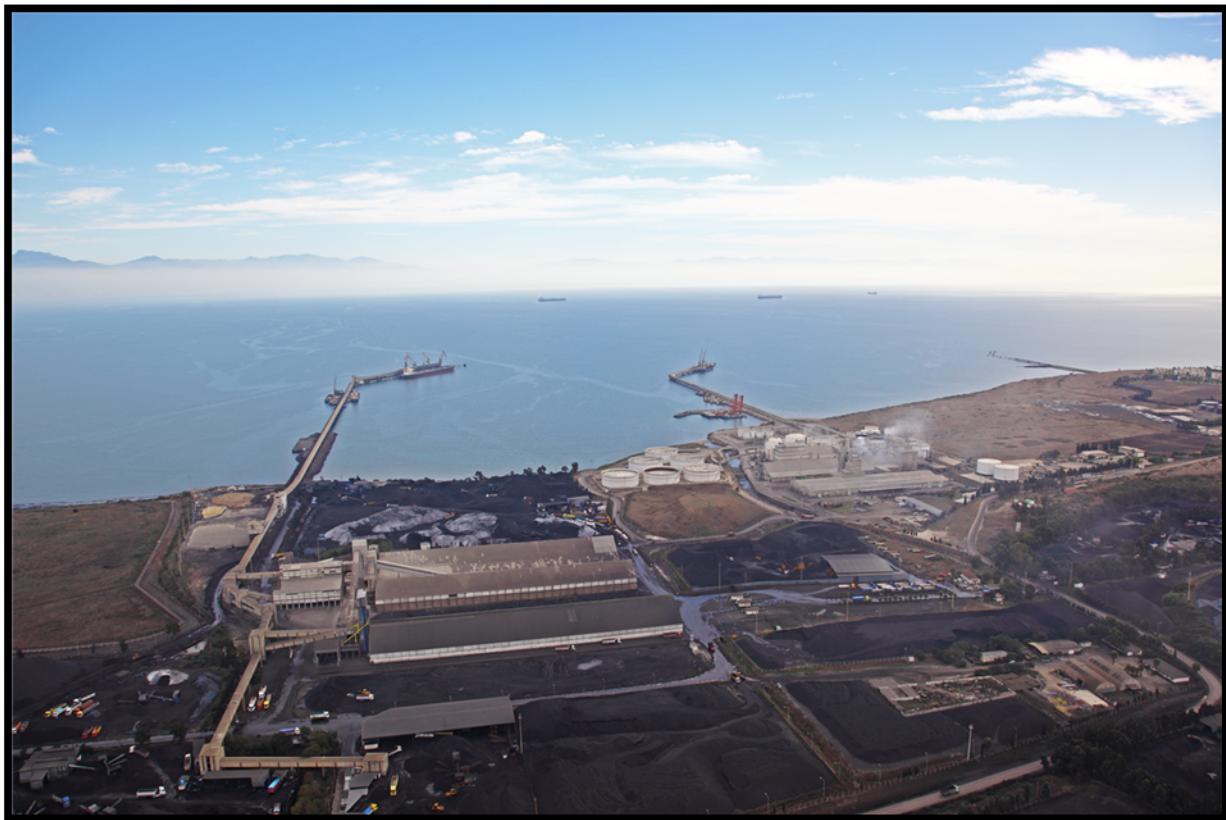




7 TOROS TARIM SANAYİ VE TİCARET A.Ş.

CEYHAN PORT FACILITY DANGEROUS GOODS GUIDEBOOK



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Purpose:

The purpose of this guide is to provide rapid, economic, safe, qualified and environmentally friendly transportation activities of dangerous goods by sea in Ceyhan Port Facility which is operated by the Toros Tarım Sanayi ve Tic. A.Ş that is also compatible to other transportation activities.

Scope:

This guidebook includes the cargoes to be handled in Ceyhan Port Facility, the duties, responsibilities, of the shipmaster, Cargo assignor, facility operator and the Dangerous Goods Safety advisor and rules to obey and precautions to take during the loading, stacking, storing, unloading from transport unit and the ship, notice, temporary storing of the said cargo.

The legal basis:

This guide is based on the 7th article of the Regulation on the Transport of Dangerous Goods by Sea and Loading Safety published in the Official Gazette dated 14 November 2021 and numbered 231659, and the Ministry of Transport and Infrastructure dated 20 April 2022 and E-63137251-010.07.01-281879. It has been prepared in accordance with the Application Instruction No.



Definitions and Abbreviations:

Regarding the implementation of this guidebook, abbreviations and definitions refer to as follows:

Ministry: Ministry of Transport and Infrastructure

Emergency Case: Natural disasters lead to suspend or stop normal operations of the entire or certain parts of Ceyhan Port Facility and requiring emergency response including the state of crisis that caused by fires, explosions, floods, sabotage, terrorist attack, a nuclear explosion and similar events.

Emergency Evacuation Plan: It is a plan prepared for the evacuation of the Ceyhan Port Facility concerning ships and marine vehicles, personnel, tools and equipment in case of emergency.

Ceyhan Port /Port Facility: Represents Ceyhan Port Facility operated by the Toros Tarım Sanayi ve Tic. A.Ş

Port Operator: Represents The exploitation management department of Ceyhan Port Facility

Port Authority: Represents Ceyhan Regional Port Authority

Emergency Evacuation: In case of emergency, it refers to the evacuation of the port concerning ships and marine vehicles, personnel, tools and equipments.

Cargo Assignor: The consignee, the consignor, the agent and the commission agent of dangerous goods.

Coastal Facility: Limits are set by the administration at where the ships can exchange load or passenger safely or can harbour, docks, piers, buoys, platform and the relevant anchorage areas, approach areas, indoor and outdoor storage areas and buildings used for administration and service. In this guidebook, it refers to Ceyhan Port Facility belonging to the Toros Tarım Sanayi ve Tic. A.Ş.

Cargo Transport Unit: Packaged or designed for the transportation of dangerous goods in bulk form and manufactured; road trailers, semi- trailers and tankers, portable tanks and multiple-element gas containers, railcars and tank wagons, container and tank container.

Dangerous Cargo (Dangerous Goods):

- 1) Petroleum and petroleum products included in the International Convention for the Prevention of Pollution of the Seas by Ships (MARPOL) 73/78 Annex I, Attachment 1,
- 2) Packaged goods and objects given in Part 3 of the IMDG Code,
- 3) Among the cargoes given in the IMSBC Code Attachment 1, the bulk cargoes with the words "B" and "A and B" in the group box in the characteristic table,
- 4) Liquid substances with the phrase "S" or "S/P" in the "d" column titled "hazards" of the table given in Chapter 17 of the IBC Code,
- 5) Gaseous substances given in IGC Code Chapter 19,

Vessel Master: The person that conducts the vessels carrying dangerous goods from the port.
Ship: The ship that loads /unloads dangerous goods at the port.

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



Material Safety Date Sheet (MSDS Form): The document includes the detailed information about dangerous materials and preparations on their features, security precaution to be taken in workplaces where dangerous substances and preparations are located, the necessary information according to the characteristics of human health and the environment from the harmful effects of dangerous materials and preparations.

Preparation: Solution and mixture of at least two or more substances.

Coastal Facility Operator: Toros Tarım Sanayi ve Ticaret A.Ş

Incident Control Center: Port Support Services

Hot work: The operations which includes usage of electrical equipment, hot rivets, grinding, soldering, burning, cutting, welding or which causes heat, open fire, flames and sparks that causes danger by presence of dangerous goods in or near the operation zone.

The consignee: Having natural and legal entities, which will be delivered according to the contract of carriage of dangerous goods.

Package: As stated in the IMDG Code Part 6, the container which is placed into the dangerous cargo.

Packer: Represents any natural and legal entities or land or coast personnel which puts dangerous goods into packagings including large packaging and intermediate bulk cargo containers and who also prepares packagings for carriage when necessary, who packs dangerous cargoes or changes these goods' packages or labels, labels for the purpose of transportation, does these procedures with the instructions of the sender

Bulk cargo: Solid, liquid or gaseous materials which are located in a tank permanently fixed on a structural part of the ship / on the ship or in the warehouse, are planned to be carried without any direct enclosure.

Handling: The dangerous goods, without changing their essential characteristics, relocating, to be transferred from large containers to small ones, small containers, ventilated, separated, sieved, mixing, renewal of cargo transport units and their packages or operations similar to repairing and transportation.

Fumigation: In order to eliminate harmful organisms, it is an application process of solid, liquid or gaseous forms of chemical substances acting in a gaseous state into an enclosed cargo unit or into the ship's hold.

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

IGC Code: The 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

ISPS Code: International Ship and Port Facility Security Code

Administration: Dangerous Goods and Combined Transport Regulation Head Office

Lumber Code: Safe Practices For the Ships carrying Lumber Cargo on the deck Code Conta

Container: The Cargo carrying equipment with a document in compliance with the current standards stated in the scope of CSC Contract.

SOLAS: The International Convention for the Safety of Life at Sea version 1974

Grain Code: International Code for the Safe Carriage of Bulk Grain

Carrier: Any enterprises which offer or accept the offer concerning transportation process for all kinds of dangerous cargo on their own or on behalf of third parties, actual carrier who accepts the offer, broker, owner, transportation planner, transportation broker, natural or legal persons that carry out the transportation process of dangerous cargo by road or railroad within the scope of combined transport with a ship agent with or without a transportation contract.

Dangerous waste: According to the classifications and conditions that are defined within the scope of SOLAS and as classified in the Basel Agreement, the parts and solutions of unforeseen direct use of cargo or dangerous cargo or packages carrying dangerous goods and cargo units in order to reprocessing, disposal, by burning, or other methods of disposal and their mixtures of used packages and cargo units.

Loader: Any natural or legal persons loading dangerous cargoes or the cargoes that can be dangerous in terms of load security in accordance with the consignor's instructions to the ship, vessel, vehicle or to a cargo unit, labelling the cargo units, placarding on the cargo units, handling, stacking, dispatching the cargoes including the dangerous cargoes on the ship or cargo units.



