation during inspections and audits conducted by the Administration and the Port Authority.
- It ensures that Class 1 (excluding Class 1 Compatibility Group 1.4 S), Class 6.2, and Class 7 dangerous goods, for which temporary storage is not permitted, are transported out of the coastal facility as soon as possible without delay; in cases where storage is unavoidable, it applies to the Authority for permission.
- It temporarily stores cargo transport units carrying dangerous goods in accordance with segregation and stacking rules, and implements fire, environmental, and other safety measures appropriate to the class of dangerous goods in the storage area. It keeps fire suppression systems and first-aid stations ready for immediate use at all times in areas where dangerous goods are handled and performs the necessary inspections periodically.
- Permission must be obtained from the port authority prior to conducting any hot work operations in areas where dangerous goods are handled or temporarily stored.
- It prepares and submits to the port authority an emergency evacuation plan for the evacuation of ships from shore facilities in the event of an emergency, and informs the relevant persons regarding the plan approved by the port authority.
- Ensures that the internal loading of cargo transport units is carried out in accordance with cargo loading safety regulations at its facility.

2.5. Responsibilities of the Ship's Representative

- Ensures that the cargo to be carried by the vessel is certified as suitable for transport and that the cargo holds, cargo tanks, and cargo handling equipment are in a condition suitable for cargo transport.
- Requests all mandatory documents, information, and records related to dangerous cargo from the cargo owner and ensures they are kept with the cargo throughout the transport operation.

- Ensures that the documents, information, and records required by law and international conventions regarding dangerous cargo on board the vessel are appropriate and up-to-date.
- Checks the transport documents to verify that the cargo transport units loaded onto the vessel are properly marked, labeled, and loaded safely.
- It informs relevant ship personnel about the risks of dangerous cargo, safety procedures, safety and emergency measures, response methods, and similar topics.
- Maintains up-to-date lists of all dangerous goods on board the vessel and provides them to interested parties upon request.
- Ensures that the loading program, if any, is approved, documented, and kept in working order.
- Reports the immediate risk posed by the dangerous cargo on board a vessel berthing at a shore facility, along with the measures taken to address it, to the port authority and the shore facility.
- In the event of a leak in the dangerous cargo or if there is a possibility of such a leak, the vessel shall not accept the dangerous cargo for transport.
- Reports any dangerous cargo accidents occurring on the vessel during navigation or while at the shore facility to the port authority.
- It provides the necessary support and cooperation during inspections and audits conducted by the administration and the port authority.
- The vessel shall not accept the transport of dangerous cargoes not listed in the vessel certificates issued by the relevant institutions and organizations.
- Ensures that ship personnel responsible for handling dangerous cargo use personal protective equipment appropriate to the physical and chemical properties of the cargo during handling.
- Ensures that cargo loaded onto its vessels meets the requirements for loading safety.

2.6. Cargo Loading Safety Regulations

- The Port Authority will suspend handling operations at the coastal facility if it identifies any risk and will not resume them until the risk has been eliminated.
- Depending on the type of cargo, compliance with the provisions of the BLU Code, BLU Manual, CSS Code (Cargo Stowage and Safety), CTU Code (Containerized Transport Units), TDC Code (Timber Cargoes), and CSM (Cargo Securing Manual) is mandatory.
- Cargo stowage must be carried out in accordance with regulations and international conventions (SOLAS, MARPOL, etc.).
- The vessel may not be loaded beyond its load line mark. If overloading is detected, the vessel will not be permitted to sail, and administrative measures will be taken.
- Prior to operations, the loading and unloading plan must be submitted to the port authority; before the vessel departs, the results of the Draft Survey or Weighbridge Survey for tonnage determination must also be submitted. The authority may request a report from an authorized survey company.
- To maintain the vessel's stability, cargo—particularly on single-hold bulk carriers—must be loaded in such a way that it is spread across the hold floor (by trimming).
- The cargo and ballast water arrangement is monitored throughout the operation to prevent the vessel's structure from being subjected to excessive stress.

- The ship is kept level; any necessary list is maintained for the shortest possible time; and loading and unloading are carried out in a balanced manner in accordance with the approved stability booklet.
- In adverse meteorological and oceanographic conditions that could affect cargo handling, the captain halts operations.
- Separation rules are followed by placing heavy cargo on top of light cargo and liquid cargo on top of dry cargo, and by preventing odor transfer.
- All cargo and cargo transport units, except for bulk cargo, are loaded, stowed, and secured in accordance with the approved Cargo Securing Manual (CSM).

2.7. Provisions for Solid Bulk Cargoes Under the IMSBC Code

- The official Bulk Cargo Shipping Name (BCSN) must be used in all documentation related to the transport of dangerous solid bulk cargo; the trade name alone is not valid.
- A manifest, special list, or detailed stowage plan indicating the locations and classes of dangerous cargoes on board must be kept.
- The density of solid bulk cargo must be declared prior to loading. For ships that do not meet the requirements of 1,780 kg/m³ or higher, the density of cargoes in the range of 1,250–1,780 kg/m³ must be tested at a TÜRKAK-accredited laboratory (TS EN ISO/IEC 17025).
- Group A (and Group A/B) Liquefiable Cargo Requirements:
  - Certificates for Transportable Maximum Moisture (TML) and Moisture Content (MC), issued by an authorized organization, are provided. Copies of these documents are retained by the Port Authority and the shore facility.
  - The moisture control procedure prepared by the ship's representative is submitted to the Port Authority for approval, and the approval certificate is kept on board the vessel.
  - Only cargoes with MC < TML may be loaded onto standard ships. Cargoes with MC > TML may only be carried on specially constructed ships that meet the requirements of IMSBC Code 7.3.2.
  - The TML test must have been conducted within the last 6 months. Sampling for the MC test may be performed no more than 7 days prior to loading. In the event of heavy rain or snow, the MC test must be repeated immediately.
- Appropriate emergency response procedures for responding to accidents involving hazardous solid bulk cargoes must be kept on board the vessel.
- Procedures for the carriage of solid bulk cargoes not covered by the IMSBC Code shall be determined by the Administration.

3. RULES AND MEASURES TO BE IMPLEMENTED BY THE SHORE FACILITY

3.1. Berthing and Access Safety

- Adequate and safe mooring personnel and equipment shall be provided.
- Sufficient and safe access between the ship and the shore facility is provided.

3.2. Inspections and Checks

- Areas where cargo transport units are stored are regularly inspected, and cargo transport units are regularly checked for leaks and damage. Necessary intervention on cargo transport units where leaks or damage are detected is carried out only under the supervision of a responsible person.
- Relevant personnel are made aware of potential hazards that may arise from the presence of dangerous cargo.
- Equipment used in handling and stacking operations—whether powered or non-powered—is inspected and verified prior to use to ensure it has been maintained in accordance with the manufacturer's maintenance instructions, is in good working condition, and meets applicable standards.

3.3. Emergency Management

Appropriate emergency procedures are established and communicated to relevant personnel. These procedures include the following:

- Provision of appropriate emergency alarm activation points,
- Reporting incidents or emergencies to the relevant emergency services located both within and outside the port area,
- Notifying the port authority and port area users, both at sea and on land, of incidents or emergencies,
- Providing emergency equipment appropriate to the hazards of the dangerous cargo to be handled,
- Ensuring the necessary coordination for the vessel's departure in the event of an emergency,
- Implementing arrangements to ensure adequate access and egress at all times,
- Developing a safe and rapid emergency evacuation plan, taking into account the nature of the dangerous goods and their specific conditions,
- Utilizing the "Medical First Aid Guide (MFAG)" included in the IMDG Code annex to ensure that necessary medical first aid is provided appropriately to persons affected by dangerous goods and for health issues arising from accidents involving such cargo,
- Utilizing the "Emergency Plans (EmS)" included in the annex to the IMDG Code regarding emergencies involving dangerous goods,
- Ensuring that first-aid supplies to be used in response to emergencies or accidents are stored in locations known to the staff and easily accessible.

3.4. Availability of Emergency Information

- All dangerous goods present at the coastal facility, including their quantities, proper shipping names, correct technical names (if any), UN numbers, classes, division/compatibility group designation (if assigned), subsidiary risk classes (if assigned), packaging group (if assigned), and the exact location information kept on hand for emergency services.
- It is ensured that persons responsible for warehouses and dangerous goods handling areas are aware of the current status of dangerous goods within their areas of responsibility and have the necessary information readily available for use in emergencies.

- It is ensured that the person responsible for cargo loading operations involving dangerous goods possesses the necessary information regarding the measures to be taken in the event of accidents involving dangerous goods, and that this information is kept readily available for use in emergencies.
- Electronic or other automated data processing and transmission technologies are used to ensure access to this information.
- Safety data sheets for hazardous materials are normally obtained from the manufacturers of the chemicals. Emergency response information is also obtained from electronic databases, and this information is used when direct access to the data is available.
- Port emergency response procedures and port emergency phone numbers are displayed prominently in warehouses, areas where dangerous goods are transported and handled, and at key locations within these areas.
- Firefighting and pollution control equipment and gear must be clearly marked, and notices drawing attention to them must be placed in appropriate locations where they can be easily seen.
- Information regarding current emergency procedures and available services is provided to the captain of a vessel loading or carrying dangerous goods.

3.5. Incident Reporting and Documentation

- During the transport of dangerous goods within one's area of responsibility, if an accident occurs that could endanger the safety and security of the port facility, vessels at the port facility, other property, the environment, or persons responsible for the transport operation, the operation shall be immediately suspended and shall not resume until appropriate safety measures have been taken.
- All personnel are required to report any accidents occurring during the transport of dangerous goods to the person in charge of the operation.
- To ensure a rapid and effective response, provide medical treatment to injured personnel, and minimize potential damage, a brief and accurate description of the incident must be communicated to the emergency response center as soon as possible.
- During the transport of dangerous goods, if an accident occurs that could endanger the safety and security of the port facility, vessels at the port facility, other property, the environment, or persons responsible for the transport, the situation must be reported immediately to the port authority.
- Any damaged or leaking packaging, unit load, or cargo transport unit containing hazardous cargo must be reported immediately to the port authority.

3.6. Fire and Explosion Precautions

The following requirements must be met and monitored:

- Mooring points at the interface where ships berth must be kept accessible at all times for emergency services,
- Audible or visual alarms must be present in the area for emergency use, and communication equipment must be kept ready for emergency services,

- All areas used for the transport of dangerous cargo must be kept clean and orderly,
- The ship's captain must be informed of the location of the nearest communication devices that can be used to call emergency services before dangerous cargo is loaded,
- Providing lighting and other electrical equipment suitable for use in flammable or explosive environments in areas where dangerous cargo is present,
- Designating areas where smoking is prohibited,
- Ensuring that warning signs in the form of symbols prohibiting smoking are clearly visible at all points and that smoking areas are maintained at a safe distance from locations that could pose a hazard,
- Equipment used in flammable or explosive atmospheres, or in areas or voids where such conditions may arise, must be suitable for use in these environments, safe, and capable of preventing any fire or explosion,
- Taking into account the fire and explosion hazards that may arise from the transport of hazardous cargo, recognizing that even empty cargo transport units may contain residues and flammable vapors and may therefore pose a hazard,
- Electrical tools and equipment connected to portable plugs with extension cords must not be used in areas or spaces where a flammable atmosphere could form.

3.7. Environmental Protection Measures

- Ensure that hazardous cargo is transported only in areas that meet the Administration's requirements.
- Necessary measures are taken to prevent hazardous materials handled at the port facility from contaminating the soil, water, or areas where water is discharged.

3.8. Pollution Control

- Sufficient equipment is maintained to minimize damage that may result from spills of hazardous cargo.
- Pollution control equipment includes cleaning materials, portable collection basins, oil containment booms, condensate covers, and absorbent and neutralizing agents.
- Personnel involved in the transport and handling of hazardous cargo are ensured to be trained and experienced in the use of pollution control equipment and facilities in accordance with the Administration's requirements.

3.9. Loading, Unloading, and Cargo Security

- To ensure the safe loading of cargo onto the vessel, the BLU Code and BLU Manual, the Code of Safe Practice for Cargo Stowage and Security (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 followed.
- Cargo stowage is carried out in accordance with relevant legislation and the international conventions to which we are a party.
- The vessel may not be loaded beyond the loading limit, taking into account the loading limit mark. If such a situation is detected, the vessel will not be permitted to sail, and administrative proceedings will be initiated against the vessel operator.

- Prior to handling operations, the loading and unloading plan must be submitted by the ship's operator to the Regional Administrative Authorities (Port Authority and Customs); furthermore, prior to the ship's departure, the results of a draft survey or weighbridge survey—conducted to determine the quantity of cargo loaded—must be submitted to these authorities. The authorities may require that the draft survey or weighbridge survey report be obtained from an authorized survey company.
- Measures are taken to prevent adverse effects on the vessel's stability by ensuring that the cargo on bulk carriers—particularly single-hold bulk carriers—is loaded in such a way that it is distributed across the bottom of the hold.
- To prevent the ship's structure from being subjected to excessive stress, the cargo and ballast water distribution is monitored throughout the loading or unloading operation. Care is taken to ensure the ship remains upright. If a list (tilting to one side) is necessary during loading, it is kept as brief as possible.
- To prevent structural damage to the vessel, loading and unloading are carried out in a balanced manner in accordance with the approved stability booklet. Under adverse weather conditions that could affect cargo handling operations, the captain suspends operations until conditions improve.
- To prevent situations such as heavy cargo being placed on top of light cargo or the odor of foul-smelling cargo spreading to other cargo, cargo possessing characteristics that could damage other cargo is loaded in accordance with segregation rules.
  To ensure the full implementation and maintenance of safety measures related to the loading, stowage, segregation, handling, transport, and unloading of cargo, in accordance with SOLAS Chapter VI, Part A, Regulation 5.6, all cargo, cargo units, and cargo transport units—excluding solid and liquid bulk cargo— shall be loaded, stowed, and secured in accordance with the Cargo Securing Manual approved by the Administration or by a recognized classification society on behalf of the Administration.

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

Our port handles dangerous goods subject to the provisions of the IMSBC Code but not covered by the IMDG Code classifications. The information provided under this heading regarding dangerous goods that fall outside the scope of our port facility's operations is for informational purposes only; our port facility does not handle, load, unload, or store dangerous goods covered by the IMDG Code.

4.1. Classes of Dangerous Goods

4.1.1. Classification Under the IMDG Code

All substances subject to the provisions of the IMDG Code (dangerous goods) are assigned to one or more of nine basic classes (secondary hazards) based on the hazards they present. The classes are:

Class 1.1	Explosive substances and articles posing a mass explosion hazard
Class 1.2	Explosive substances and articles that do not present a mass explosion hazard but do present a projection hazard
Class 1.3	Explosive substances and articles that present a fire hazard or a minor explosion hazard or a minor projection hazard, or both, but do not present a mass explosion hazard
Class 1.4	Explosive substances and articles that do not present a significant hazard
Class 1.5	Explosive substances that present a mass explosion hazard but have very low sensitivity
Class 1.6	Explosive objects with no mass explosion hazard and an extremely low level of sensitivity
Class 2.1	Flammable gases
Class 2.2	Non-flammable, non-toxic gases
Class 2.3	Toxic gases
Class 3	Flammable liquids
Class 4.1	Flammable solids, self-reactive substances, desensitized solid explosives, and polymerizing substances
Class 4.2	Substances prone to spontaneous combustion
Class 4.3	Substances that release flammable gases when in contact with water
Class 5.1	Oxidizing substances
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 hazardous substances and articles

4.1.2. Classification Under the IMSBC Code

Hazard Group A – Cargoes with a Risk of Liquefaction

If such cargo is shipped with a moisture content exceeding the transportable moisture limit (TML), there is a risk of liquefaction. Such cargo may appear as relatively dry granules but may contain sufficient moisture to become fluid due to the effects of vibration during transit.

A cargo posing a liquefaction hazard may shift and slide as a result of the ship's movement, potentially causing the ship to capsize. Proper stowage in accordance with the procedures outlined in Chapter 5 of the IMSBC Code can prevent the risk of cargo shifting.

Some liquefiable cargoes may also heat up spontaneously.

The loading of liquefiable cargoes is permitted only if the moisture content actually measured in the cargo is below the TML value. Such cargoes may be carried on ships specifically designed and suitable for transporting fine-particle cargoes.

Cargoes containing liquids, other than packaged canned goods and similar items, may not be stowed on top of or adjacent to these solid bulk cargoes in the same cargo hold.

The actual moisture content (MC) and transportable moisture limit (TML) of a Group A cargo are determined by authorized organizations in accordance with test procedures.

Hazard Group B – Cargoes with Chemical Hazards
Bulk solid cargoes posing a chemical hazard can lead to hazardous situations on board ships and at terminals. These cargoes are classified in two different ways:

- Classification is performed in accordance with the SOLAS IMDG Code. Under the IMSBC Code, the classes applicable to Group B bulk solid cargoes are as follows:

  Class 4.1 Flammable solids
  These are solids that can ignite easily or cause a fire through friction.

  Class 4.2 Substances Prone to Spontaneous Combustion
  These are solids—other than pyrophoric substances—that are prone to self-heating when exposed to air without an external energy source.

  Class 4.3 Substances that release flammable gases upon contact with water
  These are solids that, upon reaction with water, may become self-igniting or release flammable gases in hazardous quantities.

  Class 5.1 Oxidizing substances
  These are substances that, while not flammable themselves, can cause or contribute to the combustion of other materials by supplying oxygen.

  Class 6.1 Toxic substances
  Substances that, if ingested or inhaled, may cause death or serious injury, or that may harm human health upon skin contact.

  Class 7 Radioactive Substances
  Subject to special regulations.

  Class 8 Corrosive Substances
  These are materials that, through chemical action, will cause serious damage upon contact with living tissue or will cause material damage to or even destroy other goods or means of transport.

  Class 9 Miscellaneous Substances
  These are materials and articles that pose a hazard during transport not covered by the other classes.

- These are materials that do not fall under the IMDG Code's classification system but may pose certain chemical hazards when transported in bulk. These materials pose significant risks when transported in bulk and require special precautions. If a material possesses one or more chemical hazards as defined below, it is classified under Group B in accordance with the MHB definition:

MHB (CB) Flammable Solids
Easily combustible or easily ignitable

MHB (SH) Self-heating solids
Capable of self-heating

MHB (WF) Solids that emit flammable gases when wet
Can burn easily or ignite easily upon contact with water

MHB (WT) Solids that may release toxic gases when wet
Materials that produce toxic gases upon contact with water.

MHB (TX) Toxic solids
Pose toxic hazards when inhaled or upon skin contact.

MHB (CR) Corrosive solids
It has corrosive effects on the skin, eyes, or metal.

MHB (OH) Other Hazards
If there are deviations from the hazard criteria listed above, the substance is classified under "other hazards" and recorded in the hazard section of the shipment.

4.2. Packaging and Containers for Dangerous Goods

Packaging used under the IMDG Code refers to one or more containers, along with the materials and components necessary for these containers to fulfill their protective and other safety functions. The principles governing the use of packages and packaging are as follows:

- **General Strength and Durability:** Hazardous materials must be placed in high-quality packaging, IBCs, and large packaging that are sturdy enough to withstand impacts and loads that may be encountered during transfers between cargo transport units, transfers between cargo transport units and storage facilities, and subsequent manual or mechanical handling operations.
- **Leak-Tightness and Sealing:** Packaging, including IBCs and large packaging, must be prepared and sealed in such a way that it does not result in loss of contents due to normal conditions, vibration, humidity, or pressure changes during transport. Packaging must be sealed in accordance with the information and sealing instructions provided by the manufacturer.
- **Compatibility of Packaging with the Substance:** Parts of the packaging that come into direct contact with hazardous substances must not be affected by or significantly weakened by the substance being transported. There must be no interaction between the packaging material and the hazardous substance that could cause a hazardous reaction, degradation, or leakage. Where necessary, an appropriate inner lining or surface treatment is applied.
- **Conformity of Packaging to a Tested Design Type:** Unless otherwise specified in the IMDG Code, packaging—including IBCs and large packaging, but excluding inner packaging—must conform to a design type that has been successfully tested in accordance with the relevant provisions.