1. INTRODUCTION

1.1 General information about the facility as stated in the facility information form below.

FACILITY INFORMATION FORM

1	Facility Operator Name /Title	Toros Tarım Sanayi ve Ticaret A.Ş.		
2	Facility operator's address	Tekfen Tower, Büyükdere Caddesi No:209 34394, 4.Levent, İstanbul		
3	Facility name	Ceyhan Port Facility		
4	The city where the facility is located	ADANA		
5	Facility contact details (address, phone no, fax no, e-mail and website)	Sarımazi Mah. BOTAŞ Yolu Cd. No:56 Ceyhan 01920 Adana Tel: +90 0322 634 2222 Faks: +90 0322 634 2323 www.toros.com.tr		
6	Facility regional location	Mediterranean		
7	Affiliated port authority and contact details	Ceyhan Region Port Authority Tel: 0 322 639 21 39 Faks: 0 322 639 21 40		
8	Affiliated Ministry and contact details	Adana Büyükşehir Belediyesi 0322 455 3500 0322 454 37 87		
9	The name of Free zone or Organized industrial zone where the facility is located	Private Property		
10	The validity date of temporary operational permit/coastal facility operating permit	18/01/2025		
11	Business status of the facility (X)	Own cargo and additional third party cargo (x)	Own cargo and additional third party cargo (x)	Own cargo and additional third party cargo (x)
12	Facility superintendent name surname and contact details	Ertem ARSLANTAY Tel: 0322 634 2222 – 0530 665 02 78 Faks: 0322 634 2323 e-mail: ertem.arslantay@toros.com.tr		
13	Dangerous goods operations officer name surname and contact details	Saip Onurhan KADIOĞLU Tel: 0530 767 64 81 e-mail: s.onurhan.kadioglu@toros.com.tr Mehmet PUSAT Tel: 0533 285 51 27 e-mail: mehmet.pusat@toros.com.tr		



14	Dangerous Goods Safety Advisor Name surname and contact details	Sezgi Sayılgan 0539-542-83-49 sezgi.sayilgan@toros.com.tr Ahmet Cemil Burhanlıoğlu 0532-510-15-36 cemil.burhanlioglu@toros.com.tr			
15	Marine coordinates of the facility	West Pier (Pier No: 1-2-3-9-10) Land Side 36 55' 00" N - 035 58' 54" E Sea Side 36 54' 24" N - 035 59' 06" E East Pier (Pier No: 4-5-6-7-8) Land Side 36 55' 12" N - 035 59' 18" E Sea Side 36 54' 30" N - 035 59' 34" E			
16	Types of dangerous Cargoes operated at the facility	Marpol Annex-1 Cargoes IMDG Code Cargoes IBC Code Cargoes IMSBC Code Cargoes IGC Code Cargoes Asphalt			
		Description Of Goods	Marpol Annex-1 Description	UN	TY Code
17	Dangerous Liquid Bulks Cargoes (Petroluem Products) Marpol Annex-1 Products	CONDENSATE	NAPHTHA PETROLUEM	UN 1268	TY 854
		FUEL OIL	OILS / FUEL OIL NO:4 NO:5 NO:6	UN 3082	TY 834 TY 844 TY 847
		KEROSENE	JET FUELS/JP-1 KEROSENE	UN 1863	TY 831
		UNLEADED GASOLINE	GASOLINES / AUTOMATIVES	UN 1203	TY 838
		CRUDE OIL	OILS CRUDE OIL	UN 1267	TY 833
		BITUMEN	ASPHALT SOLUTIONS	UN 3257	TY 842 TY 855
		GASOIL	GAS OIL / CRACKED	UN 1202	TY 870
	Dangerous Liquid Bulks Cargoes (Chemicals) IBC Code Cargoes	Description Of Goods	IBC Code Description	UN	TY Code
		PHOSPHORIC ACID	PHOSPHORIC ACID	UN 1805	TY 506
		FORMIC ACID	FORMIC ACID (85% OR LESS ACID) FORMIC ACID (OVER 85%)	UN 1779	TY 329 TY 330
		VINYL ACETATE MONOMER	VINYL ACETATE	UN 1301	TY 641
		STYRENE MONOMER	STYRENE MONOMER	UN 2055	TY 583
		ACETIC ACID	ACETIC ACID	UN 2789	TY 1
		SODIUM HYDROXIDE SOLUTION (*)	SODIUM HYDROXIDE SOLUTION (*)	UN 1824	TY 571
		2-ETHYL HEXANOL (2EH)	OCTANOL (ALL ISOMERS)	UN 2282	TY 474



		ETHYL ACETATE	ETHYL ACETATE	UN 1173	TY 279
		SULPHURIC ACID	SULPHURIC ACID	UN 1830	TY 586
		BUTYL ACRYLATE	BUTYL ACRYLATE (ALL ISOMERS)	UN 2348	TY 97
		METHANOL	METHYL ALCOHOL (*)	UN 1230	TY 413
		1.4BUTANEDIOL	1.4BUTANEDIOL BUTYLENE GLYCOL	N/A	TY 103
		METHYL METHACRYLATE	METHYL METHACRYLATE	UN 1247	TY 435
		PARAXYLENE	XYLEMES	UN 1307	TY 648
		(DOWANOL PM)	PROPYLENE GLYCOL MONOALKYL ETHER	UN 3092	TY 548
		METHYLENE CHLORIDE	DICHLOROMETHANE	UN 1593	TY 188
		SUNFLOWER SEED OIL	SUNFLOWER SEED OIL	N/A	TY 589
		MEG MONO ETHYLENE GLYCOL	ETHYLENE GLICOL 1,2 ETHANEDIOL	N/A	TY 298
		DEG DÍ ETHYLENE GLYCOL	DIETHYLENE GLYCOL DIGLYCOL	N/A	TY 204
		LAB LINEER ALKYL BENZENE	ALKYL BENZENE DISTILLATION BOTTOMS	N/A	TY 36
		UAN-UREA AMMONIUM NITRATE SOLUTIONS	UREA AMMONIUM NITRATE SOLUTION 28%, 30%, 32% N (UAN)	N/A	TY 633
		BUTYL CELLOSOLVE	ETHYLENE GLYCOL MONOALKYL ETHERS	N/A	TY 303
		POTASSIUM HYDROXIDE	POTASSIUM HYDROXIDE SOL.	UN 1813	TY 1793
		Description Of Goods	IGC Code Description	UN	TY Code
	Dangerous Liquid Bulks Cargoes (Liquid Gas-Ammonia) ICG Code Cargoes	AMONNIA	AMONNIA ANHYDROUS	UN 1005	AMMON44
		Description Of Goods	IMDG Code Description	UN	TY Code
	IMDG Code	POTASSIUM NITRATE	POTASSIUM NITRATE UN 1486	UN 1486	POTAS14
		Description Of Goods	IMSBC Code Description	UN	TY Code
	Dangerous Solid Bulks Cargoes	AMMONIUM NITRATE	AMMONIUM NITRATE BASED FERTILIZER UN 2067	UN 2067	TY663
	IMSBC Code Cargoes	POTASSIUM NITRATE	POTASSIUM NITRATE UN 1486	UN 1486	TY 791
		SULPHUR	SULPHUR UN 1350 (crushed lump and coarse grained)	UN 1350	TY759
		MONOAMMONIUM PHOSPHATE	MONOAMMONIUM PHOSPHATE (M.A.P.), MINERAL ENRICHED COATING	N/A	TY745
		CALCIUM FLUORIDE	FLUORSPAR	N/A	TY 677
		LIGNITE	LIGNITE	N/A	TY726
		PETROLEUM COKE	PETROLEUM COKE (calcined) PETROLEUM COKE (uncalcined)	N/A	TY787 TY788
		COAL	COAL	N/A	TY686





		SEED CAKE RICE BRAN SEED CAKE UN 1386	Grup (B or C) Grup (B or C) Grup B
		SEED CAKE UN 2217 SOYBEAN SUNFLOWER SEED PELLETS	Grup B Grup (B or C) Grup (B or C) Grup (B or C)
		SEED CAKES AND OTHER RESIDUES OF PROCESSED OILY VEGETABLES	Grup B
20	The types of vessels that can dock the facility	General Cargo Ship Chemical Tanker Bulk Freighter Ro-Ro Oil/Product Tanker Liquified Gas Tanker	
21	The distance to highway (km)	1 km	
22	The distance to the railroad kilometers) or railroad link (Y/N)	18-20 km Erzin City	
23	The name of the nearest airport and the distance to the facility(km)	Adana Şakirpaşa Airport 85 km	
24	The handling cargo capacity of the facility(Ton/Year;TEU/Year; vehicle /year)	Total Bulk/ General Cargo handling capacity 45.000 tonne a day	
25	Will scrapped cargoes be handled or not	Not	
26	Is there any entry point? (Y/N)	N	
27	Is there any customs area? (Y/ N)	Y	
28	The capacities & equipments of Cargo Handling	Approximately 42,000 tons/day bulk solid cargo/general cargo can be handled at 4 separate ship docking piers (Piers- 4, 5, 7 and 8) on the New (East) Pier. Approximately 40,000 tons/day of liquid cargo can be handled at Piers 1-2-6-7-9-10.	
29	Tank storage capacity (m ³)	*For 26 units of various sizes of liquid fuel and petroleum products 219.679 m ³ *2 ammoniac tanks 15.000 ton(22.000 m ³) *6 phosphoric acid tanks 18.450 m ³ Total: 265.465 m ³	
30	Open storage area (m ²)	400.000 tonne	
31	Semi-closed storage area (m ²)	N/A	
32	Kapalı depolama alanı (m ²)	250.000 tonne	



33	Designated area for fumigation and or defumigation (m ²)	N/A	
34	The name /title of pilotage and towage services provider and contact details	Ankaş Anadolu Kılavuzluk A.Ş (Mustafa Akarca-0530 417 56 64)// Arpaş Ambarlı Römörkaj Pilotaj Tic. A.Ş (Ufuk Kaynar-0553 635 65 55) Uzmar Uzmanlar Denizcilik Tic.Ltd.Şti. (Gökhan Parlak -0538 489 22 49)	
35	Has the Security Plan been made? (Y/N)	Yes (Within the scope of ISPS)	
36	The capacity of waste receiving facility (This section will be held separately according to the wastes accepted by the facility)	Waste type	Capacity (m ³)
		Sludge	526 m ³
		Bilge	40 m ³
		Slop	4250 m ³
		Non-Water Sludge	40 m ³
		Waste Oil	1050 m ³
		Toxic Liquid (CAT.Y-Z)	92 m ³

37 The pier/dock etc. area features						
Pier	Max. DWT	Max. Ship Length (m)	Max. Ship Width (m)	Max. DRAFT (m.)		
				Fore	Aft	Equivalency
1	40.000	185	For bulk carriage 28m, No limitation for tankers	--	--	10,5
2	40.000	212	No Limits	--	--	11,5
3	3.000	100	15	--	--	4,8
4	110.000	270	42	13,0	13,5	13,0
5	110.000	270	42	13,0	13,5	13,0
6	40.000	190	No Limits	10,0	10,5	10,0
7	40.000	220	For bulk carriage 25m, No limitation for tankers	10,0	11,0	10,0
8	3.000	100	15	4,5	5,0	4,5
9	80.000	235	Kisit yok	16,5	15,5	15,5
10	80.000	235	Kisit yok	16,5	15,5	15,5
Ro-Ro	8.000	120	20	8,0	8,0	8,0



Name of Pipeline (If present in facility)	Number (unit)	Length (meter)	Diameter (inch)
12" White Product Ship Bleed Load Line	1	1130 m	12
14" Black Product Ship Bleed Load Line	1	1130 m	14
14" Old White Product Ship Bleed Load Line	1	1065 m	14
14" New White Product Ship Bleed Load Line	1	1780 m	14
Ammoniac Bleed Line	1	1250 m	6
Ammoniac Cooling Line	1	1250 m	1,5
Old Acid Line	1	1475 m	8
New Acid	1	1475 m	14

1.2 Loading, Discharging, Handling and Storage Procedures for Dangerous Goods Handled and/or Temporarily Stored at the Coastal Facility

In our facility, dangerous liquid bulk cargoes within the scope of Marpol Annex-1 and IBC code, dangerous liquefied gaseous bulk cargoes under IGC code, dangerous packaged bulk cargoes under IMDG code, dangerous solid bulk cargoes and asphalt/bitumen cargoes under IMSBC code are handled. The loading, unloading, handling and storage procedures of these cargo groups are carried out according to the procedures stated below and in the annex of the guide.