- **Filling of Liquids and Allowing for Headspace:** When filling liquids into packaging, IBCs, or large packaging, sufficient headspace must be left to prevent leakage or permanent deformation that could result from temperature-induced expansion during transport.
- **Protection of Inner and Outer Packaging:** Inner packaging must be placed inside the outer packaging in such a way that it will not break, puncture, or cause the contents to leak into the outer packaging under normal transport conditions. Inner packaging made of materials such as glass, porcelain, ceramics, and similar materials that can easily break or be punctured must be protected with appropriate cushioning materials.
- **Use** of **Cushioning and Absorbent Materials:** It is ensured that the cushioning and absorbent materials used are suitable for the properties of the transported substance and will not react dangerously with the contents. When necessary, appropriate cushioning material is used to prevent movement within the packaging.
- **Combined Use of Different Types of Inner Packaging:** The use of different types of inner packaging within a single outer packaging or large packaging is permitted provided that the relevant packaging combination has been properly tested and all other packaging requirements are met.
- **Combined Packaging and Compatibility:** Hazardous materials that could react dangerously with one another shall not be placed in the same outer packaging or large packaging. In particular, the combined packaging of substances that could lead to hazardous consequences—such as combustion or significant heat generation, the formation of flammable, toxic, or asphyxiating gases, the formation of corrosive substances, or the formation of unstable substances—must be avoided.
- **Special Sealing and Venting:** Unless otherwise specified in the List of Hazardous Substances, packages containing substances that emit flammable, toxic, or corrosive gases or vapors, or that may react dangerously with the atmosphere, must be properly sealed to prevent leakage. In cases where there is a possibility of pressure buildup due to the contents, appropriate ventilation or pressure relief devices may be used in accordance with the provisions of the IMDG Code.
- **Liquids, Powders, and Granular Substances:** Liquids are filled into packaging capable of withstanding the internal pressure that may develop under normal transport conditions. Packaging used for powders or granular substances must be designed to prevent the escape of the substances or must contain a suitable lining.
- **Pre-Use Inspection of Packaging:** Packaging, including IBCs and large packaging, is inspected for corrosion, contamination, deformation, and other damage before being filled and released for transport. The proper functioning of IBC service fittings is also verified.
- **Prohibition of Damaged Packaging:** Packaging and IBCs that show signs of reduced strength compared to the approved design type shall not be used. Where necessary, they shall be repaired, refurbished, or undergo routine maintenance in accordance with the relevant test requirements.
- **Cleaning of Exterior Surfaces:** It is ensured that the exterior surfaces of all packaging, including IBCs and large packaging, are free of any hazardous substance residues resulting from transport and handling.

- **Empty Packaging:** Empty packaging—including IBCs and large packaging that previously contained hazardous materials—shall be treated in accordance with the provisions established for filled packaging under the IMDG Code unless the necessary procedures to eliminate the hazard have been carried out.
- **Service Life of Packaging:** The service life specified in the IMDG Code and related regulations is adhered to for plastic drums and pails, rigid plastic IBCs, and composite IBCs with plastic inner receptacles. Unless a different period is specified by the competent authority, the service life of the relevant packaging is determined by taking into account the properties of the substance being transported.
- **Packaging Codes and Classification:** Packaging used for the transport of hazardous materials is classified as follows, based on its structure and intended use:
  - P (Packaging); standard packaging other than IBCs and large packaging,
  - IBC (Intermediate Bulk Container); intermediate bulk containers,
  - LP (Large Packaging); large packaging.
- **Marking, Labeling, and Overpacks:**
  - The packaging must be marked with the UN number, preceded by the "UN" designation and followed by the proper shipping name of the hazardous material, in a durable and legible manner, and must bear hazard labels in accordance with the IMDG Code.
  - For consolidated packages in which multiple packages are combined into a single unit, if the markings and labels on the inner packages are not clearly visible from the outside, the required markings and labels must be applied to the consolidated package, and the words "OVERPACK" or "CONSOLIDATED PACKAGE" must be clearly indicated.
- **Damaged Packaging and Salvage Packaging:**
  - Damaged, leaking, deformed, or non-compliant packaging, as well as spilled or leaking hazardous materials, must be placed in appropriate salvage packaging for safe transport, recovery, or disposal.
  - Packaging used for salvage purposes must bear the phrase "SALVAGE PACKAGE" or "KURTARMA AMBALAJI" in clear and legible writing.

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

4.3.1. Placarding Requirements

- If the labels and/or markings affixed to packages are not clearly visible from the outside of the cargo transport unit or bulk cargo container, enlarged labels (placards), markings, and signs shall be affixed to the outer surfaces of the cargo transport unit or bulk cargo container to indicate that the unit or container contains hazardous materials and that these materials pose a risk.
- The methods for affixing placards and markings to cargo transport units and bulk cargo containers must be such that this information remains identifiable even if the cargo transport unit or bulk cargo container remains submerged at sea for three months. The surface of the cargo transport unit and bulk cargo container shall be easily marked in accordance with appropriate marking methods.

- All placards, orange panels, signs, and labels shall be removed or covered after the dangerous goods and their residues that necessitated their application inside the cargo transport units have been discharged.
- Placards shall be affixed to the exterior surfaces of cargo transport units and bulk cargo containers to warn that the contents are hazardous materials and pose a hazard. Except in the following cases, placards shall correspond to the primary hazards of the materials inside the cargo transport unit and bulk cargo container:
  - No placards are required on cargo transport units and bulk cargo containers carrying any quantity of explosives in Subgroup 1.4, Compatibility Group S; and
  - Placards indicating the highest hazard level shall be affixed only to cargo transport units and bulk cargo containers carrying substances and articles belonging to more than one division within Class 1.
- Placards shall be placed on a background of a contrasting color or shall have a dotted or clearly defined outer border.
- For dangerous goods covered by Class 9, the placard shall conform to Model No. 9; Model No. 9A shall not be used for placarding purposes.
- Placards must also be displayed for secondary risks requiring a secondary risk label. If the primary or secondary risk placard already indicates the hazard it represents, cargo transport units containing substances belonging to more than one class are not required to carry a secondary risk placard.
- A cargo transport unit or bulk cargo container containing hazardous materials or their residues shall display placards clearly visible as follows:
  - Cargo container, semi-trailer, or portable tank: one on each side and one on each end. Portable tanks with a capacity of less than 3,000 liters may be placarded or labeled only on two opposite sides.
  - For a rail car, at least one on each side;
  - For a multi-compartment tank carrying more than one hazardous substance or their residues, each face of the location where the relevant compartments are situated must be labeled. In cases where all compartments must carry the same label, these labels must be placed along both sides of the cargo transport unit, and only once;
  - For flexible bulk cargo containers, on at least two opposite sides; and
  - For all other types of cargo transport units, on at least two sides and the rear face of the unit.

4.3.2. Placard Specifications

Placards (excluding Class 7 placards and the hazardous substance symbol) are arranged as follows:

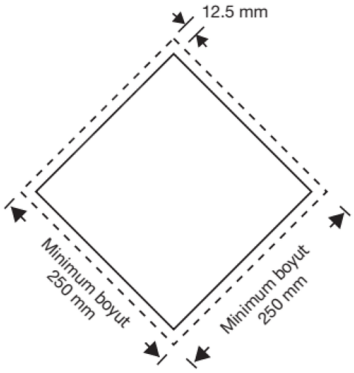


Figure1 - Label Dimensions (Excluding Class 7)

The placard shall be square in shape with a 45° angle (in the shape of a diamond). The minimum dimensions shall be 250 mm x 250 mm (measured from the edge of the placard). The line within the corner shall be parallel, and the distance from this line to the corner of the label shall be 12.5 mm. The symbol and the line within the border shall be the same color as the label indicating the class or division number of the hazardous materials in question. The class or division symbol/number shall be positioned and sized proportionally to the class or division of the hazardous materials in question.

The placard shall display the class or division number (and, for Class 1 goods, the compatibility group letter) of the hazardous materials in question for the relevant label, provided that the numerals are no smaller than 25 mm. Where dimensions cannot be specified, all features shall be in proportion to those shown.

4.3.3. Labeling Provisions

- Labels identifying primary and secondary hazards shall conform to the models for Classes 1 through 9.
- If an object or substance is specifically listed in the List of Hazardous Materials, a hazard class label shall be affixed for the hazard indicated in the third column of the list.
- A secondary hazard label shall also be affixed for any hazard indicated by a class or division number in Column 4 of the List of Hazardous Materials. However, the special provisions listed in column 6 may require a secondary hazard label even when no secondary hazard is indicated in column 4, or may exempt a secondary hazard label when such a hazard is listed in the List of Dangerous Goods.
- If their toxicity causes damage only to tissue, packages containing Class 8 substances are not required to bear the Class 6.1 secondary hazard label. Substances in Class 4.2 are not required to bear the Model No. 4.1 secondary hazard label.
- If a substance meets the criteria for more than one class and is not specifically noted in the List of Dangerous Goods, the provisions of the IMDG Code are used to determine the substance's primary hazard class. In addition to the label required for this primary hazard class, secondary hazard labels will also be applied as specified in the List of Dangerous Goods.

- A package containing a low-hazard substance may be exempt from these labeling requirements. In such cases, Column 6 of the List of Dangerous Goods contains a specific provision stating that a hazard label is not required for the substance in question. However, for certain substances, the package must be marked with an appropriate text as specified in the special provision.
- These provisions primarily concern hazard labels. However, additional signs and symbols related to the handling or storage of a package—intended to indicate the precautions to be taken—are affixed separately to the package, if appropriate (such as an umbrella symbol to indicate that the package must be kept dry).

4.3.4. Label Characteristics

Labels shall be arranged as follows:

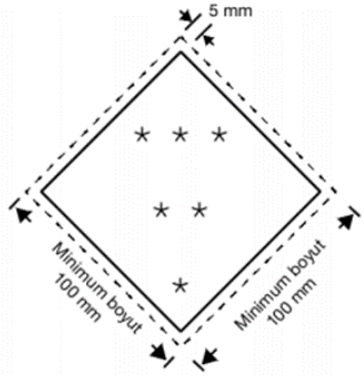


Figure2 – Label Sizes

* * * *The class or section designation, or the section numbers for 1.4, 1.5, and 1.6, and the word "FISSILE" for Model No. 7E shall be displayed in the upper half.*

* * *Additional text, numbers, or letters are displayed in the lower half (if required) or may be displayed (if optional).*

* *The class or section numbers for sections 5.1 and 5.2 shall be printed in the lower corner.*

The label must be in the shape of a square set at a 45-degree angle (diamond-shaped). The minimum dimensions must be 100 mm x 100 mm. A line parallel to the inner edge of the diamond-shaped square shall be present, and there shall be a distance of approximately 5 mm between the outer edge of this line and the edge of the label; the line within the corner of the lower half of the label shall be the same color as the class or section number located in the lower corner. In cases where dimensions cannot be specified, all features shall be in proportion to those shown.

4.4. Hazardous Cargo Markings and Packaging Groups

4.4.1. Hazard warning labels

Labels and placards must comply with the relevant provisions and conform to the applicable models in terms of color, symbols, and general format. Similar models that include minor modifications required for other modes of transport—provided such modifications do not affect the clear meaning of the label—are also acceptable.

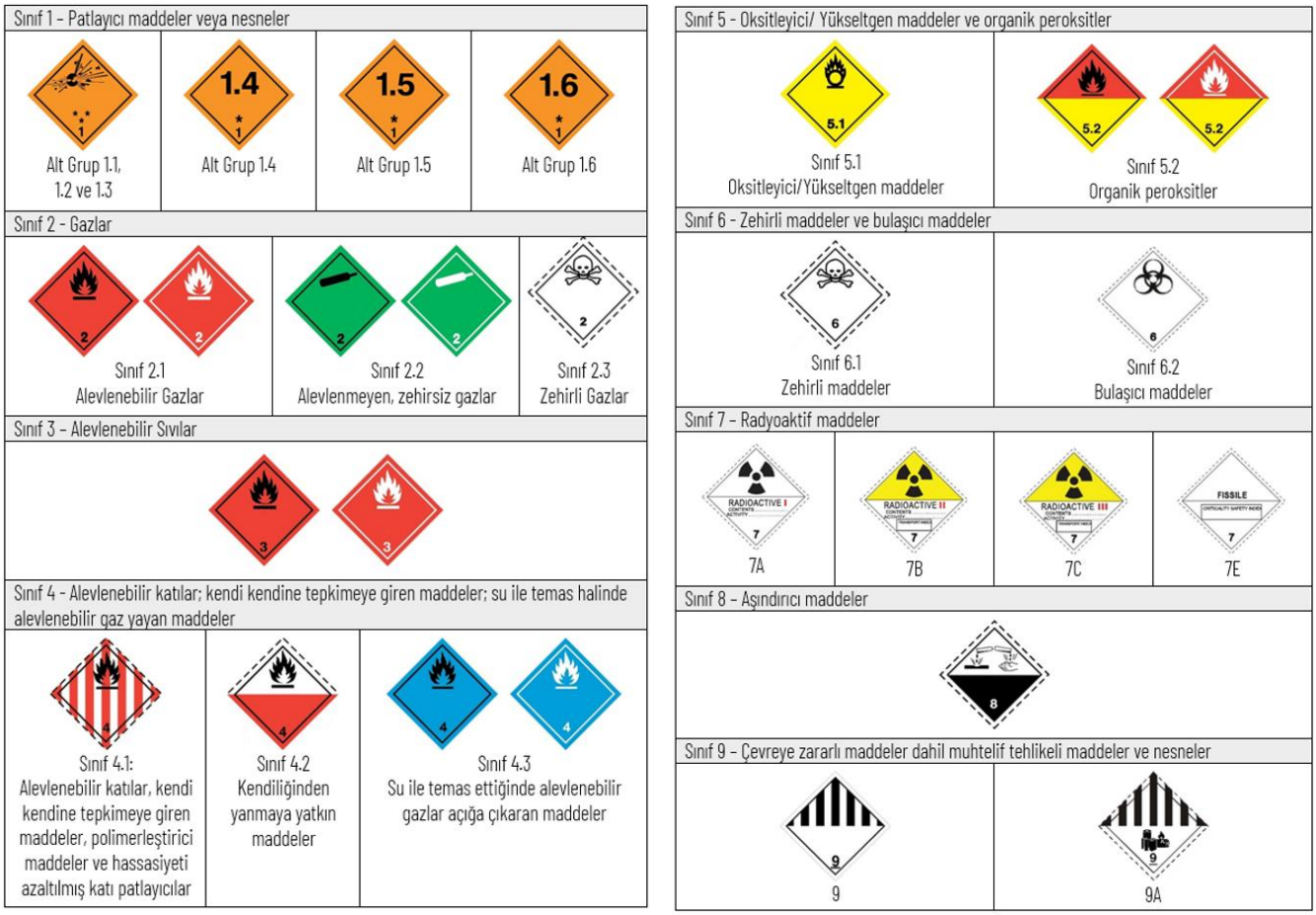


Figure3 – Classification Symbols for Hazardous Substances

4.4.2. Packaging Groups

- For packaging purposes, substances other than those in Classes 1, 2, 5.2, 6.2, and 7, and substances in Class 4.1 that are not self-reactive, are divided into three packaging groups based on the degree of hazard they pose:

Packaging Group I	Highly hazardous substances
Packaging Group II	Substances presenting a moderate degree of hazard
Packaging Group III	Low-hazard substances

- The packaging group to which substances are assigned is specified in the List of Dangerous Goods in the IMDG Code.
- Articles are not assigned to a packaging group. For packaging purposes, the requirements for a specific packaging performance level are specified in the applicable packaging instructions.

4.4.3. Labeling Requirements

- The proper shipping name of the contents shall be marked durably on at least two sides of the following:

  - Tank cargo transport units containing dangerous goods;
  - Bulk cargo containers containing dangerous goods; or
  - Any other cargo transport unit containing a single type of packaged dangerous goods for which a placard, UN number, or marine pollutant marking is not required.
- The Proper Shipping Name of the substances shall be displayed in characters at least 65 mm in height. The Proper Shipping Name shall be in a color that contrasts with the background. This height may be reduced to 12 mm for portable tank containers with a capacity of less than 3,000 liters.
- Except for Class 1 substances, UN numbers shall be affixed to the following consignments as required in this section:
  - Solids, liquids, or gases carried in tank cargo transport units, including each compartment of a multi-compartment tank cargo transport unit;
  - Packaged dangerous goods with a gross mass exceeding 4,000 kg that have been assigned a single UN number and are the only dangerous goods in the cargo transport unit;
  - Class 7 LSA-I, SCO-I, or SCO-III material in an unpackaged state inside or on top of a vehicle, cargo container, or tank;
  - Packaged radioactive material with a single assigned UN number, intended for exclusive use, inside or on a vehicle or inside a cargo container;
  - Solid dangerous goods in bulk cargo containers.
- The UN numbers of the substances shall be displayed in black numerals no shorter than 65 mm and shall comply with one of the following conditions:
  - On a white background, in the area below the pictogram and on the class number and compatibility group letter, in a manner that does not obscure or distract from other required label elements; or
  - On an orange rectangular panel with a height of at least 120 mm and a width of at least 300 mm, bordered by a 10 mm black border, placed immediately next to each placard or marine pollutant label. For portable tanks not exceeding 3,000 liters, the UN number may be displayed on an orange rectangular panel of appropriately reduced size with characters at least 25 mm high on the tank's outer surface. If a placard or marine pollutant label is not required, the UN number shall be placed immediately next to the appropriate shipping name.

4.4.4. Marking of Packages, Including IBCs

- Unless otherwise specified in the IMDG Code, the proper shipping name of the dangerous goods and the corresponding UN number, preceded by the letters "UN," shall be displayed on each package. The UN number and the letters "UN" must be at least 12 mm high, except for packages with a capacity of 30 liters or less or a maximum net mass of 30 kg or less; 6 mm high for cylinders with a water capacity of 60 liters or less; and at an appropriate height for packages with a capacity of 5 liters or less or a maximum net mass of 5 kg.

- For unpackaged objects, the marking must be placed on the object itself, on its cage, or on the mechanism used for handling, storage, or opening. For objects belonging to compliance group 1.4S: if no label has been affixed for 1.4S, the section and compliance letter must be marked separately.
- All package markings:
  - Must be clearly visible and legible;
  - Ensure that this information remains identifiable on packages even after at least three months of submersion at sea. When determining appropriate marking methods, the durability of the packaging material and the package's surface shall be taken into account;
  - They shall be placed on the outer surface of the package against a contrasting-color background and;
  - It shall not be placed alongside other package markings that would significantly reduce its effectiveness.
- Salvage packaging, including large salvage packaging and pressurized salvage containers, must also be marked with the word "SALVAGE" ("KURTARMA"). The letters of the "SALVAGE" marking must be at least 12 mm in height.
- Medium-sized bulk cargo containers and large packages with a capacity exceeding 450 liters must be marked on both opposing sides.

4.4.5. Marine Pollutant Marking

- Packages containing marine pollutants shall be permanently marked with a marine pollutant mark.
- The marine pollutant mark shall be placed adjacent to the marks required in Section 4.4.2 and shall comply with the relevant marking provisions.
- In addition to each requirement for packages bearing the marine pollutant label, the labeling provisions specified in Article 4.3.3 apply.
- The marine pollutant label shall be displayed as shown below:



Figure4 – Marine Pollutant Mark

- The mark shall be in the shape of a square set at a 45° angle (diamond-shaped). The symbol (fish and tree) shall be black on a white or appropriately contrasting background. The minimum dimensions shall be 100 mm x 100 mm, and the minimum width of the line forming the diamond shape shall be 2 mm. Where package dimensions so require, the size or line thickness may be reduced provided the mark remains clearly visible. Where dimensions cannot be specified, all features shall be in proportion to those shown.
- Cargo transport units and bulk cargo containers containing marine pollutants shall clearly display the marine pollutant marking in locations compliant with the Signage Provisions of Article 4.3.1. For cargo transport units and bulk cargo containers, marine pollutant markings shall comply with the specifications outlined above, except that the minimum dimensions must be 250 mm x 250 mm. For portable tanks with a capacity of less than 3,000 liters, the dimensions may be reduced to as small as 100 mm x 100 mm.

4.4.6. Directional Arrows

- Packages shall be legibly marked with directional arrows similar to those shown below or in accordance with the technical specifications of ISO 780:1997 in the following cases:
  - Combined packages containing inner packagings with liquid hazardous materials,
  - Single packages with air vents,
  - Cryogenic containers intended for the transport of liquefied gases by cooling, and
  - Machines or devices containing hazardous liquid substances, when it is necessary to ensure that the hazardous liquid substances remain in the desired orientation and form.
- Directional arrows shall be placed on two opposite vertical surfaces of the package so that the arrows point in the correct vertical orientation. They shall be rectangular and of a size clearly visible and appropriate to the package's dimensions. The display of rectangular borders around the arrows is optional.
- Directional arrows consist of two black or red arrows on a white or appropriately contrasting background. A rectangular frame is optional. All features shall be proportioned similarly to those shown here.

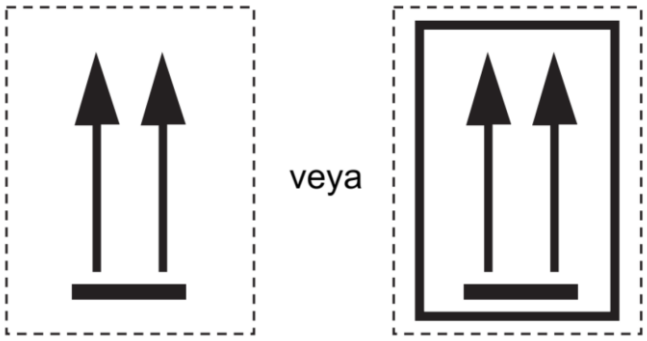


Figure5 – Directional Arrangement Arrows Marking

- Directional arrows are not required on the following:
  - Outer packaging containing pressurized containers other than cryogenic containers;

- Outer packaging containing dangerous goods in inner packaging, each with a capacity of no more than 120 ml, where there is a sufficient amount of absorbent material between the inner and outer packaging to completely absorb the liquid contents;
- Outer packaging containing infectious substances classified under Hazard Class 6.2 in primary containers, each with a capacity of no more than 50 ml;
- Type IP-2, Type IP-3, Type A, Type B(U), Type B(M), or Type C packages containing Class 7 radioactive materials;
- Outer packagings containing leak-proof articles in all orientation positions (e.g., alcohol or mercury in thermometers, aerosols, etc.) or
- Outer packagings containing hermetically sealed inner packagings, each containing no more than 500 ml of a hazardous substance.

- Arrows serving any purpose other than indicating the proper package orientation shall not appear on a package marked under this provision.

4.4.7. Lithium Battery Marking

- Packages containing lithium cells or batteries that have been prepared in accordance with the specific provisions of the IMDG Code and meet the relevant conditions shall be marked as shown below.
- The marking shall consist of the letters “UN” followed by the UN number. For example, “UN 3090” for lithium metal cells or batteries, or “UN 3480” for lithium-ion cells or batteries.
- If lithium batteries are contained within equipment or packed together with equipment, the UN number follows the letters “UN.” For example, the appropriate number—“UN 3091” or “UN 3481”—is indicated.
- If the package contains lithium cells or batteries assigned to different UN numbers, all applicable
- UN numbers must be indicated on one or more labels.
- The label shall be in the form of a scanned square. The minimum dimensions shall be 100 mm wide by 100 mm high, and the minimum width of the outer line shall be 5 mm. The symbol (for lithium-ion or lithium-metal batteries or cells, the battery group on the UN number and a single damaged, flame-emitting cell) shall be black on a white background.
- The outline will be red. Where package dimensions require it, the size/line thickness will be at least 100 mm wide by 70 mm high. Where dimensions cannot be specified, all features will be in proportion to those shown.

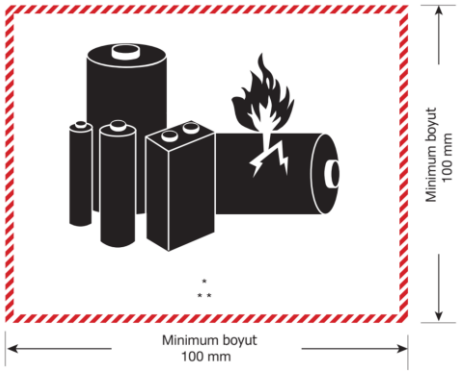


Figure6 – Lithium Battery Marking

* *Space for UN number(s)* ** *Space for telephone number for additional information*

4.4.8. Excepted Quantity Label

- Packages containing dangerous goods in exceptional quantities shall be marked in a durable and legible manner with the label shown below. The primary hazard class of each dangerous good contained in the package shall be indicated on the label. If the name of the shipper or consignee does not appear elsewhere on the package, this information shall be included on the label.

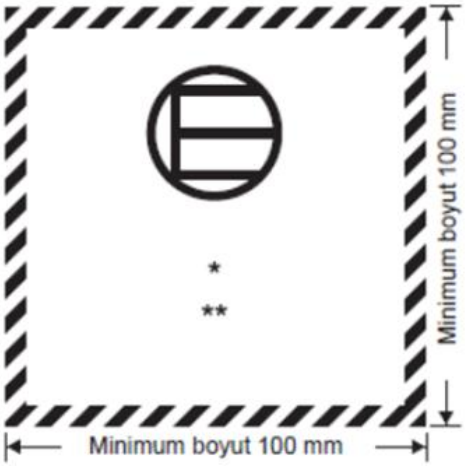


Figure7 – Exceptional Quantity Indicator

* *If a class or assigned section number(s) exist, they will be displayed in this section*

* * *If the sender's or recipient's name does not appear anywhere else on the package, it will appear here*

- The mark shall be square in shape.
- The barcode and symbol shall be the same color—black or red—on a white or contrasting background.
- The minimum dimensions shall be 100 mm x 100 mm. Where dimensions cannot be specified, all features shall be in proportion to those shown.
- Packages containing dangerous goods in excepted quantities, when placed within a combined package or a unit load, shall be marked with the label required by this section unless the combined package or unit load bears clearly visible labels representing all the dangerous goods contained therein. If the markings representing the dangerous goods in the overpack are not visible, the overpack shall be marked with the word "OVERPACK." The letters of the "OVERPACK" marking shall be at least 12 mm high.

4.4.9. Limited Quantity Marking

- Packages containing dangerous goods packed in limited quantities shall bear the label shown below.
- The marking shall be clearly visible, legible, and capable of withstanding exposure to the elements without any significant loss of effectiveness.
- The label shall be in the shape of a square set at a 45° angle (diamond-shaped). The top and bottom sections and the surrounding border shall be black. The central area shall be white or have a background of suitable contrast.

- The minimum dimensions are 100 mm x 100 mm, and the minimum width of the line forming the diamond shape is 2 mm. Where dimensions cannot be specified, all features shall be in proportion to those shown. If the package size requires it, the minimum external dimensions shown below may be reduced, provided that the mark remains clearly visible, to no less than 50 mm x 50 mm.
- The minimum width of the line forming the diamond shape may be reduced, provided it is at least 1 mm.

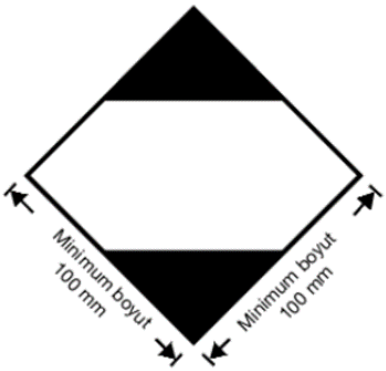


Figure8 – Limited Quantity Marking

- Packages containing dangerous goods in limited quantities, when placed within a combined package or a unit load, shall be marked with the label required by this section unless the combined package or unit load bears clearly visible labels representing all dangerous goods contained therein.
- Furthermore, if the markings representing the dangerous goods in the overpack are not visible as required by this section, the overpack shall be marked with the word "OVERPACK."
- The letters of the "OVERPACK" (INTEGRATED PACKAGE) marking shall be at least 12 mm high.
- Cargo transport units containing only limited quantities of dangerous goods and no other dangerous goods, as well as cargo transport units containing dangerous goods packaged in limited quantities, shall be marked with a placard with minimum dimensions of 250 mm x 250 mm.
- The marking shall ensure that this information remains legible on cargo transport units even after at least three months of submersion at sea.

4.4.10. High-Temperature Substance Marking

- Cargo transport units containing a substance that is transported or offered for transport in liquid form at a temperature of 100 °C or higher, or in solid form at a temperature of 240 °C or higher, shall bear the following mark on each side and at each end:

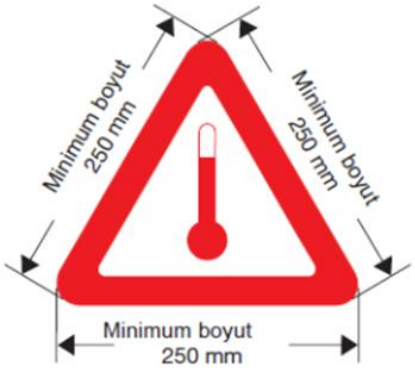


Figure9 – High-Temperature Substance Marking

- The marking shall be in the shape of an equilateral triangle.
- The color of the marking shall be red.
- The minimum side length shall be 250 mm, except for portable tanks with a capacity of less than 3,000 L, for which the side length may be reduced to 100 mm.
- In cases where dimensions cannot be specified, all features shall be in proportion to those shown.
- In addition to the elevated temperature mark, the maximum temperature expected to be reached by the substance during transport shall be permanently marked in characters at least 100 mm high immediately adjacent to the elevated temperature mark at both ends of the portable tank or insulation jacket.

4.5. Segregation tables on board ships and at shore facilities according to the classes of dangerous goods

4.5.1. General Segregation Provisions

- Segregation is the process of separating two or more substances or objects that are considered mutually incompatible, as their combination or accumulation could result in excessive hazards in the event of a leak or spill, or in the event of any other accident.
- However, since the degree of hazard may vary, the necessary segregation arrangements may also vary accordingly.
- Segregation is achieved by maintaining specific distances between incompatible hazardous materials, by providing one or more steel partition walls or decks between them, or by a combination of these measures.
- The spaces between such hazardous materials may be filled with other cargoes that are compatible with the hazardous materials or objects in question.
- To determine the segregation requirements between two or more dangerous goods, refer to the segregation table and the relevant sections of the List of Dangerous Goods in the IMDG Code. In the event of conflicting provisions, the relevant provisions of the List of Dangerous Goods always take precedence.
- Whenever a segregation term applies, the goods may not be placed in the same outer packaging and, except as specified in the special segregation provisions and exemptions and in the segregation provisions within cargo transport units, may not be transported in the same cargo transport unit.

- General provisions for segregation between various classes of dangerous goods are shown in the segregation table provided below:

Table1 – Classification Table for Dangerous Goods by Class

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

1 Distance
2 Separated
3 Separated by a full partition or compartment
4 Separated lengthwise by a full partition or hold
X Consult the List of Hazardous Materials to verify whether specific separation requirements apply
** For separation requirements between substances or products in Class 1, refer to the relevant provisions*

4.5.2. Separation from Foodstuffs

- The following specific segregation rules apply to prevent hazardous bulk cargo from contaminating foodstuffs:
  - From Toxic Substances: “Separated from” (in separate holds).
  - From Infectious Substances: “Separated by a complete compartment or hold from” (Separated by a complete compartment or hold).
  - Radioactive Substances: “Separated from” (In separate holds).

- Corrosive Substances: “Away from” (At least 3 meters away).

4.5.3. Separation of Packages Containing Hazardous Materials and Stowed by Conventional Means

- **At** a **Distance:** This means that the packages may be carried on the same compartment, hold, or deck, provided they are effectively separated to prevent dangerous interactions between incompatible goods in the event of an accident, and provided that a minimum horizontal separation of 3 meters is maintained vertically.
- **Separated (When stowed below deck in different compartments or holds):** A vertical separation in different compartments may be considered equivalent to this separation, provided the intervening deck is fire- and liquid-resistant. For stowage on deck, this separation means a horizontal distance of at least 6 meters.

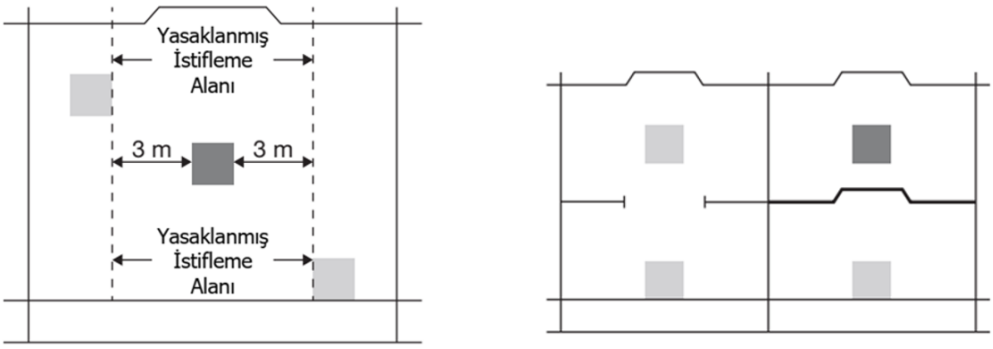
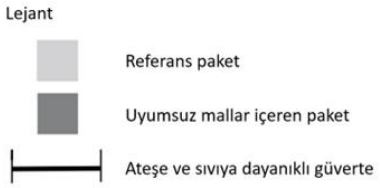


Figure10 - Terms “At a Distance” (left) and “Separated” (right) in the Separation of Packages Containing Dangerous Goods Stowed by Conventional Means



Dikey çizgiler, yük alanları arasındaki su geçirmez bölmeleri temsil eder.

- **Separated by a full bulkhead or hold (either vertical or horizontal separation):** If the intervening decks are not fire- and liquid-resistant, longitudinal separation by a full bulkhead or hold is acceptable. For stowage on deck, this separation means a horizontal distance of at least 12 meters.

  The same distance applies when a package is stowed on one deck and another in an upper compartment.

  Note: One of the two decks must be fire- and liquid-resistant.

- **Separated longitudinally by a complete partition or hold:** Vertical separation alone does not satisfy this requirement. A minimum longitudinal distance of 24 meters, including a complete partition, must be maintained between a package below deck and one on deck. For stowage on deck, this separation means a minimum longitudinal distance of 24 meters.

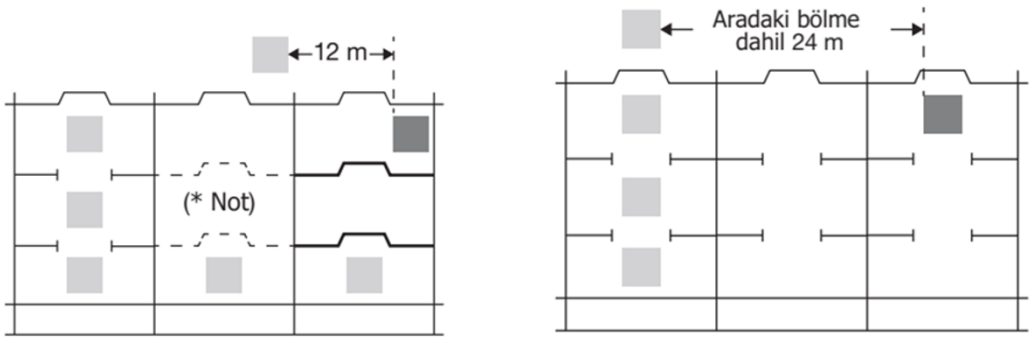
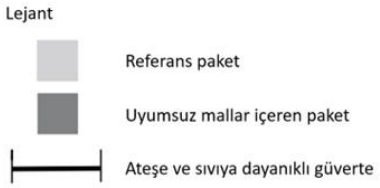


Figure11 - Terms for the Separation of Packages Containing Dangerous Goods Stowed by the Conventional Method: Separated by a Complete Partition or Hold (left) and Separated Longitudinally by a Complete Partition or Hold (right)



Dikey çizgiler, yük alanları arasındaki su geçirmez bölmeleri temsil eder.

4.5.4. Separation of Hazardous Materials Stowed by Conventional Means from Those Carried in Cargo Transport Units

- Dangerous goods stowed by conventional means shall be separated from goods carried in open cargo transport units.
- Dangerous goods stowed by conventional means shall be separated from goods carried in closed cargo transport units, except as follows:
  - When the “at a distance” requirement applies, no separation is required between packages and closed cargo transport units, and
  - when the “separated” requirement applies, the separation between packages and enclosed cargo transport units may be “at a distance.”

4.5.5. Separation of Dangerous Goods Stowed in Conventional Cargo Areas of Cargo Transport Units

- During transport, dangerous goods in different closed cargo transport units (closed cargo containers) stacked in holds and compartments that are not suitably equipped to provide permanent stacking shall be separated from one another, except as follows:
  - When the “at a distance” requirement applies, no separation is required between closed cargo transport units, and
  - when the “separated” condition applies, the separation between closed cargo transport units may be “at a distance.”

4.5.6. Segregation of Packaged Dangerous Goods and Bulk Cargo Materials with Chemical Hazards

- **"At a distance":** This means that incompatible materials may be carried in the same compartment, hold, or on the same deck, provided they are effectively separated to prevent hazardous interaction in the event of an accident, and provided that a minimum horizontal separation of 3 m is maintained vertically.
- **Separated (when stowed below deck in different holds):** A vertical separation in different compartments may be considered equivalent to this separation, provided that the intervening deck is fire- and liquid-resistant.

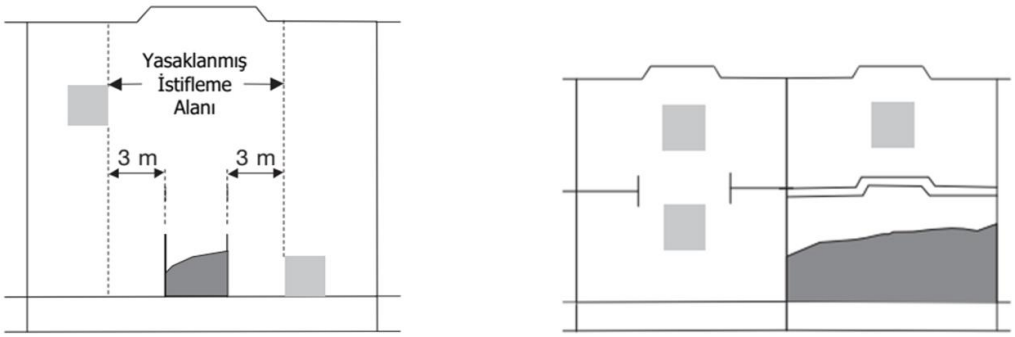
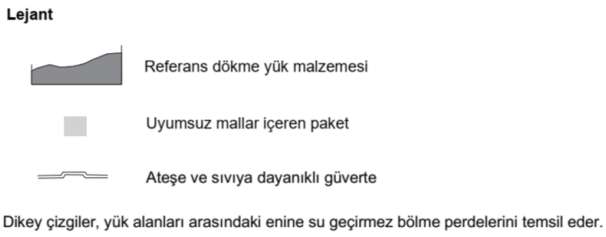


Figure12 - Terms "Away" (left) and "Separated" (right) in the Separation of Packaged Dangerous Goods and Bulk Cargo Materials with Chemical Hazards



- **Separated by a complete partition or hold (either vertical or horizontal separation):** If the decks are not fire- and liquid-resistant, longitudinal separation by a complete partition between them is acceptable.
- **Separated longitudinally by a complete partition or hold:** A vertical partition alone does not meet this requirement.

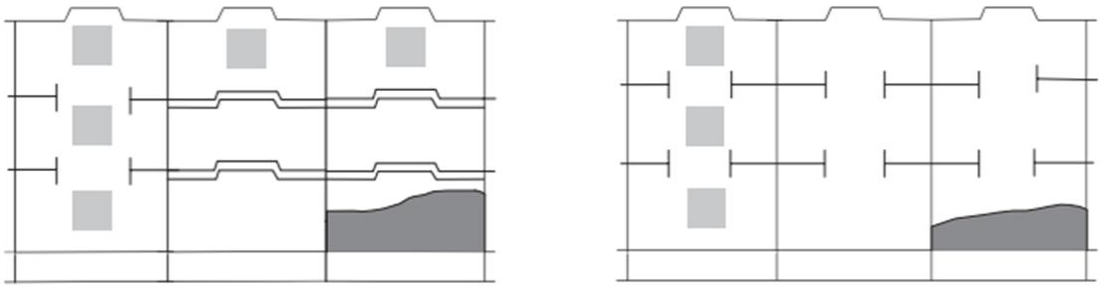
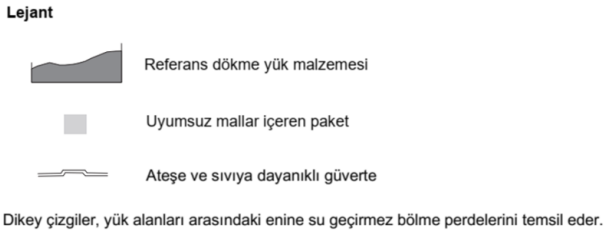


Figure13 - Separation of Packaged Dangerous Goods and Bulk Cargo Materials with Chemical Hazards by a Complete Partition or Hold (left) and Longitudinal Separation by a Complete Partition or Hold (right)



- Unless otherwise required by the IMDG Code or the IMSBC Code, separation between packaged dangerous goods and bulk cargo materials posing chemical hazards shall be in accordance with the following table.