- **APPENDIX-18/1 MARPOL APPENDIX-1 AND IBC CODE – Operation Procedure for Safe Handling of Liquid Bulk Dangerous Goods**
- **ANNEX-18/2 IGC CODE – Procedure for Safe Handling of Bulk Dangerous Goods in Liquefied Gaseous State**
- **ANNEX -18/3 IMDG CODE – Safe Handling of Packaged Dangerous Goods Operation Procedure**
- **ANNEX -18/4 IMSBC CODE – Operation Procedure for Safe Handling of Solid Bulk Dangerous Goods**

ANNEX -18/4 Safe Handling of Asphalt/Bitumen Cargo Operation Procedure

2. OBLIGATIONS

2.1 Obligations of Cargo Assignor

The responsibilities of cargo assignor, which is defined in the field of Ceyhan Port Facility as consignor, consignee (or representative acting on behalf of the recipient), the transportation broker of the dangerous cargoes, are as follows:



- a) Preparing all necessary documents and information related to dangerous goods, preparing and installing documents and ensuring that these documents will be in conjunction with the cargo during the transportation process.
- b) Provides classification, packaging, marking, labeling, placarding on the dangerous goods in compliance with the regulations,
- c) Providing that dangerous cargoes are all approved and packed properly, to be loaded on a container and on a cargo unit, to be stacked, to be transported and to be discharged securely.
- d) Ensuring that training for all relevant staff on the risks of the dangerous goods carried by sea safety precaution, safe working, emergency precaution, security and similar issues are provided. And he will keep the training records.
- e) Ensuring that all the necessary safety precaution will be taken against the dangerous goods which are unappropriate, unsafe or posing a risk to the public and the environment.
- f) Providing information and support to the related parties in case of emergency and accidents.
- g) Notifying the Ministry regarding the dangerous cargo accidents occurred in the area of his responsibility.
- h) Providing the necessary documentation on the inspections carried out by the authorities and providing the necessary cooperation.

2.2 Obligations of Coastal Facility Operator:

The responsibilities of the Ceyhan Operation Port Facility, which is the operator of the coastal facility, are given below.

- a) Do not berth the ships carrying dangerous goods without the permission of the port authority.
- b) Provides written information within the scope of facility rules, cargo handling rules and relevant legislation to the ship that will dock at its facility.
- c) It does not handle dangerous goods for which it has not received a handling permit from the Administration, and it does not make the ships that will berth suffer by planning in this context.
- d) Requests the mandatory documents, information and documents related to dangerous goods from the cargo person and ensures that they are found with the cargo. If the relevant documents, information and documents cannot be provided by the cargo person, it is not obliged to accept or handle the dangerous cargo at its facility.
- e) It carries out the loading or unloading operation according to the agreement to be reached by sharing all the data that may be required according to the characteristics of the cargo with the ship's person. The ship does not make any changes in the operation without the knowledge of the person concerned.
- f) It determines the working limits by taking into account the safe working capacity of the facility and the weather forecasts, and takes the necessary measures to ensure that the ship is safely moored at the pier and handling.



- g) Controls the transport documents containing information that the dangerous goods coming to the facility are classified, packaged, marked, labeled, plated and loaded safely to the cargo transport unit.
- h) It ensures that the personnel involved in the handling of dangerous goods and the planning of this handling are certified by receiving the necessary training, and does not assign the personnel who do not have the documents in these operations.
- i) It ensures that the dangerous goods handling equipment in its facility is in working condition and that the relevant personnel are trained and documented on the use of these equipment.
- j) By taking occupational safety measures at the coastal facility, it ensures that the personnel use personal protective equipment suitable for the physical and chemical characteristics of the dangerous cargo.
- k) Carries out activities related to dangerous cargoes at docks, piers and warehouses established in accordance with these works.
- l) Equips the piers and piers reserved for ships that will load or unload dangerous liquid bulk cargoes with appropriate installations and equipment for this work.
- m) Keeps an up-to-date list of all dangerous goods on board the vessels berthed and in the closed and open areas of the facility and gives this information to the relevant parties upon request.
- n) Notifies the port authority of the instant risk posed by the dangerous goods that it handles or temporarily stores in its facility and the measures it takes for it.
- o) Notifies the port authority of the accidents related to dangerous goods, including the accidents at the entrance to the closed areas.
- p) Provides the necessary support and cooperation in the controls and inspections carried out by the Administration and the port authority.
- q) Provides the transport of Class 1 (Class 1 Compatibility Group 1.4 S), Class 6.2 and Class 7 dangerous goods that are not allowed for temporary storage, out of the coastal facility as soon as possible, without waiting, and applies to the Administration for permission in cases where it is necessary to wait.
- r) Temporarily stores the cargo transport units where dangerous goods are transported in accordance with the separation and stacking rules, and takes fire, environment and other safety measures in accordance with the class of the dangerous cargo in the storage area. It keeps fire extinguishing systems and first aid units ready for use at any time in the areas where dangerous cargoes are handled and makes the necessary controls periodically.
- s) It obtains permission from the port authority before the hot working works and operations to be carried out in the areas where dangerous goods are handled and temporarily stored.
- t) Prepares an emergency evacuation plan for the evacuation of ships from the coastal facilities in case of emergency and submits it to the port authority and informs the relevant people about the plan approved by the port authority.
- u) It ensures the internal loading of the cargo transport units in accordance with the loading safety rules in its facility.



2.3 Obligations Of Vessel Master

The obligations of the captain of the ship that will dock the port and load or unload dangerous goods are as follows:

- a) It ensures that the cargo to be carried by the ship is documented as suitable for transportation and that the cargo holds, cargo tanks and cargo handling equipment are suitable for cargo transportation.
- b) Requests all mandatory documents, information and documents related to dangerous goods from the cargo person and ensures that they are present with the cargo during the transportation activity.
- c) It ensures that the documents, information and documents required to be found on the ship regarding dangerous goods within the scope of legislation and international conventions are appropriate and up-to-date.
- d) Controls the transport documents containing information that the cargo transport units loaded on the ship are appropriately marked, plated and loaded safely.
- e) Informs the relevant ship personnel on the risks of dangerous cargoes, safety procedures, safety and emergency measures, intervention methods and similar issues.
- f) Keeps the up-to-date lists of all dangerous cargoes on board and declares them to the relevant parties upon request.
- g) Ensures that the loading program, if any, is approved and documented and kept in working condition.
- h) It notifies the port authority and the coastal facility about the instant risk posed by the dangerous cargoes on the ship approaching the coastal facility and the measures taken for it.
- i) In case of leakage in the dangerous cargo or if there is such a possibility, it will not accept the dangerous cargo to be carried.
- j) Notifies the port authority of the dangerous cargo accidents that occur on his ship while navigating or at the coastal facility.
- k) Provides the necessary support and cooperation in the controls and inspections carried out by the Administration and the port authority.
- l) It does not accept to carry dangerous goods that are not included in the ship certificates issued by the relevant institutions and organizations.
- m) It ensures that the people of the ship involved in the handling of dangerous goods use personal protective equipment suitable for the physical and chemical properties of the cargo during handling.
- n) It provides the requirements regarding the loading safety of the loads loaded on the ships.



2.4 Responsibilities of the Carrier

- a) Requests mandatory documents, information and documents related to dangerous goods from the cargo person and ensures that they are present with the cargo during the transportation activity.
- b) Controls the compliance of dangerous goods classified, packaged, marked, labeled and placarded by the cargo person with the legislation.
- c) Controls that the dangerous goods are packed in accordance with the rules by using approved packaging and cargo transport units, they are safely loaded and securely fastened to the cargo transport unit.

2.5 Responsibilities of Dangerous Goods Safety Advisor

- a) TMGDs authorized under the IMDG Code prepare quarterly reports regarding their responsibilities specified in the regulation and directive and notify this report to the Administration.
- b) TMGDs have information about dangerous goods activities in general, about IBC Code, IGC Code, IMSBC Code and MARPOL 73/78 applications within the scope of dangerous goods handled at the coastal facility, except for the IMDG code.
- c) TMGDs are present at the shore facility during TYUB inspections and actively participate in the inspections.
- d) TMGDs will arrive at the facility within 2 hours at the latest, when requested by the port authority of the coastal facilities they serve, or when called by the facility and cargo authorities during an operation of dangerous goods stored or handled at the facility in case of emergency.
- e) TMGD serving at the coastal facility prepares the Dangerous Goods Handling Guide of the coastal facility and checks its accuracy. There is a signature on the guide.

2.6 Coastal Facility Dangerous Goods Handling Operations Responsibles

Name-Surname	Job Duty	Phone Number
Mehmet PUSAT	Terminal Chief	0533 285 51 27
A.Cemil BURHANLİOĞLU	Jetty Chief	0532 510 15 36
Ahmet MAZMAN	Bulk Terminal Chief	0533 121 25 79
Furkan Tuluk	Jetty Engineer	0531 089 94 03
A.Turan DEVECİ	Terminal Shift Manager	0532 718 29 84



Eser CAN	Terminal Shift Manager	0538 287 28 73
Halil EVER	Terminal Shift Manager	0543 592 84 77
Mustafa MERT	Terminal Shift Manager	0507 298 63 45

3. SAFETY RULES & PRECAUTION TO BE FOLLOWED/ TO BE APPLIED BY THE COASTAL FACILITY

This guide has been prepared for the classification of cargoes within the scope of MARPOL Annex-1, IBC Code, IGC Code, IMDG Code and IMSBC Code arriving to the coastal facility operation by sea or land, loading, unloading from the ship, handling, stacking and storage of the cargo.