Table2 - Separation Between Bulk Dry Cargo and Packaged Cargo

Dökme Yükler \ Ambalajlı Yükler		1.1, 1.2, 1.5	1.3, 1.6	1.4	2.1	2.2, 2.3	3	4.1	4.2	4.3	5.1	5.2	6.1	6.2	7	8	9
Alevlenebilir katılar	4.1	4	3	2	2	2	2	X	1	X	1	2	X	3	2	1	X
Kendiliğinden yanmaya yatkın maddeler	4.2	4	3	2	2	2	2	1	X	1	2	2	1	3	2	1	X
Su ile temas hâlinde alevlenebilir gazlar açığa çıkaran maddeler	4.3	4	4	2	2	X	2	X	1	X	2	2	X	2	2	1	X
Yükseltgen maddeler (ajanlar)	5.1	4	4	2	2	X	2	1	2	2	X	2	1	3	1	2	X
Zehirli maddeler	6.1	2	2	X	X	X	X	X	1	X	1	1	X	1	X	X	X
Radyoaktif malzeme	7	2	2	2	2	2	2	2	2	2	1	2	X	3	X	2	X
Aşındırıcı madde	8	4	2	2	1	X	1	1	1	1	2	2	X	3	2	X	X
Muhtelif tehlikeli maddeler ve nesneler	9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Yalnızca dökme yükte tehlikeli malzemeler	MHB	X	X	X	X	X	X	X	X	X	X	X	X	3	X	X	X

1 Away from
2 Separated
3 Separated by a full partition or compartment
4 Separated lengthwise by a full partition or hold
X Indicated in the List of Dangerous Goods or in the individual entries in the IMSBC Code to verify whether specific separation requirements apply

4.6. Separation distances and terms for dangerous goods in cargo holds

- Segregation levels are defined from 1 to 4 based on the level of incompatibility between hazard classes and the risk of reaction between them:

- **1 "Away from":** Separation to prevent incompatible substances from interacting dangerously in the event of an accident. They may be carried in the same hold, compartment, or deck; however, a horizontal separation distance of at least 3 meters must be maintained in the vertical projection.
- **2 "Separated from" (Separated / In Separate Holds):** Requires stowage in different holds below deck. If the vertical or horizontal partition (deck/bulkhead) separating the holds is fire-resistant and liquid-tight, vertical isolation in different compartments may also be considered equivalent.
- **3 "Separated by a complete compartment or hold from" (Separated by a complete compartment or hold):** Refers to complete vertical or horizontal compartmentalization. If the decks separating the holds are not fire- and liquid-resistant, only longitudinal separation with a complete compartment in between is accepted.
- **4 "Separated longitudinally by an intervening complete compartment or hold from" (Separated longitudinally with a complete compartment or hold in between):** This is the strictest degree of separation. Vertical isolation alone does not meet this requirement; there must be a complete compartment or hold intervening longitudinally between the cargoes.
- **X Table Condition / Special Segregation:** In cases indicated by "X" in the table, special segregation requirements (if any) are specified in the IMDG Code List of Dangerous Goods or in the cargo's individual schedule. For segregation activities carried out in cargo holds, the provisions of "segregation tables for dangerous goods by class on board ships and at shore facilities" set forth in Article 4.5 apply.

- **Structural Boundaries:** The terms "hold" and "compartment" used in the segregation rules refer to cargo areas enclosed by steel bulkheads, steel decks, or outer plating.
- **Fire and Liquid Tightness:** These boundaries must be constructed to be fire-resistant and liquid-tight.
- **Prohibition on Simultaneous Handling:** Incompatible bulk cargoes may not be handled simultaneously. After the loading or unloading of one cargo is complete, the relevant hold hatches must be closed, and operations for the next cargo may begin only after the decks have been cleared of cargo residues.
- **Cargo of Different Grades:** When different grades of the same bulk cargo are carried in the same hold area, the strictest segregation rule applied applies to the entire cargo.

5. HANDBOOK ON HAZARDOUS CARGO HANDLED AT SHORE FACILITIES

The Hazardous Cargo Manual is presented in Annex 10.

6. OPERATIONAL MATTERS

6.1. Procedures for the safe berthing, mooring, loading/unloading, sheltering, or anchoring of ships carrying dangerous cargo, both during the day and at night

- **Berthing and Anchoring Preparations:** To ensure that ships carrying hazardous bulk cargo can berth safely, a comprehensive exchange of information must take place between the ship and the shore facility prior to arrival. The terminal must verify the vessel's suitability for the berth by considering the water depth at the berth, maximum vessel dimensions, berthing speed limits, current and tidal conditions, expected weather conditions, tugboat and pilot boat requirements, and the maximum permitted air draft. The anchorage areas where the vessel will wait and the pilot boarding points must be determined in advance.
- **Berthing and Associated Equipment Safety:** When a vessel is berthing or departing, loading/unloading arms and booms on the pier must be raised to a safe height and parked outside the approach angle to prevent contact with the vessel's structure.
- **Mooring Rules:** Vessels must be securely moored to withstand the effects of local tides, currents, wharf structure, weather conditions, and passing maritime traffic. To prevent the vessel from slipping or moving along the pier, mooring lines must be kept taut; steel ropes and synthetic/fiber ropes must not be used together in the same line due to differences in elasticity.
- **Night Operations and Lighting:** When operating at night or under conditions of poor visibility, the gangway between the vessel and the pier, the deck area, passageways, and cargo holds must be adequately lit to ensure safe operations.
- **Safe Access:** A safe and code-compliant gangway must be provided between the ship and the pier; a safety net must be installed beneath it, and a lifebuoy with a mooring line must be placed nearby. Access equipment must be positioned so that it does not fall within the path of loading/unloading vehicles.
- **Ability to Depart the Wharf in an Emergency:** Unless a separate agreement regarding engine immobilization has been made with the terminal and port authorities, the vessel must be capable of leaving the wharf under its own power within a short time in the event of an emergency. Impeding factors such as low water levels, excessive draft, lack of tugs, or the impossibility of night navigation must be assessed in advance, and emergency towing-off wires must be kept on standby when necessary.
- **Operational Monitoring and Staffing:** During loading and unloading, a sufficient number of officers and crew must be on board to adjust mooring lines, conduct ballast operations, and respond to emergencies. Prior to the operation, the Ship/Shore Safety Checklist must be completed jointly, and the approved loading/unloading plan must be strictly followed.

6.2. Procedures regarding additional measures required based on seasonal conditions for the loading and unloading of dangerous cargo

- **Adverse Weather Conditions and Rain Management:** Prior to loading or unloading, the ship's captain and the terminal representative must reach a prior agreement on the precautions to be taken in the event of rain or changes in weather conditions.

- **Cargoes That React with Water or May Liquefy (Group A):** Types of coal that pose a liquefaction risk, concentrated ores, bauxite fines, and similar Group A cargoes must not be loaded at moisture levels exceeding the transport moisture limit (TML). If precipitation (rain, snow, etc.) begins during the handling of such hazardous bulk cargoes, operations must be stopped immediately, and the hatches of unused holds must be closed.
- **Cargoes That Emit Flammable or Toxic Gases** When Wet**:** During the loading and unloading of cargoes that emit flammable and/or toxic gases—such as hydrogen, phosphine, arsine, or ammonia—when wet (e.g., ferrosilicon, DRI, aluminum ferrosilicon powder), operations must be suspended in rainy weather, and the hold hatches must be closed to keep the cargo completely dry.
- **Wind and Storm Precautions:** Wind limit values must be established, taking into account the risk that the braking systems of loading/unloading cranes or conveyor lines may fail at high wind speeds, causing equipment to slide or collide with the ship; operations must be suspended when wind speeds exceed these limits.
- **Extreme Heat Conditions:** Under conditions where the air temperature exceeds 30°C, the formation time for hot spots in cargoes prone to self-heating—such as coal—in open holds waiting outdoors will be significantly reduced (to less than 6 days); therefore, the cargo loading process inside the holds must be completed without interruption, or the holds must be closed. Ammonium nitrate cargoes with a temperature exceeding 40°C and self-heating cargoes with a temperature exceeding 55°C must not be accepted at the facility or on board the vessel.
- **Extreme Cold Weather Conditions:** In regions and seasons where freezing temperatures prevail, the risk of freezing in ships' ballast tanks or ballast systems must be taken into account, and the terminal must be notified in advance.

6.3. Procedures regarding keeping flammable, combustible, and explosive cargoes away from operations that generate or may generate sparks, and prohibiting the operation of equipment, tools, or devices that generate or may generate sparks in hazardous cargo handling, stacking, and storage areas

- **Definition and Prohibition of Hot Work:** The use of open flames and fire, the operation of power tools, hot riveting, grinding, soldering, burning, cutting, welding, or any repair work that generates heat or produces sparks is defined as "Hot Work." Hot work is strictly prohibited in hazardous cargo areas where flammable, combustible, or explosive atmospheres may form, and while the vessel is at the pier; hot work may not be performed on the vessel or at the pier without the written permission (Hot Work Permit) of the captain, the terminal representative, and the port authority.
- **Prevention of Fire and Ignition Sources:** In areas where flammable gases are emitted or where cargoes prone to spontaneous combustion (e.g., coal, DRI, seed cake, synthetic/fuel pellets) are handled, stacked, and stored:
  - Open flames, smoking, and the use of bare lights must be strictly prohibited, and "NO SMOKING" warning signs must be posted in visible locations.

- Hot work, welding, cutting, chipping, and grinding operations must be prohibited.
- Machine exhausts, gallery chimneys, heated ship structures (surfaces exceeding 55°C), and hot fuel tanks must be considered potential ignition sources, and the cargo must be isolated from and kept away from these areas.

- **Electrical Equipment and Wiring Safety:**
  - All electrical cables and components in hazardous cargo areas, holds, and adjacent enclosed spaces must be in perfect condition and protected against short circuits and sparking.
  - Electrical equipment, portable lamps, and gas detection devices used in areas at risk of explosive or flammable gas accumulation must be explosion-proof (Ex-Proof / Certified Safe Type).
  - All electrical equipment that is not of a certified safe type must be completely isolated from the power source prior to loading, using an appropriate switching device (other than a fuse) located outside the cargo hold.
- **Fault and Spark Arresters:** Spark-arresting screens or wire mesh guards must be installed at the outlets of ventilation ducts to prevent the ignition of explosive gases. Blowers, pneumatic equipment, and piping used in operations must be grounded to prevent static electricity sparks. Tank hatches or other openings must be moved carefully during operation to avoid creating sparks.
- **Dust Explosion Precautions:** Since the accumulation of organic or metallic dust during loading, unloading, and cleaning can create an explosive atmosphere, washing or wetting methods should be preferred over sweeping, and dust accumulation in the environment should be prevented.

7. DOCUMENTATION, CONTROL, AND RECORD-KEEPING

7.1. Procedures regarding what constitutes all required documents, information, and records related to hazardous cargo, as well as their provision and verification by the responsible parties

For the safe handling of dangerous bulk and packaged cargo arriving by sea or to be shipped from the facility, the following documents must be obtained and verified prior to operations:

- **Cargo Information Declaration Form:**
  - Provided by: Shipper.
  - Scope: The cargo's Bulk Cargo Shipping Name (BCSN), Chemical Class (Class / MHB), UN Number, Cargo Group (A, B, C), total quantity, stowage factor, bulk density, angle of repose, trim procedures, tendency to emit toxic/flammable gases and consume oxygen, and the MARPOL Annex V environmental classification.
- **Certificates of TML and Moisture Content:**
  - Issuer: An accredited organization recognized by the Competent Authority of the Port of Loading.

  - Scope: For Group A (liquefiable) bulk cargoes, a signed analysis certificate indicating the average moisture content at the time of loading, along with the Transportable Moisture Limit (TML) test result, is required.
- **Document of Compliance for the Transport of Dangerous Goods:**
  - Issuer: Ship's Captain / Shipowner.
  - Scope: A valid flag state/class certificate demonstrating that the vessel is fit to carry dangerous bulk cargo in accordance with SOLAS Regulation II-2/19.
- **Ship/Shore Safety Checklist:**
  - Issued by: Terminal Representative and Ship's Captain.
  - Scope: A joint checklist used to confirm berthing depth, mooring safety, communications, gas detection, confined space safety, and emergency procedures prior to loading or unloading.
- **Loading/Unloading Plan:**
  - Provided by: Ship's Captain and Terminal Representative.
  - Scope: An approved plan that includes the hatch sequence, pour tonnages, coordination with ballast operations, and the vessel's structural strength limits.
- **Special Test and Exemption Certificates:** Aging certificates (e.g., DRI cargoes), gas-tightness / ventilation approvals, or exemption certificates issued by the competent authority.

7.2. Procedures for maintaining a current list of all hazardous cargoes at the shore facility and related information in a regular and complete manner

- **Real-Time Inventory and Site Location List:** A digital Real-Time Dangerous Goods List/Manifest is maintained for all dangerous goods stored at the facility or in the process of being unloaded or loaded. The list must fully include the cargo's BCSN name, UN Number, Chemical Class (Class / MHB), quantity (metric tons/cubic meters), exact storage location on-site (stock lot, silo, or warehouse number), and dates of entry into and exit from the facility.
- **Emergency Accessibility:** An up-to-date hazardous cargo site map and list are made available for 24-hour real-time access by the Port Authority, Fire Department, AFAD, and the Facility's Emergency Response Teams.
- **Data Update Frequency:** On-site stock quantities are updated in real time at every shift change and at the end of operations based on truck scales, conveyor scales, and warehouse inbound/outbound records.

7.3. Verification that hazardous cargo arriving at the facility is properly identified, that the correct shipping names for hazardous cargo are used, that it is certified, packaged, labeled, and declared, and that it is safely loaded onto packaging, containers or cargo transport units, and are transported in a safe manner, as well as procedures for reporting the results of these checks

- **Correct Shipping Name (BCSN) Check:** Only trade names cannot be used in documents and field records; it is verified that the cargo's official Bulk Cargo Shipping Name (BCSN) (in uppercase) and, if applicable, its UN Number are used.
- **Physical and Documentary Acceptance Check:** The declared values of cargo entering the facility (moisture content, particle size, temperature, etc.) are compared with on-site measurements and authorized analysis certificates.

- **Non-Conformance Management and Reporting:** Acceptance of cargo into the facility is suspended if it is undocumented, has incomplete declarations, exceeds the moisture limit (TML), or has a temperature above safety limits (e.g., >55°C for coal). The situation is immediately reported to the Facility Operations Manager, the Shipper, and the Port Authority by preparing a "Hazardous Cargo Non-Conformance Report."
- **Damage Reporting Procedure:** For damage to the ship's structure or facility infrastructure caused by cranes, buckets, or heavy equipment during loading/unloading, a "Damage Report" is jointly prepared and signed by the Captain and the Terminal Representative in accordance with BLU Code Annex 3 standards.

7.4. Procedures for Obtaining and Maintaining Safety Data Sheets (SDS)

- **SDS Procurement Requirement:** For all hazardous cargo to be accepted at or handled by the facility, a current Safety Data Sheet (SDS / MSDS) compliant with GHS/ISO standards must be obtained from the Shipper or cargo owner.
- **Site and Operational Access:** SDS documents are made available in both Turkish and English—in physical and digital formats—at the Terminal Representative's office, the Site Control Room, the Operations Center, Fire/Emergency Stations, and with the Ship's Captain.
- **Staff Briefing:** The exposure limits, fire extinguishing agents (e.g., a warning not to use water on substances that react with water), and required Personal Protective Equipment (PPE) listed in the SDS must be communicated to field personnel handling the cargo.

7.5. Procedures for maintaining records and statistics on hazardous cargo

- **Archiving and Retention Periods:** Approved Loading/Unloading Plans are retained for at least 6 months. Cargo Declarations, Analysis Certificates, Vessel/Shore Checklists, and Weighing / Inventory Records are archived for at least 3 years in accordance with national regulations.
- **Monthly and Annual Statistical Reporting:** Statistical data regarding the classes, UN numbers, and quantities of hazardous cargo handled and stored are compiled on a monthly basis and reported to Facility Management and the relevant Government Authorities (Maritime Administration / Port Authority).

7.6. Information Regarding the Quality Management System

- **System Integration:** All documentation, acceptance checks, gas/atmosphere measurement records, and nonconformity procedures are integrated into the facility's ISO 9001 (Quality), ISO 14001 (Environment), ISO 45001 (Occupational Health and Safety), and Safety Management System (SMS) procedures.
- **Document Control and Revision:** All forms used (Vessel/Shore Inspection Checklist, Cargo Declaration Form, etc.) are kept up to date in accordance with the Quality Management System's document control codes; they are revised immediately in the event of changes to the IMSBC Code or regulations.
- **Internal Audits and Corrective Actions (CA):** Dangerous cargo documentation, record accuracy, and on-site inventory controls are monitored through periodic internal audits. A Corrective and Preventive Action (CPA) process is initiated for any identified deficiencies.

8. EMERGENCIES, EMERGENCY PREPAREDNESS, AND RESPONSE

8.1. Procedures for responding to hazardous cargoes that pose or may pose a risk to life, property, and/or the environment, and to hazardous situations involving such cargoes

- **General Response Principles:** In the event of emergencies—such as fire, explosion, the formation of toxic or flammable gases, oxygen deficiency, spontaneous heating, cargo slippage, structural damage, spills, and environmental pollution—that may occur during the unloading, handling, transport, and temporary storage of hazardous bulk cargo at a coastal facility, response shall be based on the cargo's characteristics, the relevant Safety Data Sheet (SDS), the provisions of the IMSBC Code, relevant EmS information, and the facility's Emergency Response Plan.
- **Initial Assessment:** Upon detection of an emergency, the type of incident, location, quantity of cargo affected, prevailing atmospheric conditions, personnel safety, fire/explosion risk, and environmental impacts are rapidly assessed.
- **Isolation of the Hazardous Area:** The incident area is immediately cordoned off at a safe distance. Unauthorized personnel are not permitted to enter. When necessary, cargo handling, conveyor operations, crane operations, bunker operations, truck operations, and other related operations are halted.
- **Control of Ignition Sources:** In areas where there is a risk of fire or explosion, hot work, smoking, and activities that could generate sparks or ignition sources are suspended. Power to electrical equipment is shut off only by authorized personnel in a manner that does not create a secondary hazard.
- **Atmospheric Monitoring:** For bulk cargoes such as coal, petcoke, and similar materials that may produce gases, measurements of O_2, CO, CH_4, and other gases—depending on the cargo's characteristics—are taken. Measurement results are recorded, and personnel are not permitted to enter the area if conditions fall outside safe operating limits.
- **Coal and Self-Heating Cargoes:** If an increase in temperature, smoke, gas formation, or spontaneous heating is detected in coal or similar cargoes, measures such as reducing or cutting off air intake, isolating the area, monitoring temperature and gases, and, if necessary, applying appropriate fire suppression or inerting methods are evaluated based on the cargo's characteristics and the progression of the incident. The response method is determined in accordance with the ship and terminal emergency plans and the provisions of the IMSBC Code.
- **Rescue Priority:** The top priority in emergency response is the protection of human life. Cargo or equipment recovery operations will not begin until personnel in the hazardous area have been evacuated to a safe area.
- **Incident Command System:** Depending on the scale of the emergency, the response is coordinated by the facility's Emergency Response Officer/incident commander, and support is requested from public agencies as needed.

8.2. Information regarding the coastal facility's capabilities, capacity, and resources for responding to emergencies

- **Organized Response Teams:** Firefighting, search-and-rescue, first aid, evacuation, and environmental/pollution response teams are established within the facility in accordance with the duties and responsibilities defined in the emergency plan.

- **Response Equipment:** Fire suppression systems, portable fire extinguishers, fire hoses, hydrants, spill response equipment, absorbent materials, barriers, gas detection devices, SCBA units, and necessary PPE are kept on hand in quantities appropriate to the facility's operations and risks.
- **Atmospheric Monitoring Capability:** Gas and oxygen monitoring devices with appropriate measurement ranges are maintained for use in enclosed spaces, warehouses, silos, tunnels, conveyor lines, and similar areas.
- **Backup:** Sufficient backup equipment and alternative response options are provided for use in the event that critical emergency equipment fails or is undergoing maintenance.
- **Equipment Accessibility:** Emergency equipment is kept easily accessible, clearly labeled, and stored in a manner that prevents its use for purposes other than its intended use.

8.3. Regulations regarding the initial response to accidents involving hazardous cargo

- **Safe Approach:** Personnel responding to the incident site may not enter the hazardous area without wearing PPE appropriate to the nature of the incident and the hazards posed by the cargo.
- **Atmospheric Risk:** Areas where there is a risk of oxygen deficiency or the presence of toxic or flammable gases must not be entered without conducting the necessary atmospheric measurements and providing appropriate respiratory protection equipment.
- **First Aid:** Appropriate first aid must be administered to anyone injured or exposed to a hazardous cargo, taking into account the substance's properties. When necessary, the first aid information specified in the MFAG and SDS shall be followed.
- **Decontamination:** In the event of chemical contamination, ensure that personnel are safely decontaminated, contaminated PPE is disposed of in a controlled manner, and the spread of contamination to other areas is prevented.
- **Medical Support:** When necessary, support is sought from the 112 Emergency Medical Services, and the name of the hazardous substance causing the exposure, its UN number, and SDS information are reported to the medical teams.
- **Eye Wash Stations and Emergency Showers:** Eye wash stations and emergency showers are kept readily accessible in work areas where there is a risk of chemical exposure.