Coastal facility operators with Dangerous Goods Conformity Certificate shall comply with the following basic rules.

- If the port facility operators cannot store the dangerous goods in the area where they are unloaded at the pier or pier, they ensure that these materials are transported out of the coastal facility as soon as possible without waiting in the port area.
- It provides protective clothing and equipment in accordance with the MSDSs by providing MSDSs for the materials coming to our facility. It also ensures that the additional protective equipment of dangerous substances is supplied and distributed to the employees in accordance with the IMSBC Code.
- Coastal facility personnel, seafarers and other authorized persons in charge of dangerous goods handling wear protective clothing suitable for the physical and chemical properties of the cargo during loading, unloading and storage.
- Firefighter equipment is available for those who will fight fire in the hazardous material handling area, and fire extinguishers, first aid units and equipment are kept ready for use at any time.
- Coastal facility operators are obliged to take fire, safety and security measures.
- The inspection of the provisions of this article is carried out by the port authority and when any nonconformity is detected, the handling operation is stopped and the nonconformity is eliminated.



- The trainings required by the personnel working in accordance with the procedures and principles determined by the administration are determined. Training is given to the personnel involved.

A. Loading Safety

1. The port authority stops the handling operation at the coastal facility when it sees any risk and does not start it until the risk is eliminated.
2. BLU Code and BLU Manual, Safe Practice Code for Cargo Stacking and Safety (CSS Code), Code of Practice for Packing Cargo Transport Units (CTU Code) and Safe Practices for Ships Carrying Timber Cargo on Deck in order to ensure safe loading of the cargoes on the ship. Code (TDC Code) provisions are complied with.
3. Stacking of the cargo is carried out in accordance with the relevant legislation and international agreements we are a party to.
4. The ship cannot be loaded more than the loading limit considering the loading limit brand. In case of detection of such a situation, the ship is not allowed to sail and administrative action is taken against the ship's person within the scope of Article 22.
5. The loading-unloading plan before the handling operation and the results of the draft survey or weighbridge survey are submitted to the port authority by the ship's related party to determine the amount of loaded cargo before the ship takes off. Administration or port authority may request that the draft survey or scale survey report be received from an authorized inspection firm.
6. Precautions are taken to prevent the stability of the ship from being adversely affected by ensuring that the cargo in bulk carriers, especially single-hold bulk carriers, is loaded in such a way that it spreads over the floor of the hold (by trapping).
7. It is ensured that the load and ballast water patterns are monitored throughout the loading or unloading operation so that the structure of the ship is not subjected to excessive stress.
8. Care is taken to ensure that the ship is free of heel, but if an inclination is required during loading, it is ensured that it is as short as possible. In order to avoid structural damage to the ship, balanced loading and unloading is ensured in accordance with the approved stability boucle.
9. Under adverse meteorological and oceanographic conditions that may affect the cargo handling operation, the handling operation is stopped by the captain until the conditions improve.



10. In order to prevent situations such as placing heavy cargo on light cargo, placing liquid cargo on dry cargo, or spreading the smell of bad-smelling cargo to other cargoes, cargoes with properties that may damage other cargoes are loaded in accordance with the separation rules.
11. All cargoes, cargo units and cargo transport units, except solid and liquid bulk cargoes, in accordance with SOLAS Chapter VI Part A Rule 5.6, in order to ensure that the safety measures regarding loading, stacking, separation, handling, transportation and unloading of cargoes are fully implemented and maintained by the Administration. It is loaded, stacked and secured in accordance with the Cargo Securing Manual approved by the Administration or authorized classification societies on behalf of the Administration.

B. Goods Covered by IMDG Code

1. Substances and objects prohibited in the IMDG Code cannot be transported by sea.
2. The parties involved in the transportation of dangerous goods transported in packages take the necessary measures in accordance with this Regulation and the provisions of the IMDG Code, taking into account the nature and extent of the foreseeable risks, in order to prevent damage and injuries and to minimize their effects.
3. For the transport of dangerous goods by sea, it is obligatory to use the packages defined in IMDG Code Chapter 6 and tested by the institutions authorized by the Ministry or by the authorized administration of a country party to SOLAS and given UN certificate.
4. The Container/Vehicle Packing Certificate in IMDG Code Rule 5.4.2 is filled and signed by the persons who load the dangerous goods to the cargo transport unit (excluding the tank container). These persons receive the relevant training in IMDG Code Rule 1.3. The Container/Vehicle Packing Certificate is presented to the port before the cargo arrives at the port or at the entrance with the cargo. A copy of this certificate is placed on the inside wall of the right door of the container.
5. Documents specified in IMDG Code Rules 5.4.3, 5.4.4 and 5.4.5 are kept on every ship carrying dangerous goods in packages.



6. In accordance with SOLAS Chapter II-2 Part G Rule 19.4, a Certificate of Compliance issued by the authorized administration is kept on the ships to prove that the ships are in a suitable structure and equipment to carry dangerous goods. Except for dangerous solid bulk cargoes, there is no need for certification for IMDG Code Class 6.2, Class 7 and dangerous cargoes that can be transported in limited quantities.lved in the dangerous cargo handling operation.

C. Cargoes Covered by the IMSBC Code

1. In accordance with SOLAS Chapter VII Part A Rule 7.2.1, the use of the “bulk shipping name” is mandatory in all documents related to the transport of dangerous solid bulk cargoes, the trade name of the cargo alone is not sufficient.
2. Ships carrying dangerous solid bulk cargoes must have a cargo manifest or special list showing the dangerous goods on board, together with their locations, in accordance with SOLAS Chapter VII Part A Rule 7.2.2. A detailed stowage plan showing the location and class of all dangerous goods on board can be used instead of the aforementioned cargo manifest or special list.
3. In accordance with SOLAS Chapter XII Rule 10, the density of solid bulk cargoes is declared by the cargo person in addition to SOLAS Chapter VI Part A Rule 2 before the cargo is loaded onto the ship. For ships within the scope of SOLAS Chapter XII Rule 6, all solid bulk cargoes with densities between 1,250 kg/m³ and 1,780 kg/m³ must have a density measurement taken by an authorized testing firm, unless they meet the requirements for solid bulk cargoes with a density of 1,780 kg/m³ and above. This load density test can be performed by a laboratory accredited by the Turkish Accreditation Agency (TS EN ISO/IEC 17025: 2017) if the loading port is in Turkey.
4. Within the scope of the IMSBC Code, the following conditions are required for Group A (and Group A and B) cargoes to be handled at shore facilities and to be transported on board:
 - a) The transportable maximum moisture (TML) certificate of the cargo and the moisture content (MC) certificate or declaration of the cargo, which are issued by the authorized institutions by the authorized administration of the port of loading, are delivered by the cargo person to the relevant ship. If the loading



port is in Turkey, the TML test is performed by a laboratory accredited by the Turkish Accreditation Agency (TS EN ISO/IEC 17025: 2017). The TML certificate contains the TML test result or the test report containing this result. A copy of these documents is taken and stored by the relevant port authority and the coastal facility operator and is submitted upon request during the inspections made by the Administration.

- b) To ensure that the MC value is less than TML while the cargo is on board, the procedures for sampling, testing and controlling the moisture content are prepared by the ship owner, taking into account the provisions of the IMSBC Code. The approval of these procedures and their implementation are controlled by the port authority. The document stating that the procedure has been approved is given to the ship owner.
- c) Group A cargoes can only be loaded on the ship if the actual MC value at the time of loading is lower than the TML value of that cargo. Group A cargoes with an MC value higher than the TML value can only be transported on ships with the characteristics specified in IMSBC Code Section 7.3.2.

- 5. The TML test is carried out within six months before the Group A cargo is loaded onto the ship. If there is a change in the load composition or characteristics for any reason, a new test is performed.
- 6. Sampling and testing for the MC test of Group A cargo should be as close as possible to the date of loading the cargo on board, and never more than seven days. If heavy rain or snow falls between the test and loading, the moisture content test is repeated to confirm that the MC value of the load does not exceed the TML value.
- 7. Information on solid bulk cargoes within the scope of the IMSBC Code must be provided to the ship owners in accordance with SOLAS Chapter VI Part A Rule 2 by the cargo authorities.
- 8. Appropriate emergency response instructions are available on board to respond to accidents caused by dangerous solid bulk cargoes



D. Cargoes within the Scope of MARPOL Annex-1 and IBC Code

1. All stakeholders involved in the transportation of cargo within the scope of the IBC Code use the product name and features of the cargo specified in IBC Code Sections 17 and 18 and comply with all obligations regarding the cargo. The updates regarding the loads covered by the IBC Code and named in Chapters 17 and 18 are followed by the MEPC.2 circulars published by IMO in December each year.
2. Ships carrying cargo within the scope of the IBC Code shall carry the documents specified in the IBC Code Section 16.2.
3. In accordance with the provision of IBC Code Section 14.1.1, protective equipment meeting the EN 943-1:2015+A1:2019 and TS EN 943-2:2019 standards shall be available in sufficient numbers and appropriate features for the people involved in the loading or unloading operation. This equipment includes a large gown, long-sleeved gloves, suitable footwear, chemical-proof full-body clothing, and a full eye goggle or face mask.
4. On ships carrying cargo within the scope of the IBC Code, work clothes and protective clothing are kept in easily accessible places and in special cabinets. The equipment used during the operations are not kept in the living quarters. However, protective clothing may also be stored in living quarters, provided that they are in special cabinets adequately separated from living areas such as cabins, frequently used corridors, dining areas and shared bathrooms.
5. In cargo operations within the scope of MARPOL Annex-1 and in emergency situations, the ship's captain and coastal facility operator should have the proper transport name and UN number of the dangerous cargo in relation to the dangerous liquid bulk cargoes that are loaded/discharged or transported, according to their areas of responsibility. In this context, the list of dangerous goods handled in our port is in Annex-1.
6. Dangerous Liquid Bulk Cargoes handled in our port facility within the scope of Marpol Annex-1 and IBC Code are handled at berths 1, 2, 6, 7, 9 and 10. After the ship is safely moored to the pier with the help of the pilot and mooring, a safety inspection is carried out on the ship. If there is an unsafe situation, the situation is communicated to the ship's person and measures are taken. Discharge equipment and



hose selection suitable for the load will be made by the operation manager. ISGOTT Ship/Shore Safety Checklist is mutually signed. A communication network is established between the ship and the port facility.

7. With the exception of asphalt products, hazardous dangerous liquid bulk cargoes with the phrase "safety-S" in the "d" column titled "hazards" of the table in Chapter 17 of the IBC Code cannot be handled as suplalan in coastal facilities. These loads can only be handled by discharging them from the ships to the tanks in the facility via pipelines and filling them to the land tankers from these tanks. The same rule applies for loading from land tankers to ships.

E. Goods within the scope of the IGC Code

1. Ammonia UN 1005 is handled as liquefied gas in our facility within the scope of this code.
2. All associated tanks, pipelines, loading arms and other ship's pipelines on the ship and on the shore facility should be cooled gradually and evenly to avoid thermal stresses.
3. Gas detectors and other related equipment must be in working order.
4. It should be ensured that sufficient number of personal protective clothing and equipment are available for use.

F. Asphalt/Bitumen Goods

1. Bitumen should be stored in tanks specially designed for this purpose. Tanks must have low and high level alarms.
2. Bitumen should always be stored and handled at the optimum temperature possible.
3. The temperature of 230 C should never be exceeded to prevent the bitumen from self-igniting.
4. The biggest danger encountered when bitumen is handled at temperatures of 100C and above is skin burns caused by direct contact with hot bitumen. Product-specific work clothes and protective clothing should be provided by the shore facility.
5. Adoption of safe working procedures will greatly reduce the risk of fire. However, it is important that the personnel in charge of the operations are properly trained for a possible fire and that the necessary devices are available to extinguish the fire.



G. Other Issues

a) The following fire, environmental safety and other safety measures must be taken at the dangerous cargo storage area subject to the IMDG code.

- Dangerous goods will be stacked and segregated according to the class of the dangerous cargo, provided that the IMDG code is adhered to.
- Unloading and loading of IMDG Code Class 1 Explosives and Class 7 Radioactive Substances by sea and road to the port area is prohibited in accordance with the relevant legislation.
- It is forbidden to store IMDG Code Class 2 Gases and Class 6.2 Infectious Substances in the port area. Class 2 and 6.2 cargoes are only discharged from the ships as supalan depending on the transport unit, or if they are to be loaded on the ship, they are loaded onto the ship (supal) by entering directly from the door.
- If it is not possible to store the dangerous goods in the area where they are unloaded at the pier or pier, as stated in the 19th article of the Ports Regulation, "Coastal facility operators ensure that these materials are transported out of the coastal facility as soon as possible without waiting in the port area."

b) The stuffing and filling of Class 6 Toxic and Infectious Substances will not be done in the port area.

c) All classification, stacking-separation, plating, labeling, packaging, preparation of the load offer, preparation of the relevant shipping documents in the transport units in the port area are the responsibility of the loader and the carrier.

d) Fumigation processes are not allowed in the coastal facility.

e) After the dangerous goods are filled to the cargo transport unit, the Packing Certificate will be signed by the loader.

The person who signed the Packing Certificate:

- a. Items are loaded, marked and labeled correctly,
- b. There is no damage or leakage,
- c. It is properly supported and secured for sea travel,

D. All aspects of the IMDG Code are complied with,

to. Acknowledges that the sender's declaration correctly identifies the items in the cargo transport unit.

f) In the detection of dangerous goods that do not comply with the IMDG Code standards in the port area, the port operator notifies the port authority of the non-compliance.



g) Loading and unloading of dangerous goods on ships and sea vehicles, ship related persons and those who load, unload or load will take the necessary safety measures against heat and other hazards, especially in hot seasons. Flammable materials will be kept away from spark-generating processes and spark-generating vehicles or tools will not be operated in the dangerous goods handling area.

h) It is forbidden to smoke, use open fire, spark-producing tools, equipment, etc. on the cargo deck and points of berthed ships carrying dangerous goods and in coastal storage areas of dangerous goods.

i) Before the cargo transport units are loaded on the ship, the cargo transport units will be inspected by the Terminal Directorate for signs of external damage, leakage or spillage of contents.

- It should ensure that damaged packages, unit load or cargo transport units are transported promptly and safely to the private area. It should ensure that damaged packages do not leave the private area without being repackaged, suitable for transport and handling, and safe.
- Any cargo transport unit that is found to be damaged or leaking will not be loaded onto the ship until the necessary repairs are made or the damaged packages are removed.
- The Port Operator must ensure that all damaged or leaking packages, unit loads or cargo transport units containing dangerous goods are immediately reported to the Port Authority.

j) Unauthorized persons will not be allowed to enter all parts of fumigated ships, warehouses or cargo transport units without determining that they are free of gas, removing the fumigation warning signs and issuing the responsible personnel entry permit.

k) An appropriately illustrated warning sign shall be placed in cargo holds and other coastal areas where fumigated or about to be fumigated cargo transport units are kept.

l) For fumigated cargo transport units, Recommendations for the Safe Use of Pesticides on Ships with IMDG Code Annex and Packaging of Cargo Transport Units (CTU)

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

4.1 Classes of dangerous goods

IMDG Code divides dangerous goods into nine major risk groups from Class 1 to Class 9.

Depending on the damage, the dangerous cargoes are divided into 9 categories. These are called as 'class'.

Five of these classes (Class 1, 2, 4, 5 and 6) are divided to sub-sections or sub-classes. Class 3, 7, 8 and 9 are not divided to sub-sections. The classification of nine (9) classes is made in



accordance with United Nations (UN) criteria. This classification is used by all modes of transportation such as road, sea and air.

- Class 1: Explosives
- Class 2: Gases
- Class 3: Flammable liquids
- Sınıf 4.1: Flammable solids, self-reactive substances and solid desensitized explosives
- Class 4.2: Substances liable to spontaneous combustion
- Class 4.3: Substances that emit flammable gases when come 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 Substance
- Class 8: Corrosive Substances
- Class 9: Miscellaneous dangerous substances and articles

Dangerous Goods Sub Sections

- Class 1 Explosives

Class 1.1 Mass destructive explosives

Class 1.2 Explosives which have a projection hazard but not a mass destruction hazard.

Class 1.3 Explosives which have a fire hazard or partial projection, explosion or both hazards but not a mass destruction hazard

Class 1.4 Explosives which present a slight risk of explosion

Class 1.5 Non susceptible substances which are mass destructive

Class 1.6 Non susceptible substances with no mass destructive capacity

- Class 2 Gases

Class 2.1 Flammable gases



Class 2.2 Non-flammable and non-toxic gases

Class 2.3 Toxic gases

- Class 4 Flammable Solids

Class 4.1 Flammable solid substances

Class 4.2 Spontaneously combustible solid substances

Class 4.3 Substances that emit flammable gases when in contact with water

- Class 5 Oxidizing Substances and Organic Peroxides

Class 5.1 Oxidizing substances

Class 5.2 Organic peroxides

- Class 6 Toxic and Infectious Substances

Class 6.1 Toxic substances

Class 6.2 Infectious substances

- There are no sub sections for Class 3, Class 7, Class 8 and Class 9.

4.2 Packages and Packaging of Dangerous Goods

Dangerous cargo that will enter the premises of the port facility will be packed within the scope of IMDG Code Section 4

All packages that have dangerous substance inside it should have United Nations (UN) Type Approval even if they are within any Cargo Transport Unit (CTU).

Dangerous goods except for Class 1, 2, 5.2, 6.2, 7 and self-reactive substances of Class 4.1 are divided into three packing groups according to the degree of danger they represent:

Packing Groups of Class 3, Class 4, Class 5, Class 6.1, Class 8 and Class 9:

Packing Group I: High Level Danger

Packing Groups II: Middle Level Danger

Packing Group III: Low Level Danger



4.3 Placards, License Plates, Brands and Labels Related To Dangerous Goods

Packages and all Cargo Transport Units (CTU) that include dangerous cargo will be branded, labeled, placarded within the scope of IMDG Code Section 5.2 and 5.3 as shown below.

Hazard Warning Placard / Labels:

1-CTU (container..etc.), if it is used on the vehicles, minimum dimension should be 25 cm x 25 cm.

2-If it is used on the package or packaging, minimum dimension 10 cm x 10 cm.



Orange-colored plate:

1- Minimum dimension should be 40 cm x 30 cm if it is used on transportation vehicle for instance on a tank.

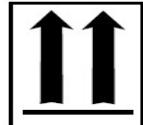
2- For Cargo Transport Units (CTU) and containers, minimum dimension should be 25cm x 25cm.



Special Labels, Placards :



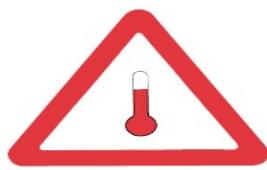
Fumigation Sign



Package Orientation



Ventilation requirements



Elevated Temperature



Special PCB requirements



4.4 Marks and Packaging Groups of Dangerous Goods

Within the scope of categories on IMDG Code Volume II Dangerous Cargoes List's column 7b (from E0 to E5) as shown in the chart in section 3.5 maximum of 1.000 units can be carried appropriately within this scope.

The letters X, Y and Z that are on UN type approved package codes that will carry dangerous substances represent package durability. X is the most durable package and can be used for all Package Groups. Y is medium durability package and can be used in Package Groups II and III and Z is the least durable package and should only be used for Package Group III.

Class 1: Explosives

Sub categories 1.1, 1.2, 1.3, 1.4, 1.5, 1.6 are not divided into packaging groups.



Class 2: Gases

Classification Codes are A, O, F, T, C, TFC, TOC. They are not divided into packaging groups.



Class 3: Flammable Liquids

Packaging Groups I, II, III (High, medium, low risk)

DANGEROUS GOODS CLASSES



OTHER HAZARDS



Class 4.1: Flammable solids, self-reactive substances and solid desensitized explosives

Packaging Groups I, II, III (High, medium, low risk)

DANGEROUS GOODS CLASSES



OTHER HAZARDS



Class 4.2: Substances prone to spontaneous combustion

Packaging Groups I, II, III (spontaneously combustible, self heating, low self heating)

DANGEROUS GOODS CLASSES



OTHER HAZARDS



Class 4.3 Substances that emit flammable gases when come in contact with water

Packaging Groups I, II, II (Over, mild, slow reaction with water)

DANGEROUS GOODS CLASSES



OTHER HAZARDS



Class 5.1: Oxidizing Substances

Packaging Group I, II, II (High causticity, caustic, causticity)

DANGEROUS GOODS CLASSES



OTHER HAZARDS



Class 5.2: Organic peroxides

DANGEROUS GOODS CLASSES



OTHER HAZARDS



Class 6.2: Toxic Substances

Packaging Groups I, II, II (Highly toxic, toxic, low toxicity)



Class 6.2: Infectious Substances



Class 7: Radioactive substances

Not divided into packaging groups, classified according to substance's activity.