8.4. Notifications to Be Made Inside and Outside the Facility in Emergency Situations

- **Alarm:** Upon detection of an emergency, relevant units are immediately notified using the facility's designated alarm and communication system.
- **Suspension of Operations:** Depending on the nature of the emergency, cargo handling, vessel operations, vehicle entry and exit, hot work, and other activities are suspended.
- **Assembly:** Personnel and visitors are directed to designated emergency assembly areas, and a headcount is conducted to the extent possible.
- **Off-Site Notification:** Depending on the nature and scale of the incident, communication is established with relevant public agencies, the Port Authority, the fire department, health services, AFAD, the Coast Guard, and environmental authorities in accordance with the notification chain specified in the facility's Emergency Response Plan.

- **Ship–Facility Communication:** In the event of an emergency occurring during ship operations, uninterrupted communication is maintained between the Captain, the Terminal Representative, and the facility's emergency response officer.

8.5. Accident Reporting Procedures

- **Official Incident Report:** In accordance with SOLAS Regulation VII/7-4, in cases of dangerous cargo falling into the sea, pollution, or a serious accident, the details of the incident are immediately reported to the nearest coastal state and the relevant authority.
- **Initial Incident Report:** Following the containment of the emergency, the time and location of the incident, the type of cargo, the UN number (if applicable), the quantity, the sequence of events, the initial measures taken, and information regarding affected personnel and equipment are documented.
- **Damage Assessment:** Damage to the vessel, wharf, conveyor, crane, bunker, storage facility, and other facility equipment is inspected. Damage to the vessel or facility structure caused by loading/unloading equipment is documented in a Damage Report, jointly prepared and signed by the Captain and the Terminal Representative in accordance with BLU Code Annex 3 standards.
- **Photographs and Measurement Records:** Where appropriate, the scene is photographed, and the necessary measurement results are included in the report.
- **Root Cause Analysis:** For serious accidents and incidents with a potential for recurrence, not only the outcome of the incident but also its underlying/root causes are investigated.
- **Corrective Action:** For nonconformities identified as a result of the incident, corrective and preventive actions are tracked by identifying the responsible person or unit, the deadline, and the completion status.

8.6. Method for Coordination, Support, and Cooperation with Official Authorities

- A single point of coordination is established between the facility's emergency response officer and official response teams.
- A safe route is provided for fire departments, AFAD, medical teams, Coast Guard, and other official teams entering the facility.
- Information regarding the nature of the incident, the name of the cargo, its UN number, hazard class, current quantity, SDS, and relevant IMSBC information is provided to arriving response teams as soon as possible.
- Response teams are provided with the necessary information regarding the facility's fire water supply, electricity, gas, fuel, drainage, access routes, and other critical infrastructure.
- Joint incident management/crisis coordination is carried out as needed.

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

- **Evacuation Decision and Communication:** In the event of a fire or uncontrolled hazard on the pier, the process of emergency unberthing and towing the vessel to the anchorage area is initiated in coordination with the Ship's Captain, the Terminal Representative, and the Port Authority.

- **Vessel's Ability to Depart (Emergency Unberthing):** The vessel's departure from the pier is evaluated in the event of a fire, explosion, significant gas buildup, or other situations threatening the vessel's safety.
- **Main Engine and Auxiliary Systems:** To ensure the ship can maneuver safely, the main engine, steering system, and necessary auxiliary systems are kept in working order.
- **Tugboat Support:** Tugboats of appropriate capacity are utilized when necessary.
- **Emergency Towing Lines:** Equipment for the emergency towing of the vessel is kept ready in accordance with the vessel's own procedures and relevant regulations.
- **Coordination:** The decision to depart in an emergency is made in coordination with the Captain, the Terminal Representative, and, when necessary, the Port Authority.
- **Traffic Safety:** The safety of other vessels, vehicles, and personnel in the vicinity of the pier is ensured during the vessel's departure.
- **Alternative Anchoring/Berthing:** Safe areas to which the vessel can be moved and alternative anchoring/berthing options are assessed in advance in the emergency plan.

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

- Damaged, spilled, or contaminated hazardous cargo is separated from normal cargo and moved to a safe and controlled area.
- In accordance with IMSBC Code Chapter 10 and the Basel Convention, spilled, degraded, or waste contaminated with dangerous cargo is collected in separate, leak-proof containers/vessels under the "Hazardous Waste" classification.
- Waste is collected in appropriate, leak-proof containers based on its characteristics.
- Wastes that may react with one another are not stored in the same container or the same area.
- Contaminated absorbents, soil, packaging, PPE, and cleaning materials are properly classified.
- Contaminated waste is prevented from entering the sea, stormwater, or the municipal sewer system.
- Contaminated waste and wash water are never discharged into the marine environment or domestic drainage systems; instead, they are delivered to licensed disposal and recycling facilities and properly recorded.
- The transport and disposal of waste are carried out in accordance with relevant environmental regulations and through authorized/licensed organizations.
- The amount and type of waste generated, the facility to which it is delivered, and the date of delivery are recorded.

8.9. Emergency drills and their documentation

- Partial emergency drills (fire, spill, confined space rescue) are conducted every 3 months, and a general, comprehensive emergency drill is held at least once a year, with the participation of facility personnel and terminal representatives.
- Emergency drills are planned taking into account the facility's risks.
- Scenarios such as fire, gas leaks, spontaneous combustion of coal, spills/contamination, injuries, confined space rescue, and ship evacuation may be used.

- During drills, not only the personnel's response capabilities but also communication, alarms, evacuation, headcount, communication with official agencies, and the availability of equipment are tested.
- An evaluation meeting is held at the end of the drill.
- Drill results are documented in an evaluation report in accordance with the ISPS Code and Safety Management System (SMS) standards, and corrective actions are initiated for any deficiencies.
- Corrective actions are developed for identified deficiencies, and their closure is tracked.
- Drill records include the date, scenario, participants, equipment used, identified deficiencies, and actions taken.

8.10. Information Regarding Fire Protection Systems

- Fixed and portable fire suppression systems appropriate for the facility's risks are maintained.
- The facility premises are equipped with a fixed fire hydrant line, seawater intake systems, FSS Code-approved fire detection/alarm systems, and foam/water spray suppression units.
- Hydrants, fire cabinets, fire pumps, portable extinguishers, and fire detection and alarm systems are inspected regularly.
- Appropriate detection and suppression systems are installed in areas with a high risk of fire, such as conveyors, tunnels, bunkers, enclosed storage areas, and similar locations.
- In enclosed storage areas and conveyor lines where there is a risk of flammable gas accumulation, explosion-proof electrical wiring and spark arrestors are used.
- Technical and operational measures are implemented in areas with high dust generation to reduce the risk of fire and explosion.
- In areas where flammable gases may form, appropriate gas detection and alarm systems are evaluated.
- Electrical equipment is ensured to be suitable for the facility's hazard class.

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

- Fire protection systems are inspected periodically in accordance with manufacturer instructions, relevant standards, regulations, and the facility maintenance plan.
- Fire pumps, alarm systems, emergency stop buttons, anemometers, and fire suppression valves are tested on a weekly or monthly basis.
- Functional tests are conducted on fire pumps, fire hydrants, fire hose cabinets, alarm systems, detectors, emergency shut-off systems, and other critical equipment.
- It is ensured that all fire control equipment is approved by the relevant authorities or classification societies and that annual inspections are completed in full.
- Test, maintenance, and failure records are maintained.
- Faulty equipment is marked and brought back online as soon as possible.
- A risk assessment is conducted to determine whether relevant operations can continue in the event that any of the critical fire systems becomes inoperative.

8.12. Measures to be taken when fire protection systems are not functioning

- If fixed fire protection systems are out of service, the risk level of the relevant area is reassessed.

- In the event of a malfunction or maintenance on fixed fire suppression systems, "Hot Work" is completely prohibited in the relevant area.
- Mobile firefighting vehicles and additional portable fire extinguishers are deployed to the area; the site is placed under 24-hour supervision by Fire Watch personnel.
- Additional fire monitoring is provided if deemed necessary.
- High-risk operations are not permitted to resume until the malfunction has been fully resolved.
- After the system is brought back online, a functional test is performed and documented.

8.13. Other risk control equipment

- **Gas Measurement:** Portable and fixed methane (CH_4), carbon monoxide (CO), oxygen (O_2), and hydrogen (H_2) detectors, along with temperature probes, are kept on hand and continuously calibrated.
- **Temperature Measurement:** Appropriate measuring devices are used to monitor temperature in coal and other loads at risk of spontaneous combustion.
- **Personal Protective Equipment (PPE):** Hard hats, safety glasses, gloves, appropriate protective clothing, respiratory protection, and other necessary PPE are determined based on the risk assessment.
- **Emergency Showers and Eye Wash Stations:** These are kept readily accessible in areas where chemical exposure is possible.
- **Spill Response Equipment:** Absorbent materials, barriers, collection containers, and other necessary equipment are kept on hand.
- **Lighting:** Suitable portable lighting equipment, explosion-proof when necessary, is kept on hand for use in emergencies.
- **Communication:** Radios, telephones, and alternative communication devices that can be used in emergencies are kept ready.
- **Evacuation and Rescue:** Emergency escape routes, directional signs, emergency exits, and rescue equipment are maintained in a condition ready for immediate use.
- **Personal and Site Safety:** Wind vanes/direction indicators, emergency eye/body wash stations, explosion-proof lighting fixtures, and emergency escape equipment are placed at critical points throughout the site.

9. OCCUPATIONAL HEALTH AND SAFETY

9.1. Occupational Health and Safety Measures

- **General OSH Obligations and Fatigue Management:** During the handling of bulk solid hazardous cargo (such as coal) at the shore facility, compliance with ILO (International Labor Organization) occupational safety and health standards for ports is mandatory. To prevent operational errors and reduce the risk of accidents, terminal personnel must be adequately rested, and fatigue management must be implemented.
- **Ship-to-Shore Access and Site Safety:** The gangway between the ship and the pier must be equipped with a safety net, adequately lit, and properly maintained. Pedestrian access on the deck must be restricted to the outboard side where no operations are taking place; personnel must never stand under cranes, buckets, or loading arms, nor in cargo handling areas. Hold access ladders, escape routes, and interior hold work areas must be adequately lit to ensure safe working conditions.

- **Dust and Explosion Precautions:** To prevent dust explosions caused by bulk cargo and mitigate chronic and acute respiratory risks, holds must be ventilated; washing or wetting methods should be preferred over dry sweeping, which stirs up dust, during cleaning. To prevent dust from entering living quarters during loading and unloading, ventilation hatches must be closed, and air conditioning systems must be set to recirculation mode.
- **Prohibition of Sparks and Fire:** In hazardous cargo areas where flammable gases may accumulate, the use of open flames, smoking, and carrying naked lights are prohibited; "NO SMOKING" signs must be posted in visible locations. Hot work (welding, cutting, etc.) that could generate sparks is subject to written authorization procedures and may not be performed without gas testing.
- **Personal Hygiene Standards:** To prevent contamination of food and long-term health risks for personnel working with hazardous and dusty cargo, eating and drinking must be prohibited in the work area, and personnel must be required to wash their hands and face and clean their outer clothing.

9.2. Information on personal protective clothing and procedures for its use

- **Standard Personal Protective Equipment (PPE):** All terminal and operations personnel working on-site must be provided with a safety helmet, safety shoes/boots, high-visibility warning vest/clothing, protective gloves, ear protection, and a dust mask/respirator, and their use must be monitored. When working on the water's surface along the dock (e.g., water level measurement/draft reading), wearing a life jacket is mandatory.
- **PPE for Dusty and Abrasive Cargo:** When handling bulk cargoes such as coal, cement, ore, and metal dusts that can cause eye and respiratory irritation, dust-filtering masks/respirators, sealed eye protection (goggles/dust eye protection), full-body protective coveralls, and work gloves must be used. For bulk cargoes that are corrosive, pose a chemical hazard, or can penetrate the skin, special protective coveralls and barrier creams must be provided.
- **Emergency and Gas Hazard Equipment:** Self-Contained Breathing Apparatus (SCBA) must be kept on hand at the facility and on the vessel for use during interventions in enclosed spaces where there is a lack of oxygen, toxic gas (carbon monoxide, phosphine, arsine, etc.), or flammable gas accumulation.
- **PPE Maintenance and Hygiene Procedure:** PPE must be inspected periodically, and any damaged or non-functional equipment must be replaced immediately. Outer garments that come into contact with hazardous dust must be washed regularly and stored in clean storage areas.

9.3. Confined Space Entry Authorization Measures and Procedures

- **Confined Space Risk:** Cargo holds, adjacent compartments, pipe tunnels, and passageways pose a risk of oxygen depletion (O_2< 20.7%/21%) due to the oxidation of coal and other organic/metallic bulk cargoes, toxic gas accumulation (CO, H_2), or flammable gas release (CH_4, H_2) as a result of the oxidation of coal and other organic/metallic bulk cargoes.

- **Atmospheric Testing and Measurement Requirements:** Before entering enclosed spaces or holds, the ambient atmosphere must be tested using calibrated and certified portable gas detectors. To grant entry permission, it must be verified that the atmospheric measurement values fall within the following safety limits:
  - Oxygen ($_{O_2}$); at least 20.7%–21% by volume.
  - Carbon monoxide (CO); no more than 50 ppm (or < 100 ppm for specific wood/pellet loads).
  - Flammable Gases ($_{CH_4/\ H_2}$); must be below 20% of the Lower Explosive Limit (LEL).
- **Enclosed Space Entry Permit:** No personnel are permitted to enter enclosed spaces without an atmospheric test, adequate ventilation, and a written Entry Permit signed by the responsible officer or terminal representative.
- **Emergency Entry Protocol:** Entry into enclosed spaces where atmosphere test results fall outside safe limits or where the space has not been ventilated is permitted only in life-threatening emergencies. Such entries must be performed only by trained personnel wearing a Self-Contained Breathing Apparatus (SCBA), protective clothing, and a safety lanyard (lifeline), under the direct supervision of a responsible officer.
- **Safety Precautions During Entry:** Personnel entering the confined space must carry a portable oxygen and gas monitoring device that is actively operating. A staff member must be stationed at the entrance to the confined space at all times, and continuous communication must be maintained with the team inside.

10. OTHER MATTERS

10.1. Validity of the Dangerous Goods Compliance Certificate

Our port facility is currently conducting application and preparatory work to obtain the Dangerous Goods Compliance Certificate (TYUB). Once the application process is completed and it is determined that the conditions stipulated in the relevant legislation have been met, the TYUB will be issued by the Authority.

The HLC is valid for the period specified in the regulations as of the date of issuance; to maintain the certificate's validity, the port facility must continuously ensure compliance with the regulations governing dangerous goods handling activities, relevant technical requirements, safety measures, equipment and infrastructure requirements, and the provisions outlined in the Dangerous Goods Handling Guide.

If there are any changes to the facility's dangerous goods operations, infrastructure, or operational conditions, or to the information included in the certificate during its validity period, the necessary notification and application procedures must be carried out in accordance with the relevant legislation.

Once the application process is completed and the TYUB is issued, the information in this section regarding the issuance date, certificate number, and validity period of our facility's TYUB will be updated.

10.2. Duties Defined for the Dangerous Goods Safety Advisor

The Dangerous Goods Safety Advisor (DGSA) carries out advisory, compliance assessment, monitoring, reporting, and guidance activities regarding the handling, temporary storage, and transport of dangerous goods at the coastal facility where they are assigned, in accordance with relevant national and international regulations.

The duties and responsibilities of the DHS at the port facility are listed below:

- The DHS monitors the provisions of the Regulation on the Transport of Dangerous Goods by Sea and Loading Safety, as well as the IMDG Code, IMSBC Code, IBC Code, MARPOL, and other national and international regulations applicable to the port facility's operations, and provides advisory services to ensure the facility's operations are conducted in compliance with these provisions.
- The TMGD assesses which national and international regulations, codes, and standards apply to dangerous goods handled, temporarily stored, or transported at the port facility, taking into account their physical and chemical properties, modes of transport, and types of operations, and informs the operator accordingly. In this context, the following are evaluated: packaged hazardous cargo, bulk solid cargo, bulk liquid cargo, petroleum and petroleum products, scrap cargo, and cargo that, due to its physical or chemical properties or mode of transport, has the potential to cause harm to life, property, the environment, or other cargo.
- It provides technical consulting during the application, renewal, and update processes for the coastal facility's Dangerous Goods Compliance Certificate (TYUB).
- The TMGD conducts on-site inspections and assessments at the port facility at least once a month. During these site visits, the compliance of dangerous goods operations with relevant regulations is evaluated. In this context:
  - The loading, unloading, handling, stacking, segregation, and temporary storage of dangerous goods,
  - The condition of dangerous goods transport units,
  - Marking, labeling, and signage practices,
  - Loading and stacking safety,
  - Emergency preparedness,
  - Whether the required permits and documents are available,
  - The training status of personnel regarding dangerous goods,
  - Whether the required inspections and records are being maintained in accordance with regulations.
- At the end of each site visit, it prepares and submits a Visit Report to the operator that includes identified nonconformities, risks, recommendations for improvement, and best practices.
- Evaluates dangerous goods operations conducted at the port facility—including loading, unloading, stacking, segregation, temporary storage, hot work, and similar activities—in accordance with relevant regulations.

- Provides the facility with the necessary technical recommendations and instructions regarding the classification, packaging, marking, labeling, and signage of cargo, as well as the use of appropriate cargo transport units.
- It provides technical support for the preparation, updating, and implementation of the Dangerous Goods Handling Guide—which must be prepared and kept up-to-date by the port facility—in accordance with relevant regulations. In this context, the guide includes:
  - Handling of hazardous cargo,
  - sorting and stacking of cargo,
  - loading and unloading operations,
  - emergency response procedures,
  - fire and environmental protection measures,
  - EmS and MFAG applications,
  - cargo transport units,
  - and assesses the compliance of sections related to controls and records with applicable regulations and recommends necessary revisions.
- It assesses the compliance of documents required to be prepared or maintained under hazardous cargo operations with applicable regulations and provides guidance to the operator. In this context, when necessary:
  - transportation documents,
  - dangerous goods declarations,
  - container/vehicle packing certificates,
  - Certificates of Conformity (DoC),
  - TML/MC documents,
  - fumigation certificates,
  - gas measurement records,
  - training records,
  - TYUB and its attachments,
  - inspection forms,
  - and procedures and instructions—and provides recommendations for their preparation, review, and maintenance.
- It provides technical support for the preparation of procedures, instructions, checklists, records, and tracking forms related to activities required to be implemented at the offshore facility under applicable regulations.
- It evaluates the feasibility of the prepared documents and their compliance with relevant regulatory provisions.
- It evaluates the coastal facility's preparedness for emergencies such as fire, spills, leaks, gas leaks, explosions, exposure, and environmental pollution that may arise from hazardous cargo.
- Provides technical support for reviewing emergency response plans in accordance with the characteristics of the relevant dangerous goods, the EmS Guide, and MFAG provisions, and for identifying necessary revisions.

- It guides the facility in accordance with regulatory provisions regarding the loading, stacking, securing, and safeguarding of dangerous goods in cargo transport units.
- Provides technical support for the preparation of checklists and instructions regarding the suitability of cargo transport units, loading safety, and stowage activities.
- It assesses the training needs and requirements of personnel involved in dangerous goods operations at the port facility in accordance with applicable regulations.
- Monitors changes in national and international legislation, codes, and relevant regulations regarding the transport, handling, and temporary storage of dangerous goods.
- Informs the facility of changes that may affect its operations and makes recommendations regarding necessary compliance measures.
- Prepares the periodic reports required by the TMGD under applicable regulations within the specified timeframes. These reports evaluate the dangerous goods operations conducted at the port facility, routine activities performed, precautions taken, nonconformities identified, improvements implemented, emergencies, accidents, and pollution incidents, as well as the training status of personnel and actions taken regarding issues identified during inspections conducted by the Authority.
- As part of fulfilling its duties and responsibilities, the TMGD coordinates and communicates on technical matters with the relevant units of the company, the Port Authority, Ministry units, and other relevant parties deemed necessary.
- The TMGD provides technical guidance to the company regarding the assessment and resolution of nonconformities identified during inspections conducted by the Authority.
- The TMGD regularly maintains records related to visits, inspections, evaluations, and reporting required under applicable regulations.
- It submits the required notifications and entries under applicable regulations or Ministry systems within the specified timeframes.
- Notifies the company in writing of any regulatory violations, deficiencies, or risks identified during dangerous goods operations and provides technical and practical recommendations for their resolution.
- It is the company’s responsibility to address nonconformities reported by the TMGD, make the necessary investments, procure personnel and equipment, and make operational decisions.
- The TMGD carries out advisory, monitoring, evaluation, reporting, and technical guidance activities. The TMGD does not directly conduct the company’s operational activities, does not make commercial or operational decisions on behalf of the company, and does not assume the employer’s or operator’s responsibilities in place of the company.
- The operator is responsible for taking the necessary measures regarding the regulatory provisions, nonconformities, and improvement recommendations reported by the TMGD; for providing the necessary personnel, equipment, infrastructure, and resources; and for conducting its activities in compliance with the regulations.
- The TMGD’s responsibility is limited to the proper, timely, and legally compliant fulfillment of the duties assigned to it under the applicable regulations and the contract signed between the parties.