Class 8: Corrosive substances

DANGEROUS GOODS CLASSES



OTHER HAZARDS



Sınıf 9: Miscellaneous dangerous substances and articles

Packaging groups II, III (medium, low danger)

DANGEROUS GOODS CLASSES



OTHER HAZARDS



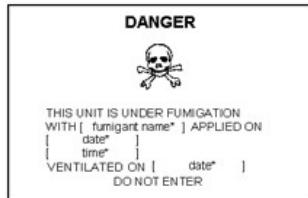
Besides danger classes, other signs that are to be used when necessary are as follows:



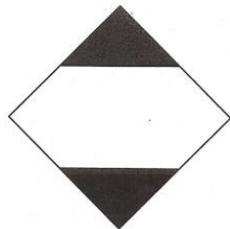
Marine Pollutants



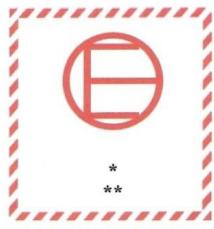
Dangerous Goods Are Carried With High Temperature



Fumigation Warning Sign



Limited Amount



Exempt Quantity

4.5 Segregation Charts of Dangerous Goods On Board and At Port According to Class

To determinethe segregation conditions for two or more dangerous cargoes, segregation conditions, IMDG Code Volume I, the Segregation Table presented in 7.2.4 and decrees in IMDG Code Volume II Dangerous Goods List (DGL) Column 16(b) shall be consulted.

In the case of discrepancy, decrees in Dangerous Goods List (DGL) Column 16(b) will take precedence.

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

Segregation terms in this chart provides information on the necessary distance between different danger class dangerous goods.

“1”: **“Apart by.....”:** It can be carried in the same compartment, warehouse and deck with a minimum of 3m horizontal segregation distance.

“2”: **“Separated by.....”:** It can be carried under the deck in a separated warehouse or compartment or on the deck with a minimum of 6m horizontal segregation distance.

“3”: **“Separated by..... via full compartment or warehouse”:** Can be carried on deck with a minimum of 12m separation. Cannot be carried within the same warehouse or compartment under the deck.

“4”: **“With an intervening full compartment or warehouse vertically separated from....”:** Can be carried on deck with a minimum of 24m horizontal distance. In the case of under the deck carrying another warehouse must be additionally be between dangerous goods lengthways. (fore to aft)

For “X” and “*” stacking conditions within the framework of Special decrees in IMDG Code and Dangerous Cargo List

Dangerous cargoes that are in different transport units or packages within harbor reach will be stacked according to the distances in the following segregation chart.



Segregation Table For Harbour Reach Legend

SEGREGATION TABLE FOR DANGEROUS GOODS IN PORT AREAS

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

1. For Packages/ IBCs/Trailers/ Flat or Platform Containers

0 = No need for segregation (Unless stated otherwise in special decrees)

A = “Apart by...” – minimum 3m distance

S = “Apart by...” – for open areas >6m, for the warehouses >12m or closed areas >3m warehouses >12m. seperated by a fireproof wall

2. For close containers / mobile tanks / close road vehicle

0 = No need for segregation (Unless stated otherwise in special decrees)

A = “Apart by...” – no need for segregation (Unless stated otherwise in special decrees)

S = “Apart by...” – for open areas >3m horizontally, for the warehouses and closed areas >6m >12m. or seperated by fireproof wall

3. For open road vehicle / train coaches / hypethral containers

0 = no need for segregation (Unless stated otherwise in special decrees)

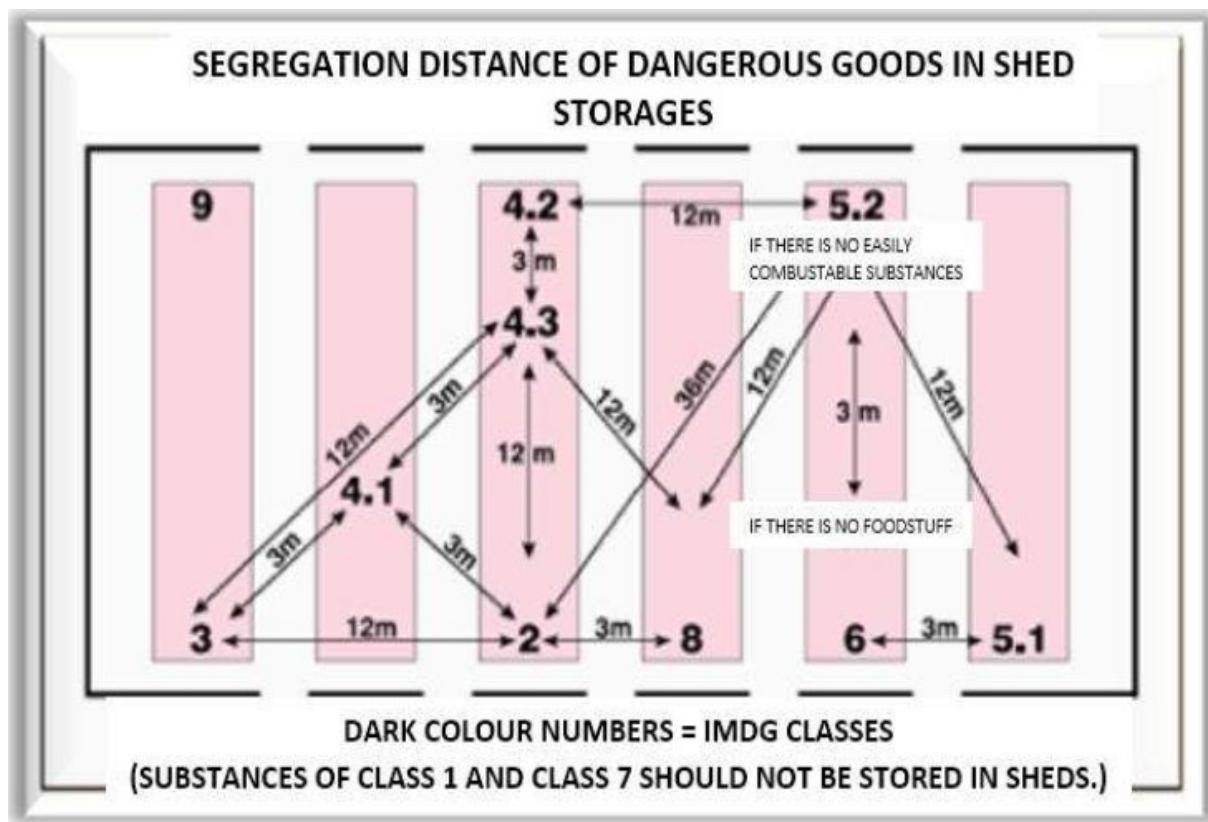
A = “Apart by...” – minimum 3m distance

S = “Apart by...” – for open areas >6m horizontally and vertically, for the warehouses and closed areas >12m or seperated by fireproof Wall.



- a) Entry permit to harbor reach for goods that belong to Class 1 (Except for 1.4S), 6.2 and 7 should only be given for through shipping and delivery by port authority. These classes are not included in the chart. However, in unforeseen instances, if these goods need to be held in harbor reach temporarily, they should be held in designated areas.
- b) For goods that carry secondary hazards, segregation need for secondary hazard should be applied if it is more restrictive. Cargo transport units that include more than one classes of dangerous cargo, the most restrictive segregation need should be applied.
- c) Dangerous cargoes that carry toxic labels or placards should be separated from food stuff and animal feed.
- d) Segregation necessities are only valid for dangerous cargo that are on storage areas of the harbor and vehicles.
- e) Except for special packages, all dangerous goods, where applicable, to make access possible, should be separated by at least 1m.

4.6 Dangerous Cargo Segregation Distances and Segregation Terms for Warehouse Storaging



4.7 IMSBC Code Cargoes Hazard Classes

IMSBC code cargoes are divided into 3 groups according to their hazard classes.

- Group A consists of cargoes that may liquefy when shipped at a moisture content exceeding transportable humidity limits.
- Group B consists of cargoes containing chemical hazards that could cause a hazardous situation on a ship.
- Group C consists of substances that are neither subject to liquefaction (group A) nor chemical hazards (group B), that is, so-called hazards.

The hazard classification table of the loads within the scope of the IMSBC Code, which is likely to be handled in our facility, is as follows;

Characteristic Table for	AMMONIUM NITRATE UN 2067	Grup B	N/A
	POTASSIUM NITRATE UN 1486	Grup B	N/A



IMSBC Code Cargoes	SULPHUR UN 1350	Grup B	N/A
	MONOAMMONIUM PHOSPHATE	Grup (B or C)	CR
	LIGNITE	Grup B	CR and /or SH WF and /or CR
	PETCOKE	Grup B	SH
	COAL	Grup (B or C)	SH
	CORN GLUTEN	Grup (B or C)	SH
	COTTON SEED	Grup (B or C)	SH
	LINSEED	Grup (B or C)	SH
	MAIZE	Grup (B or C)	SH
	SEED CAKE	Grup (B or C)	SH
	RICE BRAN		
	SEED CAKE UN 1386	Grup B	N/A
	SEED CAKE UN 2217	Grup B	N/A
	SOYBEAN	Grup (B or C)	SH
	SUNFLOWER SEED	Grup (B or C)	SH
	PELLETS	Grup (B or C)	SH
	SEED CAKES AND OTHER RESIDUES OF PROCESSED OILY VEGETABLES	Grup B	SH

Materials hazardous only in bulk (MHB)- Hazardous Substances in Bulk Only Descriptions:

Materials that, when transported in bulk, have chemical hazards other than those covered by the classification system of the IMDG Code. These materials pose a significant risk when transported in bulk and require special precautions.

A material will be classified as MHB if it has one or more of the chemical hazards defined below (excluding the hazards covered by the classification system of the IMDG Code).

A material may also be classified as MHB by analogy with similar cargoes with known hazardous properties or by accident records.

Where human experience or other factors indicate that other chemical hazards should be considered, these will always be considered, although close identification of chemical hazards is intended to establish a uniform approach to MHB classification.

For cargo classified as MHB, a notation reference will be provided in cell "MHB" of the Specifications table for each individual chart. When a material has one or more of the chemical hazards described below, the notation reference for each hazard will be included in the "MHB" cell. A summary of notation references is provided in the table below.



Chemical Hazard	Notational reference
Combustible Solids	CB
Self-Heating Solids	SH
Solids That Evolve Flammable Gas When Wet	WF
Solids That Evolve Toxic Gas When Wet	WT
Toxic Solids	TX
Corrosive Solids	CR
Other Hazards	OH

4.8 MAPROL Annex-1 and IBC Code Cargoes Hazard Classes

The products in the table in IBC Code Chapter 17 are dangerous goods within the scope of the IBC code.

All stakeholders involved in the transportation of cargo within the scope of the IBC Code use the product name and features of the cargo specified in IBC Code Sections 17 and 18 and comply with all obligations regarding the cargo. The updates regarding the loads covered by the IBC Code and named in Chapters 17 and 18 are followed by the MEPC.2 circulars published by IMO in December each year.

With the exception of asphalt products, hazardous dangerous liquid bulk cargoes with the phrase "safety-S" in the "d" column titled "hazards" of the table in Chapter 17 of the IBC Code cannot be handled as flotilla in coastal facilities. These loads can only be handled by discharging them from the ships to the tanks in the facility via pipelines and filling them to the land tankers from these tanks. The same rule applies for loading from land tankers to ships.



4.9 IGC Code Cargoes Hazard Classes

In our facility, only Ammonia UN 1005 in the form of liquefied gas is handled within the scope of the IGC code.

Ammonia ships bring cooled and liquefied ammonia to our Pier at -32°C.

The hazards of gases considered in the IGC Code include: fire, toxicity, corrosivity, reactivity, low temperature and pressure.

The outlets from the pressure relief valves located on the ship and in the plant pipeline will be arranged in such a way as to minimize the dangers to the ship and the environment.

This charge is a chemical substance with flammable-explosive properties, harmful to the respiratory tract, eyes and ears when gaseous, and caustic-decomposing for the whole body when liquid. Due to the above-mentioned characteristics of this substance, it is necessary to discharge it by the team equipped with protective material.

5. THE DANGEROUS GOODS HANDBOOK FOR THE DANGEROUS CARGOES HANDLED IN THE COASTAL FACILITY:

As provided as an example in appendix, a “Dangerous Goods Handbook” that includes classes, labels, markings and segregation principles of dangerous goods is prepared at a pocketable size and introduced to the relevant parties in order to be recognized and learned by the staff.

6. OPERATIONAL CONSIDERATIONS

6.1 Procedures for the Safe Docking, Mooring, Loading/Discharging, Shelter or Anchorage of Ships Carrying Dangerous Goods Day and Night:

- Ships carrying Dangerous Goods will be berthed to the piers with Pilots and Tugboats as specified in the Port Regulation.
- The Pilot will be informed about the dangerous cargoes on the ship before the maneuver.
- The Maritime Pilot safely berths the vessel, which has been notified for berthing, to the desired pier at the desired time by using a number of tugboats in accordance with the regulations. The Pilot keeps the berthing speed and berthing angle of the ship within the limits of the regulation during berthing operations.
- Docking will be planned following the lifting of the ship in risky situations, taking into account the position of the ship carrying dangerous cargo.



- In case the Ship's Master's practice regarding the mooring of the ships is not deemed safe for the port, the Ship's Master will be requested to tie the ship with additional ropes.
- In cases where conditions such as unfavorable weather conditions, currents and winds are considered to make loading/unloading unsafe, measures will be taken such as stopping the activity or even lifting the ships to anchor.
- Anchorage areas for ships carrying Dangerous Goods; If possible, a separate anchorage area is determined for ships carrying dangerous goods, which is stated in the 19th article of the Ports Regulation and this place is cleared from other ships. Ships and marine vessels carrying dangerous goods cannot leave the area allocated to them, anchor, dock and dock without the permission of the Port Authority. '

Ships Carrying Dangerous Goods -1	36° 49' 06" K	035° 57' 00" D
	36° 47' 00" K	035° 58' 48" D
	36° 47' 00" K	036° 01' 12" D
	36° 51' 12" K	036° 01' 12" D
	36° 51' 48" K	036° 59' 12" K
Pilot Station	36° 52' 30" K	035° 58' 48" D

Ships Not Carrying Dangerous Goods -2	36° 49' 30" K	035° 54' 42" D
	36° 49' 30" K	035° 55' 17" D
	36° 48' 30" K	035° 54' 24" D
	36° 48' 30" K	035° 53' 50" D
Pilot Station	36° 51' 21" K	035° 57' 18" D
Ships Not Carrying Dangerous Goods -3	36° 52' 18" K	035° 59' 18" D
	36° 51' 42" K	036° 01' 36" D
	36° 52' 48" K	036° 02' 18" D
	36° 53' 30" K	036° 00' 06" D
Pilot Station	36° 50' 18" K	036° 56' 24" D



Ships Not Carrying Dangerous Goods -4	36° 46' 00" K	035° 52' 00" D
	36° 46' 00" K	036° 53' 12" D
	36° 47' 36" K	035° 54' 30" D
	36° 47' 36" K	035° 53' 24" D
Pilot Station	36° 47' 00" K	035° 56' 00" D

6.2 Procedures Regarding Additional Measures to be Taken According to Seasonal Conditions for the Harvest and Discharge of Dangerous Goods

- Seasonal conditions must be taken into account in the loading / unloading of dangerous goods. Handling of flammable, explosive, explosive loads should be postponed or stopped for a while in extremely hot, extremely cold, extremely rainy weather, poor visibility, lightning and electrically charged weather.
- It should be planned to continue loading / evacuation in unfavorable conditions or to keep fire, fire brigade, fire extinguisher tugboats and emergency response teams in conditions that can intervene in a short time in a possible undesired situation.
- In case of continuity of similar conditions, the selection of the personnel working from the experienced personnel, the frequent planning of the rest periods in extremely intense works, the increase of the lighting, etc. measures should be taken.

6.3 Procedures on Keeping Flammable, Flammable and Explosive Substances Away from Operations That Create/May Create Sparks, and Not Operating Vehicles, Equipment or Tools that Generate/Create Sparks in Dangerous Goods Handling, Stacking and Storage Areas:

In dangerous cargo areas, handling dangerous goods, especially working with flammable, combustible and explosive materials;

- Not doing hot works (welding, cutting, etc.), working under control by taking technical safety measures when necessary,
- Using ex proof (non-sparking) hand tools,
- Working with experienced personnel,
- Informing the relevant units before the study,
- Informing the personnel who will work in the field,



- Making measurements of toxic, suffocating gases and sufficient oxygen, especially in indoor works, and keeping the measuring devices ready for use,
- Keeping protective measures such as water curtain, protective separation, mechanical ventilation and equipment ready for use,
- Ensuring that the personnel who will do this type of hot work (HOT WORK) work with protective clothing and equipment and, if necessary, closed circuit breathing apparatus.
- In such works, it should be ensured that emergency teams are assigned to intervene in a possible undesirable situation in a short time.
- In addition, it should be ensured that the requirements specified in ANNEX-10 of the "Directive on the Issuance of Dangerous Cargo Conformity Certificate" are fulfilled. "SEC-GM-PR-029_0 HOT WORKING PROCEDURE" of our facility is as in ANNEX-18.

6.4 Procedures for Gas Measurement and Degassing Works and Operations

Fumigation and degassing works and processes are not carried out in our port facility.

- Unauthorized persons should not be allowed to enter all parts of fumigated ships, warehouses or cargo transport units without determining that they are gas-free, removing the fumigation warning signs and issuing the responsible personnel entry permit.
- Opening of fumigated CTU or bulk cargoes must be performed by qualified personnel with appropriate documentation issued by national or local regulatory agencies.

6.5 Rules to be followed on the Ship Loading/Discharging Dangerous Goods:

Ships berthed at the pier and quay are obliged to take all necessary precautions in terms of fire, marine pollution, life and property safety, and are responsible to Iskenderun Port Authority and Toros Terminal Directorate in these matters.

If the port is polluted as a result of the fault or negligence of both the technical staff and the ship personnel, the polluter is punished by the Iskenderun Port Authority in accordance with the regulations.

All board and deck holes will be covered in order to prevent solid and liquid material spilling from the hull and deck of the ship against the sea.



Garbage, rubble, ballast, garbage and similar materials cannot be thrown into the sea inside and outside the port border. Ballast, sea-polluting goods and similar substances cannot be pressed, poured, tanks and bilges can be washed.

Damaged, leaking, moisture-affected, defective packaging should not be accepted for shipment.

Smoking, use of fire or spark-producing tools is prohibited on the cargo deck and points of berthed ships carrying dangerous goods and in coastal storage areas of dangerous goods.

Before entering a port area, the captains of the ships with dangerous goods,

- Should learn the legal requirements regarding the ships carrying or handling dangerous goods in the port area and ensure that their crews learn as well.

- Check the condition of the ship, its machinery, equipment and instruments as necessary;

As far as possible, dangerous goods and their enclosures should be checked for damage or leaks.

- In case of a defect or deficiency that may endanger life, property or environmental safety in the ship, its machinery, equipment or tools, or in case of cargo damage or leakage that may pose a similar danger, or a failure of the containment system, the port authority must be informed.

Each person or persons responsible for loading and unloading,

a. They will act in accordance with the warnings and recommendations given by the captain or officers,

b. They shall refrain from smoking anywhere on board except where the captain deems appropriate.

c. Behaviors that will spark sparks anywhere on the ship will be avoided or allowed, except where the captain deems appropriate,

D. Welding shall not be done except where the captain deems appropriate.

Entry-Exit Between Ship and Shore:

In accordance with the provision of the Regulation on the Transport of Dangerous Goods by Sea, the Port Operator Institution "Ensures that the entry-exit system between the ship and the shore is appropriate and safe";



There is a strong communication between the ships docking at the port berths and the coastal facility. Ring transportation service is provided for the transfer of ship personnel from the docks to the main port gate.

- a. It is forbidden for the ship personnel to walk in the port area, and this is indicated by the signs hung in certain parts of the berths. There are designated and marked pedestrian walkways for port personnel.
- b. The ship's side pier will be used for the ship's quay passage.
- c. Sufficient lighting is available at the berths to ensure that the vessels berthed at the coastal facility are adequately illuminated.
- d. The general site plan of the port has been hung in the necessary places to. Entry and exit of ships going to or coming from foreign ports is subject to the permission of the Customs and Security Authorities.

7. DOCUMENTATION, CONTROLLING AND RECORDING:

7.1 All Mandatory Documents, Information and Documents Related to Dangerous Goods, Procedures for their Supply and Control by the Related Persons

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

- o Current Volume 1, Volume 2 and Supplementary publications of the IMDG Code
- o IMSBC Code, BLU Code and BLU Manual publications
- o IBC Code, IGC Code, MARPOL Annexes I and II and ISGOTT publications

In order for the Coastal Facility to safely handle the dangerous goods coming to the facility and to take appropriate precautions, the documents sent beforehand are absolutely needed.