10.3. Matters concerning carriers of dangerous goods arriving at or departing from a coastal facility by road (documents that road vehicles carrying dangerous goods must have upon entry to or exit from a port or coastal facility, equipment and gear that these vehicles are required to carry; speed limits within the port area, etc.)

- **Required Documents:**
  - ADR Transport Document / Dangerous Goods Transport Certificate (including the cargo's UN No., BCSN name, quantity, and shipper/consignee information).
  - Driver ADR Training Certificate (SRC5).
  - Vehicle Compliance Certificate (ADR Certificate).
  - Sample Safety Data Sheet (SDS).
  - Facility scale entry/exit slips.
- **Mandatory Equipment and Accessories in Vehicles:**
  - Spark-arrester exhaust system.
  - At least 1 wheel chock.
  - Fire extinguishers (at least 2 x 6 kg or appropriate for the vehicle class).
  - Driver's Personal Protective Equipment (reflective vest, safety goggles, hard hat, safety shoes, dust/gas mask, and non-sparking flashlight).
  - A tightly sealed cargo cover to prevent dust and debris from escaping onto the roadway.
- **Port Area Rules and Speed Limits:**
  - The maximum speed limit within the port for road vehicles transporting hazardous cargo is 15 km/h (or a limit of 10–20 km/h as determined by the facility).
  - Vehicles must use only designated hazardous cargo routes, must not wait outside designated parking areas, and must not be left with the engine running.
  - Vehicle tires must be washed at the washing station before leaving the premises.

10.4. Provisions for those transporting dangerous goods arriving at or departing from a coastal facility by sea (daytime and nighttime signals to be displayed by ships and watercraft carrying dangerous goods in the port or coastal facility, cold and hot work procedures on ships, etc.)

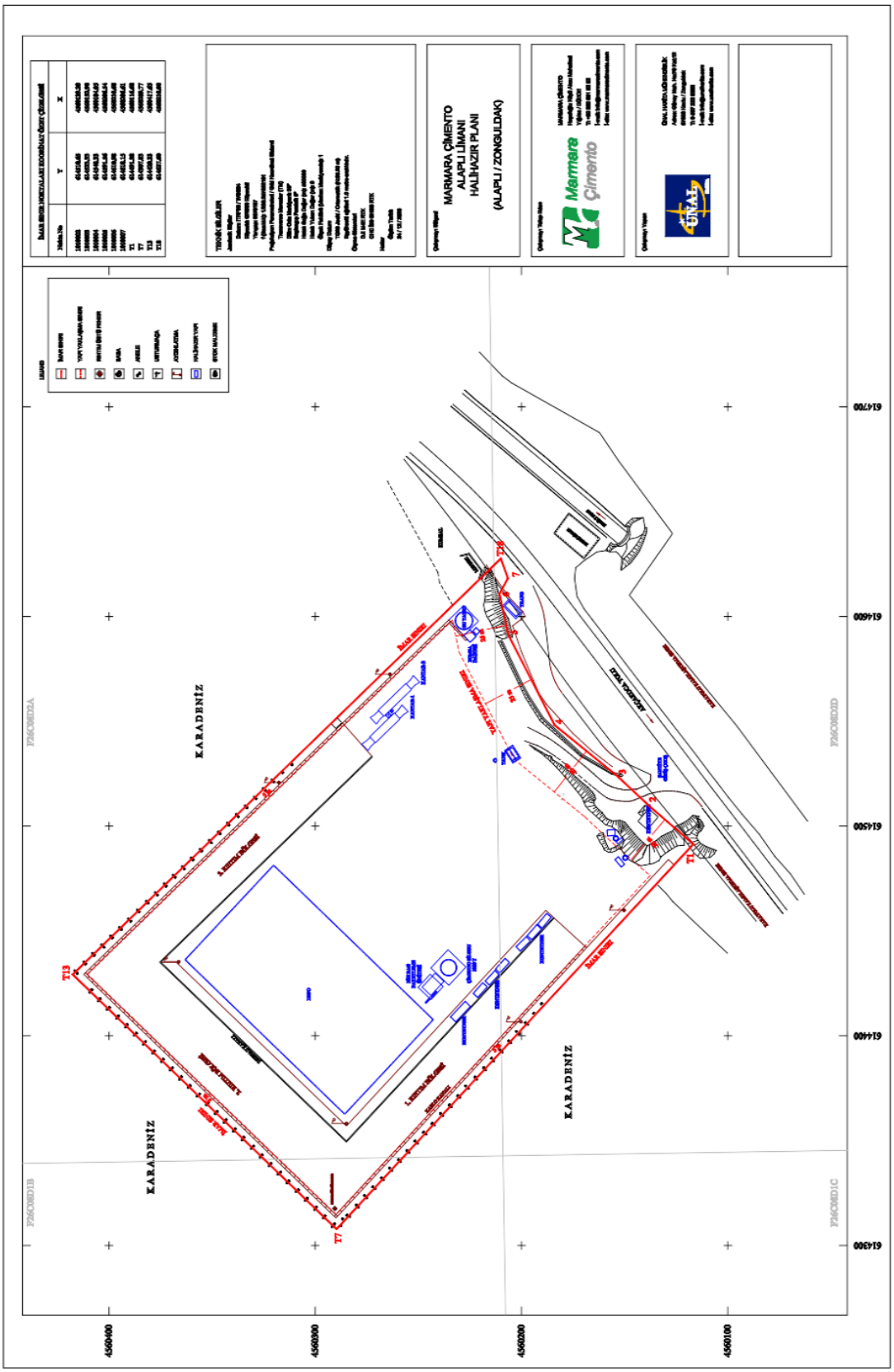
- **Daytime and Nighttime Visual Signals:** Vessels and watercraft carrying, loading, or unloading dangerous cargo must:
  - Daytime: Must display the "B" (Bravo) flag in a visible location in accordance with the International Signal Code.
  - At Night: Display a red light (Red Light) visible continuously from all 360 degrees.
- **Hot and Cold Work Procedures:**
  - Hot Work: Any operation involving an open flame, welding, cutting, grinding, or the generation of sparks. While a vessel carrying hazardous bulk cargo is at the pier, hot work is strictly prohibited on board the vessel or in the vicinity of the pier without a joint written authorization (Hot Work Permit) from the Vessel Captain, the Terminal Representative, and the Port Authority.

- Pre-Hot Work Inspection: Before a hot work permit is issued, the area must be purged of gas (gas-free), a cargo hold atmosphere test must be conducted, and the absence of flammable or explosive gases must be verified.
- Cold Work: Maintenance and repair work that does not pose a risk of sparks or high heat. Such work may be carried out after notifying the Terminal Representative, provided it does not disrupt cargo operations.

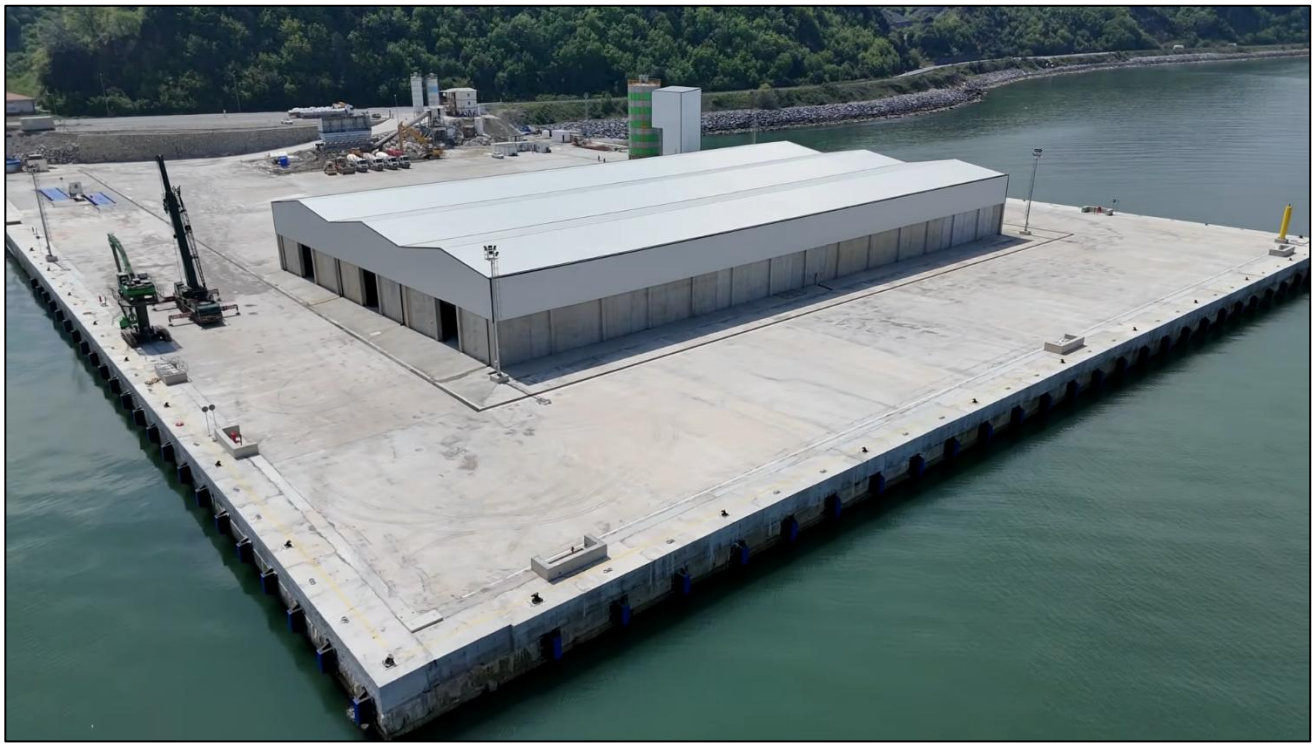
10.5. Additional requirements to be added by the coastal facility

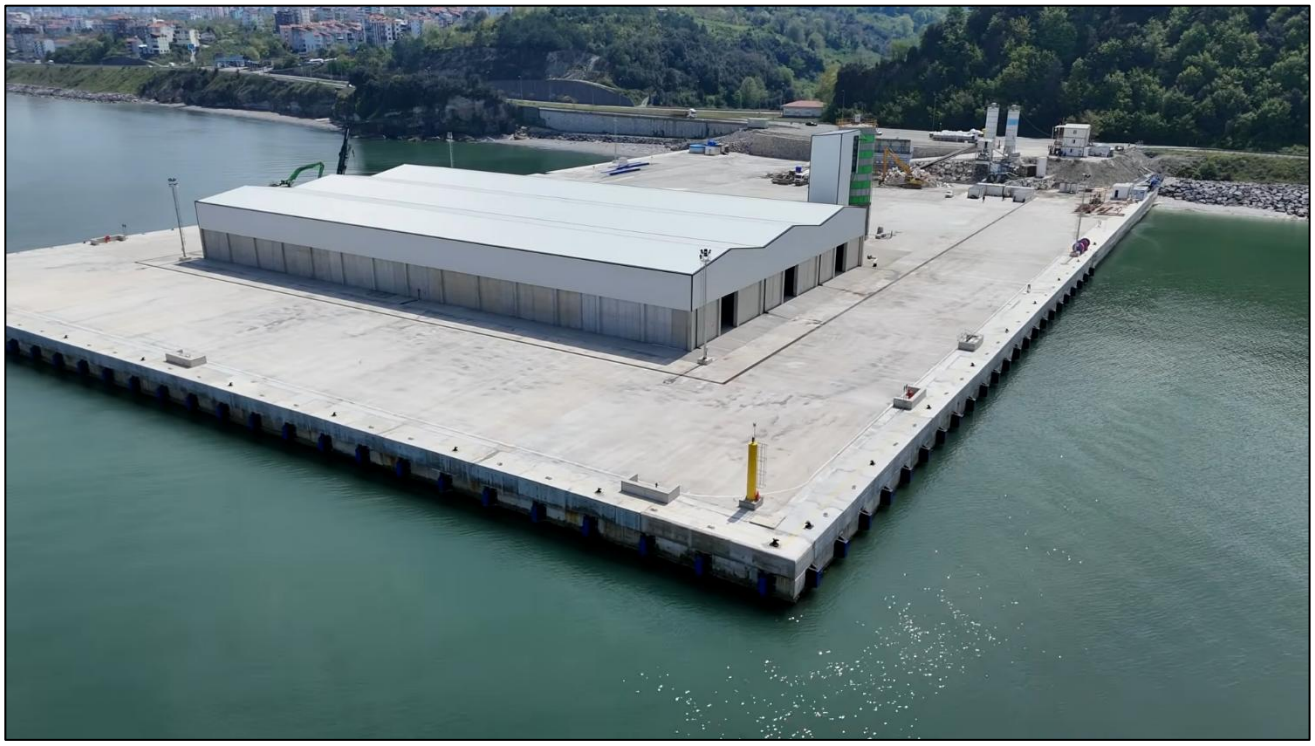
- **Dust and Environmental Protection Standards:** During windy weather, the spread of dust into the environment and the marine environment from coal and bulk cargo stockpiles in open areas must be prevented by using pulverized water sprays or chemical dust suppressants.
- **Zero Discharge to Sea:** Drainage water and hold washing wastewater from the facility premises must not be discharged directly into the sea; it must be directed to treatment ponds.
- ISPS Security Integration: Hazardous cargo storage areas must be designated as sensitive areas in accordance with the ISPS Code (International Ship and Port Facility Security Code) and monitored 24/7 by cameras (CCTV) and security personnel; unauthorized access must be prevented.
- **Crisis Management Team and Communication:** A continuous radio and telephone communication infrastructure must be maintained between the facility and the Port Authority, Coast Guard, and Fire Department.

APPENDIX 1 - GENERAL LAYOUT PLAN OF THE COASTAL FACILITY



APPENDIX 2 - GENERAL VIEW PHOTOGRAPHS OF THE COASTAL FACILITY





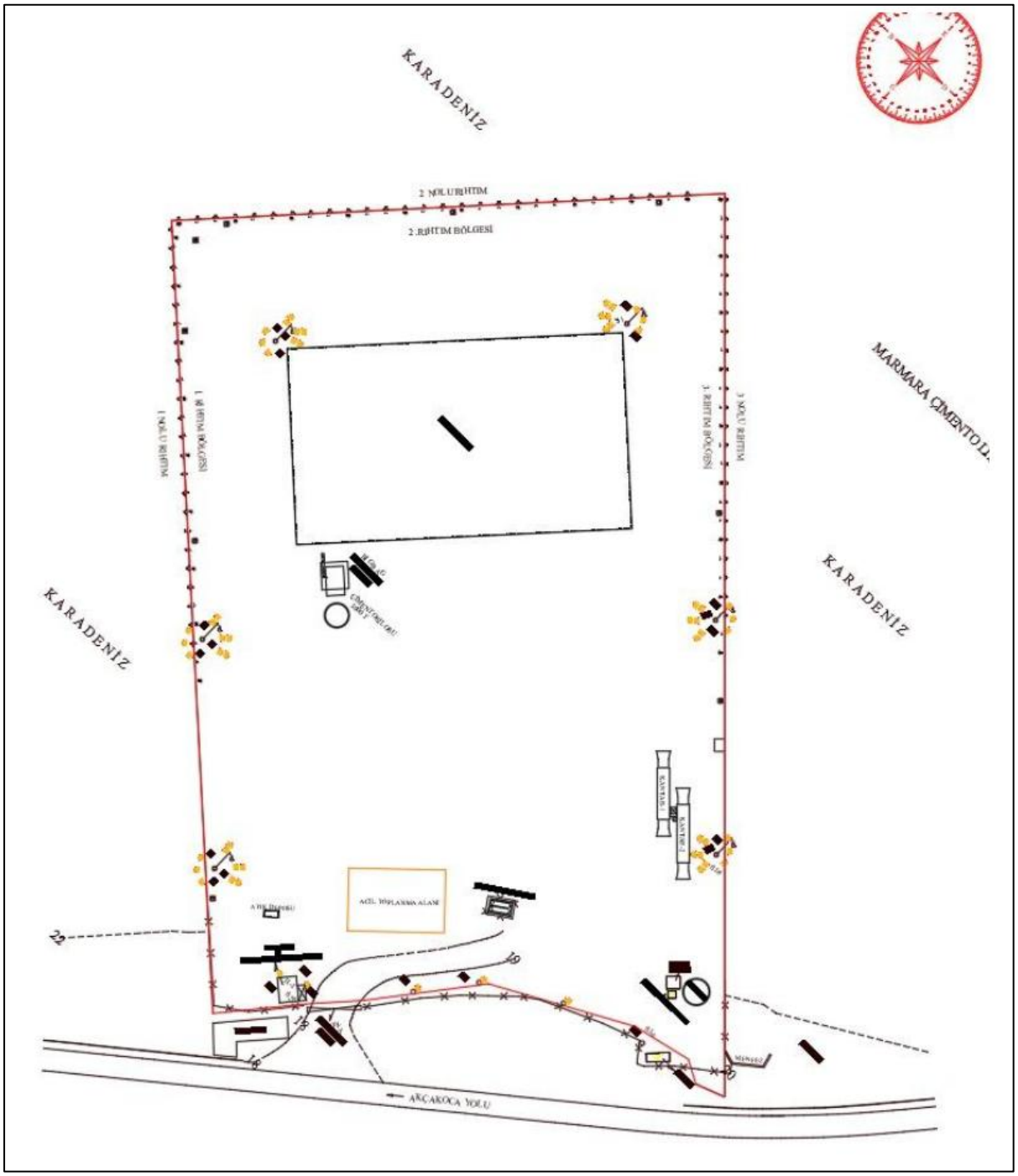
APPENDIX 3 - EMERGENCY CONTACT POINTS AND CONTACT INFORMATION

RELEVANT AGENCY	PHONE	FAX	E-MAIL
GENERAL DIRECTORATE OF MARITIME AFFAIRS	(312) 203 10 00	(312) 212 46 84	
DIRECTORATE OF MARITIME SAFETY AND SECURITY	(312) 203 10 00/2222/2223	(312) 231 33 06	
DIRECTORATE OF OPERATIONS AND SHIP REGISTRY	(312) 203 10 00/3459	(312) 231 33 06	isps@denizcilik.gov.tr
MAIN SEARCH AND RESCUE COORDINATION CENTER (AAKKM)	(312) 231 91 05 (312) 232 47 83		trmrcc@denizcilik.gov.tr
MINISTRY OF THE INTERIOR	(312) 425 72 14		
NAVAL FORCE COMMAND	(312) 287 99 63	(312) 285 51 40	
EREĞLİ REGIONAL PORT AUTHORITY	(372) 316 10 07		eregli.liman@uab.gov.tr
GENDARMERIE STATION	(372) 378 10 68	(372) 378 10 68	
CUSTOMS PROTECTION DIRECTORATE	(372) 322 64 23		
COAST GUARD HEALTH DEPARTMENT	(372) 316 10 42	(372) 322 75 64	kdzeregli@hssgm.gov.tr
ALAPLI FIRE DEPARTMENT	(372) 378 13 12		
COAST GUARD	(362) 445 03 33/34		
ALAPLI HEALTH CENTER	(372) 378 74 75		
Alaplı District Police Headquarters	(372) 378 17 02	(372) 378 29 34	
ZONGULDAK GOVERNOR'S OFFICE, PROVINCIAL DIRECTORATE OF ENVIRONMENT AND URBAN PLANNING	(372) 252 12 62/63/64		
PORT DIRECTOR POLAT KARAGÜZEL	(534) 688 12 11		polat.karaguzel@marmaracimento.com
YD Mining Marmara Cement General Manager Eray Erçin	(545) 857 31 98		eray.ercin@marmaracimento.com
YD Mining Inc.	(380) 651 52 52		
SECURITY DEPARTMENT MEHMET KILIÇ	(505) 262 60 60		bilgi@kdzradar.com
YD MINING MARMARA CEMENT PORT FACILITY	(372) 502 58 23		

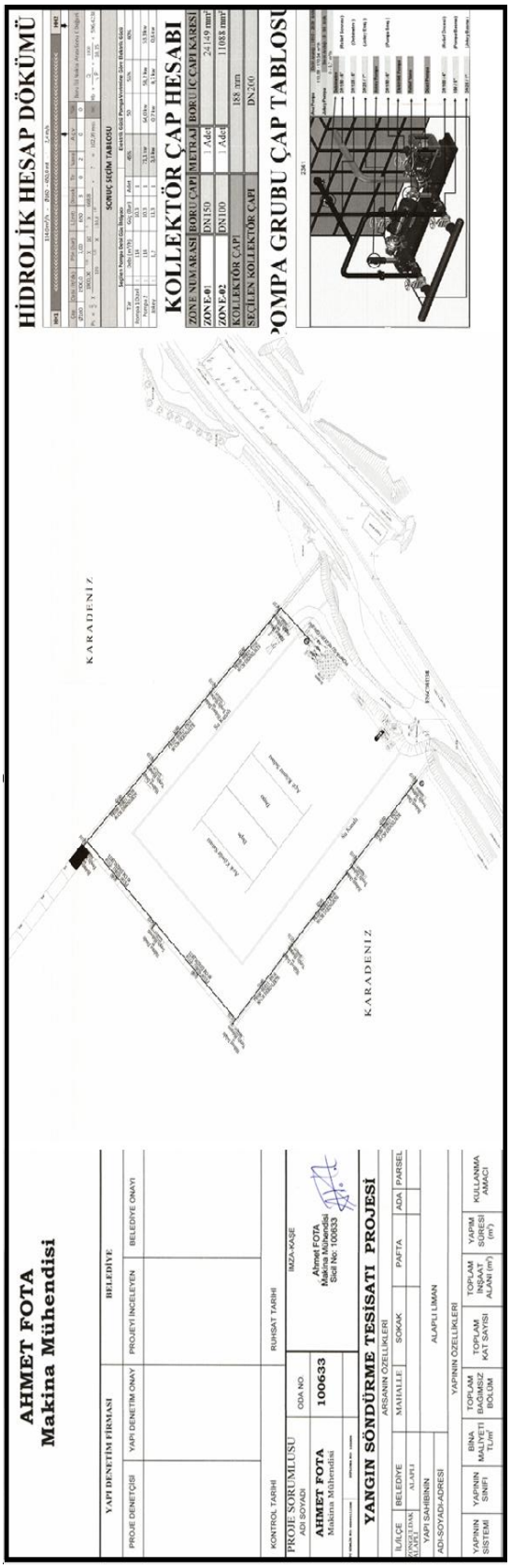
APPENDIX 4 - GENERAL LAYOUT PLAN OF AREAS WHERE DANGEROUS GOODS ARE HANDLED

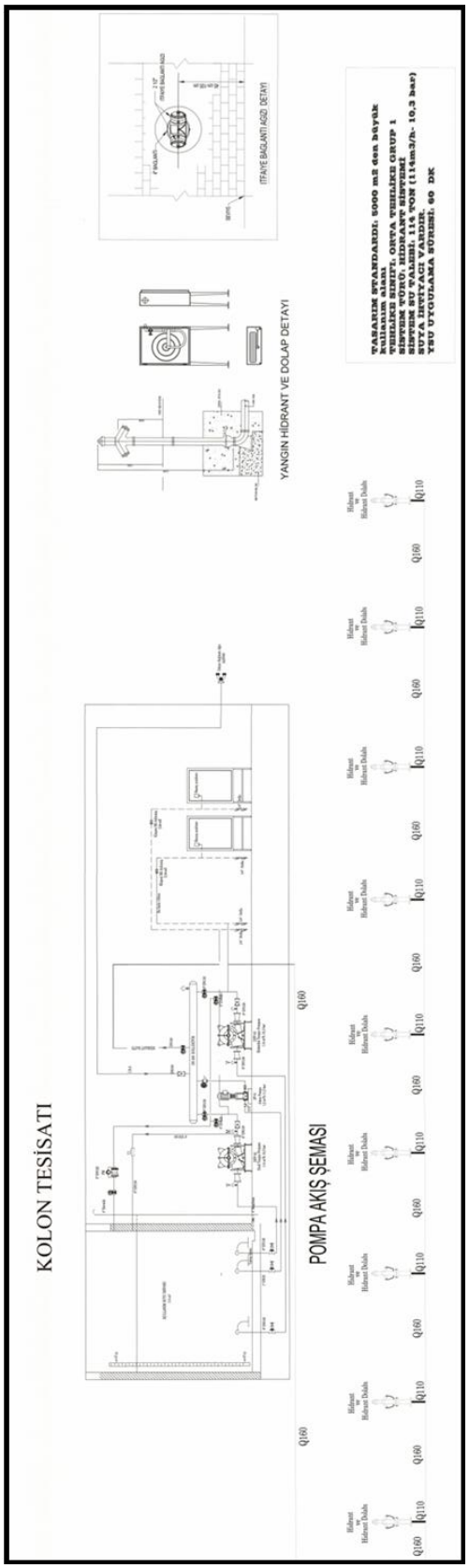


APPENDIX 5 - FIRE PLAN FOR AREAS WHERE HAZARDOUS CARGO IS HANDLED



APPENDIX 6 - GENERAL FIRE PLAN FOR THE FACILITY





APPENDIX 7 - EMERGENCY PLAN

LİMAN OPERASYONLARI ACİL DURUM PLANI

BÖLÜM 1: GENEL ESASLAR VE OPERASYONEL TANIMLAR

1.1 Amaç ve Kapsam

Bu plan; liman sahasında gerçekleşebilecek endüstriyel kazalar, doğal afetler, deniz kirliliği ve sabotaj gibi acil durumlarda operasyonların güvenli şekilde durdurulması, can, mal ve çevre emniyetinin sağlanması amacıyla hazırlanmıştır. Limanın kara ve deniz mülkiyet sınırları içerisindeki tüm faaliyetleri kapsar.

1.2 Liman Tesisi Tanıtım Bilgileri

Koordinatlar ve Lokasyon: X : 41.16963 / Y:31.36311
Rıhtım ve İskele Sayısı: 3 adet rıhtım (Maksimum yanaşabilecek gemi tonajı: 6000 DWT)
Elleçlenen Yük Türleri: Kömür, dökme katı yükler, genel kargo, IMDG kapsamındaki tehlikeli yükler.
Tehlikeli Madde Muhafaza Alanları: Geçici depolama sahaları ve izolasyon bölgeleri.

BÖLÜM 2: ACİL DURUM SENARYOLARI VE MÜDAHALE PROSEDÜRLERİ

Senaryo 1: Gemi Kazaları (Çarpma, Oturma, Gemi Yangını)

İlk Aksiyon: Gemi kaptanı ve Liman Kontrol (VTS / Kılavuzluk) arasında telsiz bağı kurulur. Rıhtımdaki yükleme/tahliye vinçleri derhal durdurulur.
Avara Prosedürü: Yangın veya batma riski limanı tehdit ediyorsa, Liman Başkanlığı onayıyla geminin halatları kesilerek veya çözülerek römorkörler eşliğinde emniyetli demir yerine açığa çıkartılması (Acil Avara) sağlanır.

Senaryo 2: Deniz Kirliliği (Petrol ve Kimyasal Sızıntısı)

İlk Aksiyon: Gemi yakıt ikmali (bunker) veya tahliye sırasında denize sızıntı olduğunda operasyon durdurulur.
Bariyer Serimi: Limanın kendi bünyesindeki veya protokol yaptığı acil müdahale firmasının **Deniz Bariyerleri** gemi çevresine veya rıhtım önüne serilerek kirliliğin yayılması önlenir. Skimmer (petrol sıyırıcı) cihazları aktif edilir.

Senaryo 3: Endüstriyel Kazalar (Vinç Devrilmesi, Yük Düşmesi)

İlk Aksiyon: Sahadaki tüm araç trafiği durdurulur. Kazanın olduğu hat izole edilir.
Mühendislik Kontrolü: Devrilen vinç veya hasarlı ekipmanda akaryakıt/hidrolik sızıntısı kontrolü yapılır, elektrik hatları kesilir. Malzeme altında kalan personel için arama-kurtarma başlatılır.

Senaryo 4: Doğal Afetler (Deprem, Fırtına, Tsunami/Kabarış)

Fırtına Alarmı: Rüzgar hızı liman limitlerini (Örn: 25 knot/saat) geçtiğinde sahadaki yüksek vinçler sabitlenerek güvenli bölgeye alınır. Gemi halatlarının takviye edilmesi için gemi kaptanına gerekli uyarıda bulunulur.

BÖLÜM 3: GÜVENLİK VE DIŞ KURUMLARLA KOORDİNASYON (ISPS)

3.1 Liman Giriş-Çıkış Kontrolü (Nizamiyeler)

Acil durumda limana sadece resmi kurtarma ekiplerinin (112, İtfaiye, AFAD, Sahil Güvenlik) girişine izin verilir.
Limandaki tüm gümrüklü saha kapıları koruma altına alınarak yağma ve güvenlik zafiyeti önlenir.

3.2 İletişim ve Raporlama Protokolü

Olay gerçekleştikten sonra **en geç 2 saat içerisinde** aşağıdaki kurumlara resmi acil durum ön bildirim raporu geçilmelidir:

1. Ulaştırma ve Altyapı Bakanlığı (Denizcilik Genel Müdürlüğü)
2. Yerel Liman Başkanlığı
3. Çevre, Şehircilik ve İklim Değişikliği İl Müdürlüğü (Deniz kirliliği varsa)

BÖLÜM 4: EKLER VE KONTROL FORMLARI

Ek-1: Acil Durum Telefon Listesi (Tüm kurumlar ve liman kriz masası iç hatları)

Acil Çağrı Merkezi (İtfaiye, Ambulans, Polis, Jandarma, AFAD): 112
Alaplı İtfaiye - 0 372 378 13 12
Alaplı Sağlık Ocağı - 0 372 378 74 75
Alaplı İlçe Emniyet Müdürlüğü - 0 372 378 17 02
Sahil Güvenlik İhbar Hattı: 158
Deniz Kirliliği ve Kaza İhbar Hattı (Kıyı Emniyeti): 151
Denizcilik Müdürlüğü Genel - 0 (312) 203 10 00
Deniz Emniyeti ve Güvenliği Başkanlığı Dairesi - 0 (312) 203 10 00 / 2222 – 2223
Ereğli Liman Başkanlığı - 0 372 316 10 07

Ek-2: Liman Teçhizat Envanteri (Kaç adet römorkör var? Kaç metre deniz bariyeri var? Yangın pompası kapasiteleri nelerdir?)
(Sorbent Boom 3x20x15cm -120 adet / Sorbent Ped 50x40x1 paket -100 adet
/ Çit Tipi Deniz Bariyeri 300 mt/ ÇitTipi Bariyer Çekme 2 adet / Manul Tambur -2adet / Tambur Kılıfı 2 Adet)

Ek-3: Ramak Kala ve Kaza Raporlama Formu Şablonu

LİMAN İŞLETMESİ – İSG ACİL DURUM KAYIT FORMU **Form / Doküman No: İSG-2026/FRM-03**

Bildirimi Yapan Personelin Adı-Soyadı: **Görevi / Departmanı:**

Olayın Gerçekleştiği Tarih ve Saat: .... / .... / 2026 - .... : .... **Olayın Tam Lokasyonu:** (Örn: Kömür Sahası B-Blok / 2 No'lu Rıhtım)

1. OLAYIN TÜRÜ (Uygun olan seçeneği "X" ile işaretleyiniz)

- **Ramak Kala:** Yaralanma veya maddi hasara yol açmayan ancak potansiyeli olan olay. (Örn: Kömür yığınından duman çıkması ama alevlenmeden fark edilmesi, vinç kepçesinin boşta kayması).
- **İş Kazası (Yaralanmalı):** Personel, taşeron veya ziyaretçinin fiziki zarar görmesiyle sonuçlanan olay.
- **Maddi Hasarlı Kaza:** Sadece liman ekipmanlarında, araçlarda veya yükte hasar meydana getiren olay.
- **Çevre / Deniz Kirliliği Kazası:** Denize veya toprağa kimyasal/petrol/kömür tozu sızması olayı.

2. OLAYIN TANIMI VE DETAYLARI

(Olayın nasıl meydana geldiğini, dahil olan iş makinelerini, yük türünü ve varsa çevre şartlarını rüzgar yönü dahil olmak üzere detaylıca yazınız)

.....
.....
.....
.....
.....

3. VARSA HASAR VE YARALANMA DURUMU

- **Yaralanan Personel Bilgileri (Adı, Şirketi):**
  .....
- **Yaralanmanın Türü / İlkyardım Durumu:** .....
- **Hasar Gören Ekipman / Liman Yapısı:** .....

4. OLAY ANINDA ALINAN ACİL ÖNLEMLER (Olay Yerinde Ne Yapıldı?)

(Örn: Yangın tüpüyle müdahale edildi, konveyör bant acil durdurma butonuna basıldı, sızıntı etrafına absorban döküldü)

.....
.....

5. KÖK NEDEN ANALİZİ VE TEKRARI ÖNLEYİCİ FAALİYETLER (HSE Grubu Dolduracaktır)

- **Olayın Kök Nedeni:** [ ] Güvensiz Davranış [ ] Güvensiz Durum [ ] Ekipman Arızası [ ] Yetersiz Prosedür
- **Açıklama:** .....
- **Alınacak Kalıcı Önlem (Düzeltici Faaliyet):**
  .....
- **Termin (Hedef Süre) ve Sorumlu Kişi:** .... / .... / 2026 | Sorumlu:

İmzalar:

- **Bildirimi Yapan Personel:** .....
- **Saha Vardiya Amiri / Operasyon Şefi:** .....
- **Liman HSE Müdürü / İş Güvenliği Uzmanı:** .....

EK-4: TEHLİKELİ MADDELER (IMDG) ACİL MÜDAHALE REHBERİ

Tehlikeli madde içeren bir yükte yangın veya reaksiyon fark edildiğinde şu adımlar sırasıyla uygulanır:

1-Güvenli Mesafeye Çekilme: Olayı gören personel, rüzgarı arkasına alarak (rüzgar üstü) alandan uzaklaşır.
2-Kimlik Tespiti : Yüke ait IMDG Sınıf tespiti yapılır.
3-Kırmızı Kod İhbarı: Liman Kontrol Merkezi'ne telsizle bilgi verilir. İihbara yüke ait IMDG bilgisi eklenir.
4-Manifesto ve SDS Kontrolü: ISIG, yüke ait SDS ve EmS kodlarını belirler.
5-Operasyon Alanının İzolesi: Olay yerinin çevresine emniyet şeridi çekilir. Giriş-çıkışlar durdurulur ve iş makineleri sahadan uzaklaştırılır.

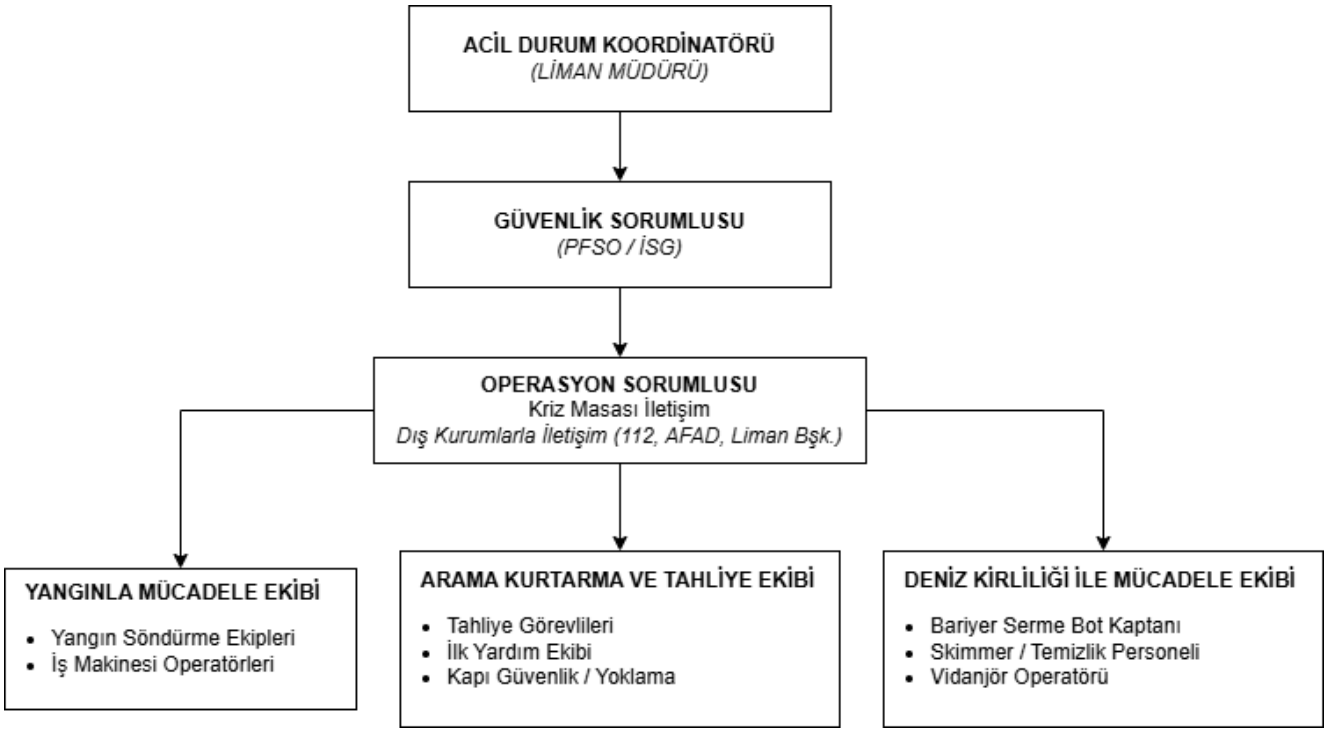
IMDG SINIFLARINA GÖRE TEKNİK MÜHADALE MATRİSİ

IMDG Sınıfı ve Etiketi	Tehlike Karakteristiği	Yangın Anında Müdahale (EmS-F)	Sızıntı Anında Müdahale (EmS-S)
Sınıf 1: Patlayıcılar *(Örn: Havai fişek, mühimmat)*	Şok, sürtünme veya ısı ile ani patlama riski.	**Asla müdahale etmeyin!** Alanı en az 500 metre çapında tahliye edin. Yerel itfaiye ve AFAD'ı bekleyin.	Kıvılcım çıkaran araçları kapatın. Sızıntı yapan ambalaja dokunmayın, statik elektrik üretmeyin.
Sınıf 2.1: Yanıcı Gazlar *(Örn: LPG, Asetilen, Metan)*	Havayla karışarak patlayıcı atmosfer (ATEX) oluşturur.	Gaz kaynağı kesilmeden yangını söndürmeyin. Çevre konteynerleri su sıkarak soğutun.	Gaz dedektörü ile LEL ölçümü yapın. Ex-proof (Ateş almaz) olmayan hiçbir aracı sahaya sokmayın.
Sınıf 3: Yanıcı Sıvılar *(Örn: Tiner, Boya, Solvent)*	Düşük parlamanoktası, hızla yayılan yüzey yangınları.	**Kesinlikle düz su sıkmayın.** Alkol dirençli köpük (AFFF) veya kuru kimyevi toz (KKT) kullanın.	Rıhtım drenaj kanallarını kapatın. Sızıntıyı denize gitmeden absorban (emici) ped ve sosislerle sınırlayın.
Sınıf 4.3: Suyla Temas Edince Gaz Çıkaranlar	Suyla temas ettiğinde yanıcı ve zehirli gaz üretir.	**SU KULLANMAK KESİNLİKLE YASAKTIR!** Yangını kuru kum, çimento veya özel kuru toz ile boğun.	Sızıntı alanını tamamen kuru tutun. Yağmur ihtimaline karşı üzerini plastik branda ile örtün.
Sınıf 5.1: Oksitleyici Maddeler *(Örn: Amonyum Nitrat Gübre)*	Kendisi yanmaz ama yangını şiddetlendirir, oksijen üretir.	Köpük veya CO2 işe yaramaz. Sadece **büyük miktarda su** kullanarak ısıyı hızla düşürün.	Yanıcı ve organik maddelerden (kereste, kömür, yağ, yakıt) uzak tutun. Kendiliğinden yanmayı tetikler.
Sınıf 6.1: Zehirli Maddeler *(Örn: Pestisitler, Siyanür)*	Soluma, temas veya yutma ile ağır zehirlenme ve ölüm.	Müdahale ekibi kesinlikle **Temiz Hava Solunum Cihazı (SCBA)** takmalıdır. Su sisi ile dumanı bastırın.	Sızıntıyı toprak veya kimyasal bariyerle çevreleyin. Temizlik suyunu nizamî atık tanklarında toplayın.
Sınıf 8: Aşındırıcılar *(Örn: Sülfürik Asit, Kostik)*	Canlı dokuyu ve metalleri (iş makinelerini) eritir/aşındırır.	Kimyasal reaksiyon riskine karşı bol su sisi ile çevre soğutması yapın.	Müdahale personeli **Seviye A (Tam sızdırmaz) Kimyasal Müdahale Elbisesi** giymelidir. Kuru kumla absorbe edin.

APPENDIX 8 - EMERGENCY ASSEMBLY POINT PLAN



APPENDIX 9 - EMERGENCY MANAGEMENT DIAGRAM



MARMARA ÇİMENTO LİMANI



TEHLİKELİ YÜK EL KİTABI

(Marmara Çimento Limanı'nda gerçekleştirilen tehlikeli yük operasyonlarının emniyetli, verimli ve çevreye duyarlı şekilde yürütülmesi amacıyla hazırlanan bu El Kitabı, tesis çalışanları ve liman kullanıcıları için temel emniyet kurallarını içermektedir.)

1. Giriş ve Tesis Tanıtım Bilgileri

Marmara Çimento Limanı, Batı Karadeniz Bölgesi'nde lojistik ve deniz taşımacılığı süreçlerinin güvenli şekilde sürdürülmesini sağlayan kıyı tesisidir. Tesis, katı dökme yüklerin kabulü, elleçlenmesi ve geçici depolanması için teknik altyapıya sahiptir.

Tesisin idari ve teknik yapısına ilişkin temel bilgiler aşağıdaki tabloda özetlenmiştir:

Tesis İşletmecisi Unvanı	YD Madencilik Anonim Şirketi
Tesisin Adı ve Konumu	Marmara Çimento Limanı Kıran Köyü Değirmenağzı Mevkii No:79 Alaplı/ZONGULDAK
Coğrafi Koordinatları	41° 10.168' N – 31° 21.732' E
Bağlı Bölge Liman Başkanlığı	Kdz.Ereğli Bölge Liman Başkanlığı
Yıllık Yük Elleçleme Kapasitesi	1.500.000 ton/yıl
Depolama Sahaları	34.500 m² Açık Depolama Alanı 6.266 m² Kapalı Depolama Alanı
Tesis Sorumlusu	İlker ARI (Tel: 0 531 790 33 09)
Tehlikeli Yük Operasyon Sorumlusu	Polat KARAGÜZEL - Liman Müdürü (Tel: 0 534 688 12 11)

2. Rıhtım Yapısı ve Kapasiteleri

Liman bünyesinde farklı ölçekteki gemilerin yanaşmasına ve dökme yük operasyonlarına imkân tanıyan üç ayrı rıhtım bulunmaktadır:

1 No'lu Rıhtım: Uzunluk 147 metre, genişlik 12 metre, maksimum su derinliği 4.40 metredir. Azami 2.300 DWT gemiler yanaşabilir.

2 No'lu Rıhtım: Uzunluk 175 metre, genişlik 12 metre, maksimum su derinliği 6.30 metredir. Azami 5.300 DWT gemiler yanaşabilir.

3 No'lu Rıhtım: Uzunluk 146 metre, genişlik 10 metre, maksimum su derinliği 5.00 metredir. Azami 2.000 DWT gemiler yanaşabilir.

3. Limanı Sahamızda Uyulması Gereken Hususlar

- Liman sahasında ve rıhtımlarda izinsiz ve baretsiz yürümek, vinçlerin çalışma sahasına girmek tehlikeli ve yasaktır.
- Rıhtım ve güverte üzerinde yük altında bulunmak tehlikeli ve yasaktır.
- Vinç, loader, forklift ve ekskavatör gibi iş makinelerinin çalıştığı sahalara girilmesi tehlikeli ve yasaktır.
- Geminin rıhtımda bulunduğu süre içerisinde elleçlenen yüklerin döküntüleri üzerinde yürümek tehlikeli ve yasaktır.
- Yazılı ve görsel tüm iş güvenliği kurallarına uyulması zorunludur.

4. Elleçlenen Tehlikeli Yükler ve Temel Riskler

Marmara Çimento Limanı'nda Uluslararası Denizcilik Katı Dökme Yükler Kodu (IMSBC Code) kapsamında tehlikeli dökme katı yük kategorisinde yer alan Kömür (COAL) elleçlenmektedir. Tesiste ambalajlı (IMDG Code) tehlikeli maddelerin elleçlemesi ve depolaması yapılmamaktadır.

Yükün Sınıflandırılması

Kömür, IMSBC Code standartları uyarınca aşağıdaki kategorilerde değerlendirilir:

- **IMSBC Kod Grubu:** Grup B (Kimyasal tehlikesi olan yükler) veya fiziki yapısına/test sonuçlarına bağlı olarak Grup A ve B (Hem sıvılaşma hem kimyasal tehlikesi olan yükler).
- **MHB (Materials Hazardous in Bulk) Özellikleri:**
  - CB (Combustible Solid): Kolay yanıcı katı özelliği
  - SH (Self-Heating Solid): Kendiliğinden ısınan katı özelliği
  - WF (Water-Reactive Solid): Islandığında yanıcı gaz çıkarma riski
  - CR (Corrosive Solid): Su ile temasta aşındırıcılık etkisi

Kömür Yükü Temel Operasyonel Risk Özeti

- **Metan Gazı (CH_4) Salınımı:** Hacimsel %5 - %16 aralığında patlayıcı atmosfer oluşturur.
- **Oksijen Tükenmesi:** Kömürün oksitlenmesi ambar içi oksijeni hızla düşürür.
- **Zehirli Gaz Birikimi:** Renksiz ve kokusuz Karbonmonoksit (CO) ve Karbondioksit (CO_2) birikir.
- **Kendiliğinden Isınma:** Kontrolsüz oksitlenme iç tutuşmaya (kızışmaya) yol açar.
- **Korozyon ve Sıvılaşma:** Nemli kömür asit üretebilir; yüksek nem taşıyan ince kömür sıvılaşabilir.

Kömür Yükü İlk Yardım Önlemleri

- **Soluma halinde:** Kişiyi temiz havaya çıkarın. Rahat nefes alabileceği bir pozisyonda dinlendirin. Solunum güçlüğü veya rahatsızlık devam ederse tıbbi yardım alın.
- **Yutulması durumunda:** Ağzı su ile çalkalayın. Kusturmaya çalışmayın. Rahatsızlık veya belirti görülmesi halinde tıbbi yardım alın.
- **Göz ile teması halinde:** Gözleri, göz kapaklarını açık tutarak birkaç dakika bol temiz su ile yıkayın. Tahriş veya rahatsızlık devam ederse tıbbi yardım alın.
- **Deri ile temas halinde:** Kirlenmiş giysileri çıkarın ve cildi bol su ile yıkayın. Tahriş oluşması halinde tıbbi yardım alın.

5. Marmara Çimento Limanında Yaşabilecek Acil Durumlar

- Gemide yangın veya acil durum gerektiren şartlar
- Liman tesisi sahasında yangın veya acil durum gerektiren şartlar
- Sızıntı veya döküntü
- Yaralanmalar, tıbbi sorunlar
- Hava muhalefeti, doğal afet ve terör gibi diğer nedenler

Acil durumlarda tesisimizin Tehlikeli Yük Elleçleme Rehberi'nde verilen "Ek-19 Acil Tahliye Prosedürü" uygulanır.

Acil durumlarda aşağıdaki ilgili kişilerle derhal iletişime geçin.

Adı Soyadı	Görevi	Telefon
İlker ARI	Tesis Sorumlusu	0 531 790 33 09
Polat KARAGÜZEL	Liman Müdürü	0 534 688 12 11

ACİL TOPLANMA YERLERİ



Marmara Çimento

MARMARA ÇİMENTO LİMANI

İLETİŞİM BİLGİLERİ

Marmara Çimento Limanı Kıran Köyü
Değirmenağzı Mevkii No:79
Alaplı/ZONGULDAK

Tel: (372) 502 58 23
Fax: (372) 502 56 49

Koordinatlar

41° 10.168'N - 31° 21.732'E

APPENDIX 11 - SPILL CONTAINMENT AREAS AND EQUIPMENT FOR CTUs AND PACKAGES, ENTRANCE/EXIT DRAWINGS

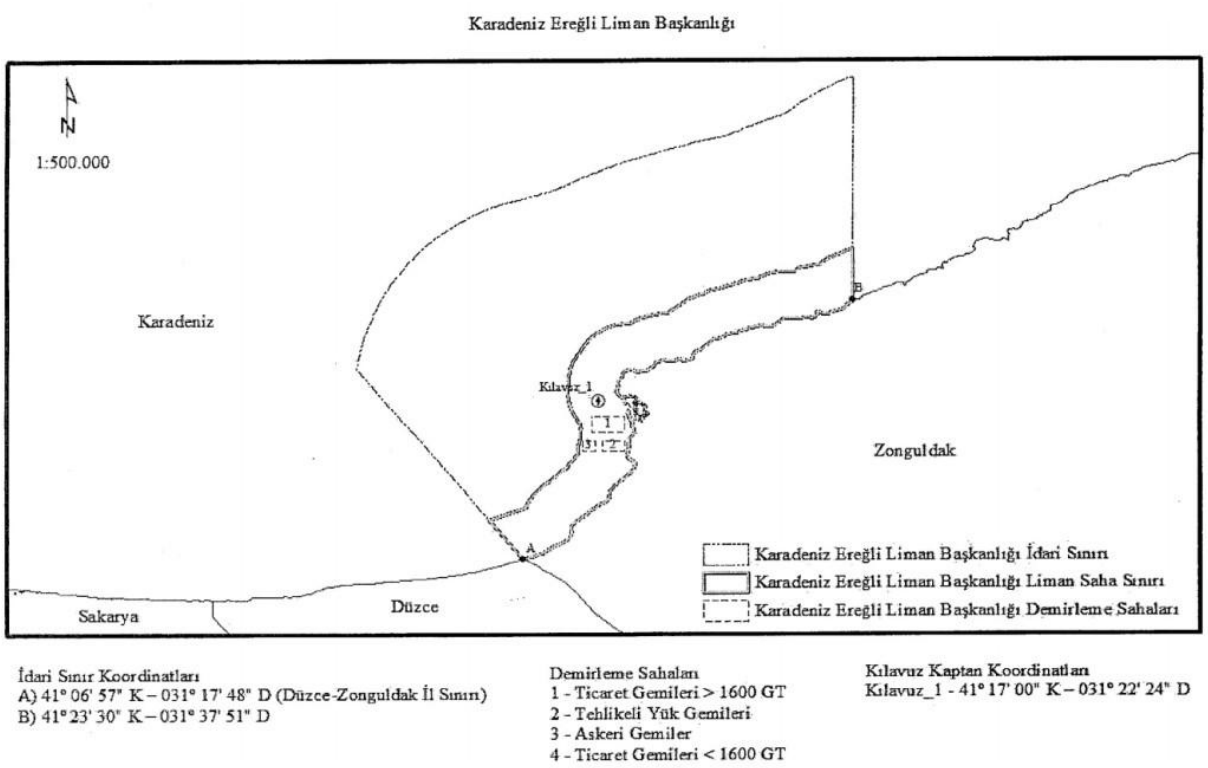
- CTU (Containerized Transport Units) and dangerous packaged cargo handling are not performed at our port.
- Should such handling activities be carried out in the future, the Dangerous Goods Handling Guide will be revised to include updated drawings of the required spill containment areas and equipment, as well as entry/exit routes for CTUs and dangerous packaged cargo.

APPENDIX 12 - INVENTORY OF PORT SERVICE VESSELS

- Port services are provided by Erdemir Port Services. Pilotage, towing, and mooring services are provided on a 24-hour basis to ensure the safe berthing, departure, and maneuvering of vessels in the port.
- The inventory of service vessels currently used for port services is provided below:

Type	Number	Function / Purpose	Technical Information
Tugboat	3	Towing services during ship berthing, unberthing, and maneuvering	Total pulling power: 154 metric tons
Tugboat	1	Support for mooring and tying-up operations	-
Pilot Boat	1	Assistance with the pilot's boarding and disembarkation from the vessel	-

APPENDIX 13 - MARITIME COORDINATES OF THE PORT AUTHORITY'S ADMINISTRATIVE BOUNDARIES, ANCHORAGES, AND PILOT BOARDING/DISEMBARKATION POINTS



Port administrative area boundary

The administrative area of the Karadeniz Ereğli Regional Port Authority consists of the maritime and coastal area bounded by a line drawn from coordinate (a) in a true azimuth of 320° and a line drawn from coordinate (b) in a true northerly direction, and bordered by the adjacent Turkish territorial waters.

a) 41° 06' 57" N – 031° 17' 48" E
b) 41° 23' 30" N – 031° 37' 51" E

Anchorage Areas

a) Anchorage Area No. 1: The anchorage area for merchant vessels of 1,600 GT and above is the maritime area defined by the following coordinates:

41° 15' 00" N – 031° 24' 00" E
41° 16' 00" N – 031° 24' 00" E
41° 16' 00" N – 031° 22' 00" E
41° 15' 00" N – 031° 22' 00" E

b) Anchorage Area No. 2: The anchorage area for ships carrying dangerous cargo, nuclear-powered military ships, ships to be placed under quarantine, and ships undergoing degassing is the maritime area defined by the following coordinates.

41° 13' 48" N – 031° 23' 24" E
41° 14' 24" N – 031° 23' 24" E
41° 14' 24" N – 031° 22' 36" E
41° 13' 48" N – 031° 22' 36" E

c) **Anchorage Area No. 3:** The anchorage area for military vessels is the maritime area defined by the following coordinates.

41° 13' 48" N – 031° 22' 12" E
41° 14' 24" N – 031° 22' 12" E
41° 14' 24" N – 031° 21' 24" E
41° 13' 48" N – 031° 21' 24" E

d) **Anchorage Area No. 4:** The anchorage area for vessels smaller than 1,600 GT that do not carry hazardous materials is the maritime area within the line formed by the following coordinates. Anchoring is permitted in this area provided that the vessel does not enter the military restricted zone and does not approach the shore by more than 1 gominod.

41° 16' 15" N – 031° 24' 38" E (Shore)
41° 17' 02" N – 031° 24' 19" E
41° 17' 16" N – 031° 24' 37" E (Shore)

Pilot boarding and disembarkation point

41° 17' 00" N – 031° 22' 24" E

APPENDIX 14 - EMERGENCY RESPONSE EQUIPMENT FOR MARINE POLLUTION AT COASTAL FACILITIES

The following emergency response equipment for marine pollution is maintained at the coastal facility to prevent and contain the spread of oil, grease, and similar pollutants that may occur in the marine environment, and to carry out cleanup operations:

Equipment	Specifications	Quantity	Intended Use
Sorbent Boom	3 m long, 20–15 cm wide absorbent barrier	120 units	To absorb oil, petroleum, and similar liquid pollutants on the water surface and limit their spread
Sorbent Pad	Absorbent pad measuring 50 × 40 cm. 1 package contains 100 pieces	1,000 pieces	Used to absorb oil, fuel, and similar liquid pollutants and in cleanup operations
Fence-Type Marine Barrier	A floating barrier designed for use on the water's surface	300 m	Prevents the spread of pollution on the water surface and contains the contaminated area
Fence-Type Barrier Towing System	A system used to tow and position the fence-type marine barrier	2 units	Deployment, towing, and positioning of the marine barrier
Manual Reel	A manual reel used for deploying and retrieving the barrier	2 units	Controlled deployment and retrieval of the fence-type marine barrier
Reel Cover	A cover that protects the manual drum from outdoor conditions	2 units	Storage and protection of the drum when not in use

Note: Emergency response equipment for marine pollution is used to prevent and limit the spread of marine pollution that may occur at coastal facilities and to absorb and remove pollutants. The equipment is kept easily accessible, ready for use, and stored under appropriate conditions. In emergency situations, response operations are carried out by personnel responsible for using the equipment.

APPENDIX 15 - PERSONAL PROTECTIVE EQUIPMENT (PPE) USAGE CHART

	WORK CLOTHING	WORK BOOTS	GLOVES	HARD HAT	SAFETY BELT	EYE PROTECTION	MASK	EAR PROTECTION
PORT DIRECTOR	X	X	X	X	-	X	-	-
PORT MANAGER	X	X	X	X	X	X	X	X
SHIPPING UNIT	X	X	-	X	-	X	-	-
OPERATORS	X	X	X	X	X	X	X	X
THIRD PARTIES	-	X	-	X	-	X	-	X
OHS UNIT	X	X	-	X	-	-	X	-

APPENDIX 16 - HAZARDOUS CARGO INCIDENT REPORT FORM

Company/Organization		**Date**
Sender		**Reference No.**
Purpose		**Contact Information**

COASTAL FACILITY HAZARDOUS CARGO INCIDENT REPORT

1. Location (coastal facility and/or vessel) where the accident/incident occurred, its position, and area of impact
2. Type of emergency (e.g., fire, fuel spill, hazardous material leak, personnel injury, etc.) and how the incident occurred:
3. If a vessel was involved in the accident/incident, provide the following information (name, flag, IMO number, owner, operator, cargo and quantity, captain's name, and similar details)
4. If known, how the accident/incident occurred and its probable cause
5. Number of injured, deceased, and missing persons, along with their identifying information, if available
6. The extent of the damage/pollution
7. Meteorological conditions
8. Information on the hazardous substance
   - UN number and proper shipping name
   - Hazard class / sub-hazard class
   - Packing group
   - Additional risks, such as marine pollutants
   - Marking and labeling information
   - Packaging, cargo transport unit, or container specifications and number
9. Hazardous substance party information
   - Manufacturer
   - Sender
   - Carrier
   - Consignee
10. Monitoring and measurement results, and actions taken to bring the emergency under control
11. Condition of the facility and/or equipment, if any
12. Product loss and/or the amount of product recovered, if any
13. Impact of the accident/incident on the facility's routine operations
14. Equipment and/or product quality controls performed
15. Actions taken or to be taken to prevent a recurrence of the emergency
16. Authorities affected by the emergency and those informed about it
17. Reactions in the media or those expected to occur

FORM PREPARED BY
First Name Last Name
Position
Signature

APPENDIX 17 - NOTIFICATION FORM FOR INSPECTION RESULTS OF CONTAINERS FOR THE TRANSPORT OF DANGEROUS GOODS (CTUs)

- Currently, no CTUs (Dangerous Goods Transport Units) or dangerous packaged cargo handling operations are conducted at our port.
- Should such handling activities be carried out in the future, the Dangerous Goods Handling Guide will be revised to include “ANNEX 17 – Inspection Results Reporting Form for Dangerous Goods Transport Units (CTUs),” and the relevant inspection activities will be conducted using this form.

ANNEX 18 - OTHER REQUIRED ANNEXES

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ANNEX 19 - HAZARDOUS CARGO HANDLING GUIDELINE ADDITIONAL CARGO NOTIFICATION (WHEN REQUIRED)

- For hazardous cargoes not listed in the facility's current Hazardous Cargo Handling Guide but planned to be handled at the facility, a notification must be submitted to the relevant Port Authority by completing the form provided below:

Uygun sevkiyat adı	
Varsa UN Numarası ve Class ID/Karakteristik tablosundaki gruplar	

Yükün türü ve tabii olduğu kod	Tehlikeli Sıvı Dökme Yükler (Petrol ve Petrol Türevleri-MARPOL Ek-1)	
	Tehlikeli Sıvı Dökme Yükler (Kimyasal ve Benzeri-IBC Kod)	
	Tehlikeli Sıvı Dökme Yükler (Sıvılaştırılmış Gaz-IGC Kod)	
	Paketli Tehlikeli Yükler (IMDG Kod)	
	Tehlikeli Katı Dökme Yükler (IMSBC Kod)	

Ek: Güvenlik Bilgi Formu (SDS)

Tehlikeli Madde Güvenlik Danışmanı — Ad/Soyad/İmza

Kıyı Tesisi Yetkilisi — Ad/Soyad/İmza

- The port facility shall ensure that the equipment required at the facility, as specified by the relevant code and the attached Safety Data Sheet (SDS) for the cargo in question, is available; that the necessary first aid, fire safety, security, environmental, and other required measures are implemented during the handling and/or temporary storage of the cargo; and that all necessary preparations have been completed.
- Prior to the commencement of handling the relevant cargo at the facility, the Dangerous Goods Handling Guide, procedures, instructions, checklists, and other relevant documents are revised as necessary.

Note: At this time, our facility does not plan to handle any additional dangerous cargo not covered by the guide. Should the handling of a new type of dangerous cargo be planned, the necessary notifications and preparations will be carried out using Annex 19 – Dangerous Cargo Handling Guide: Additional Cargo Notification.