These documents are:

Dangerous Cargo Notification Document

The shipping documents prepared by the shipper will include a "Signed Certificate or Dangerous Goods Notification Document" stating that the shipment to be transported is properly packaged, marked, labeled and in suitable conditions for shipment.

At least twenty-four hours before the ship and sea vehicle carrying dangerous goods enter the port administrative area; Ships and marine vessels with a cruise time of less than



twenty-four hours until they enter the port area submit a notification document containing detailed information about their cargo to the port authority in writing, right after their departure from the coastal facility.

The cargo person has to notify the coastal facility at least 3 hours before entering the coastal facility regarding the dangerous goods coming by road and rail.

In case the notification obligation is not complied with or the notifications do not contain correct information, administrative action may be taken against the notifier and he may lose the order of approaching, departing, or passing, if any.

Dangerous Cargo Notification Document can be provided to the carrier by EDP (Electronic Information Processing) or EDI (Electronic Information Exchange) techniques.

Documents Required on Board

Each ship carrying dangerous goods and marine pollutants shall have a specific list, manifest or loading plan with the names and locations of the dangerous goods and marine pollutants. This particular list and manifest will be based on the documents and certificates required in the IMSBC Code.

A detailed cargo plan, determined by class and showing the locations of all dangerous goods and marine pollutants, can be used instead of this special list or manifest.

For dangerous goods shipments; Appropriate information will be at hand at any time to be used in the emergency response to all kinds of accidents and incidents related to dangerous goods during transportation. This information will be far from packages containing dangerous goods and will be available immediately in case of an event. Information to be used in emergency response will be found in the following documents.

- Within the special list, manifest or dangerous goods declaration,
- In a separate document such as a safety data sheet,
- In separate documents, such as the Medical First Aid Guide (MFAG) for Use in Accidents Involving Dangerous Goods and the “Emergency Response Methods for Ships Carrying Dangerous Goods (EMS Guide)” to be used in conjunction with the transport document.

Other Required Documents and Information

In certain cases, the following special certificates or documents will be required.



- An air abrasion certificate as required for certain entries in the Dangerous Goods List.
- Substance, material or object; A certificate excluding IMDG provisions (see separate entries for charcoal, fish meal, seed meal, etc.);
- For new self-reactive substances and organic peroxides or new formulations of currently assigned self-reactive substances and organic peroxides, a notification by the competent authority of the country of origin on the approved classification and transport conditions.

Multi Model Dangerous Cargo Form

Multi-Mode Dangerous Goods Form is a form that can be used as a combined dangerous goods declaration and container packaging certificate regarding the transportation of dangerous goods in more than one mode.

An example of the Multimodal Hazardous Substances Form is as in Annex-18.

7.2. All Mandatory Documents, Information and Documents Related to Dangerous Goods, Procedures for their Supply and Control by the Related Persons

When requested, the port facility is obliged to provide information about the class, quantity, emergency response methods and locations of all dangerous cargoes available at the port facility when requested.

The records of dangerous goods handled at our port will be kept by the operations department, including the following information.

- UN Number,
- PSN name (Proper Post Name),
- Class (with sub-hazards),
- Packing Group (Class 3, 4.1, 4.2, 4.3, 5.1, 6.1, 8, 9),
- Whether it is a Marine Pollutant,
- Buyer,
- Shipper,
- Container / Packaging, its number,
- Seal number,
- Additional Information (Ignition degree, viscosity, etc.),
- Where it is stored in the Port Area,



- Length of stay at the port,

7.3 Indicating that the Dangerous Goods Arriving at the Facility are Properly Defined, the Correct Shipping Names of the Dangerous Goods are Used, Certified, Packed/Packed, Labeled and Declared, Loaded and Transported Safely to the Approved and Proper Package, Container or Cargo Transport Unit, Control and Control Results Reporting Procedures

The terminal operation unit checks the accuracy of the following information on the dangerous goods documents issued by the sender of the dangerous goods to be accepted into the port in coordination with the operation;

- UN Number,
- PSN name (Proper Post Name),
- Class (Class 3, 4.1, 4.2, 4.3, 5.1, 6.1, 8, 9, with sub-hazards),
- Packing Group(I, II, III),
- IMSBC Code characteristic group (A & B & C)
- IBC Code S/P group
- Material safety data sheet (SDS) content
- Whether it is a Marine Pollutant,
- Additional Information (Ignition degree, viscosity, etc.)

This information is transmitted to the Shift Supervisors, Chief Controllers, HSE unit and the personnel who need to know, through the terminals/documents, and the control of the incoming dangerous cargo is ensured.

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

This information is kept in a computer environment or in a file order so that only authorized personnel can access it and is displayed when requested.

The port facility keeps up-to-date the class and quantity information of the dangerous goods it handles throughout the year.



In our facility, after the first production of all kinds of tools, equipment and equipment used in the handling and stacking of dangerous goods, the maintenance and attitude procedures are carried out and the operations are recorded.

In a predetermined period in our facility, the machinery and equipment parts are regularly reviewed, all the equipment on the equipment are reviewed, and the detected malfunctions and the parts that are likely to malfunction, as well as the monthly / 3-monthly / 6-monthly / 12-month protective equipment for certain periods in order to comply with legal inspection and conditions maintenance is done and the maintenance is registered in the Infor system. These registered maintenances are followed by the BKM-C-PR-002 "Preventive Maintenance Procedure" within the integrated management system.

7.4 Procedures for Supply and Keeping of Dangerous Goods Safety Data Sheet (MSDS):

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

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

For all dangerous goods to be accepted into the port, it is checked that the safety data sheet (MSDS) is present with dangerous goods.

7.5 Procedures for Keeping Records and Statistics of Dangerous Goods:

A report containing information about the dangerous goods handled in our Port Facility will be reported to the Port Authority by TMGD in quarterly periods.

Statistical evaluations from the records of the dangerous cargo handled annually in our port are made by the operations department.



The monthly count and control reports of dangerous goods stored in our port area are prepared by the operation department and presented to the management. Records and reports are archived annually by the departments.

The port facility, shipper and carriers where dangerous goods are handled are obliged to keep and keep a copy of the dangerous goods transport document and the additional information mentioned in the IMDG Code for at least 3 months.

7.6 Notification of Dangerous Goods Incidents

Dangerous Goods Incidents Notification Form attached to the Port Authority is required for all kinds of dangerous goods-related incidents in the port area that may cause damage to persons, the ship or ships in the port, the port or any property or the environment. should report as soon as possible.

In this context;

Port operating organization,

- a. It shall immediately notify the Harbor Master and emergency fighters in case of any risk of dangerous goods spillage or fire hazards and incidents occurring in its area of responsibility.
- b. Statistics of dangerous cargo accidents are kept, cargo accidents are discussed in the port operation Occupational Health and Safety Sub-Committees. The root cause of the accidents is investigated and the necessary precautions are taken to prevent recurrence.
- c. It notifies the dangerous cargo accident statistics to the Port Authority in periods to be determined by the Ministry.

The necessary safety measures for dangerous goods that do not comply with the rules, are unsafe or pose a risk to persons or the environment are taken by the port operator and notified to the Port Authority.

7.7 Surveillance and Routine Controls of Dangerous Goods Stacker:

- The following regular and unannounced controls are carried out for dangerous goods in the dangerous cargo storage area and warehouses for leakage, damage to the packaging, deterioration, temperature changes and similar issues.

- Refrigerated containers containing dangerous goods should be checked at intervals not exceeding 2 hours to ensure that the set temperature is maintained.



- Routine checks should be made to be prepared for any signs of deterioration in stacked or stored dangerous goods to eliminate any possible source of fire, leakage or other problems. Leaking packaging should only be handled under the supervision of responsible personnel.

- For loads with self-heating properties, temperature and humidity measurements should be made at certain intervals.

- If this cargo container is opened by a person authorized to inspect its contents, it must be ensured that the person concerned is aware of the possible dangers arising from the presence of dangerous cargoes.

- It should be checked whether the segregation rules are complied with in the hazardous cargo storage area.

- Dangerous cargo storage area is under the surveillance of security personnel with 24/7 cameras and patrol tours.

- As a general rule, everyone in the port is responsible for being cautious and doing their best to prevent accidents caused by dangerous goods.

- The areas where dangerous goods are stored and handled will be well illuminated.

7.8 Notification of Dangerous Goods Transport Units Control Results:

In accordance with the IMO's circular numbered MSC.1/Circ.1442 and the articles of the Dangerous Goods and Combined Transport Regulation Gn.D.D. dated 04.03.2013 and numbered 80063613/115.01.1099; Necessary inspections regarding the compliance of the Cargo Transport Units (CTUs) containing cargo subject to the IMDG Code with the IMDG code will be made by the port facilities where packaged dangerous goods are handled, and the Port Authorities to which the coastal facility is affiliated will be notified at the end of the quarterly period.

8. EMERGENCIES, PREPARING FOR AND RESPONDING TO EMERGENCIES

Dangerous goods arriving, handled, stored, loaded and evacuated to the coastal facility create unique hazards such as explosion, fire, corrosion, poisoning, infectious disease, and radiation. For this reason, the types of emergencies that the coastal facility will encounter are many. In order to deal with these hazards, it is extremely important to develop, publish and implement an Emergency Action Plan in cooperation with local emergency teams.

Definitions:

Accident: An undesirable event that causes death, illness, injury, damage or other loss.



Fire: It is the uncontrolled burning of solid, liquid or gaseous flammable materials by taking heat.

Earthquake: It is the displacement movements that occur as a result of the sudden discharge of the deformation energy accumulated on the fault.

Leakage – Spill: It is the discharge of harmful substances that may directly or indirectly harm human health and the environment by leaking or spilling from a container.

First Aid: It is the non-medical, temporary intervention at the scene of a person who is in a dangerous situation for any reason, gets sick or has an accident, to prevent his condition from getting worse.

Sabotage: It is a form of aggressive destructive activity aimed at the destruction of workplaces with the aim of temporarily inactivating them.

Emergency Response Guide: EmS Guide referenced document in the IMDG Code annex on how to respond to emergency situations involving dangerous substances.

Medical First Aid Guide: A document with reference to the Medical First Aid Guide for Use in Accidents Involving Dangerous Goods (MFAG) in the annex of the IMDG Code for health problems caused by accidents caused by dangerous substances.

The following points will be taken into account in the formation of the emergency strategy at the coastal facility.

- Prevention of Accidents
- Preparation of Emergency Action Plan
- Implementation and Practice of Emergency Procedures
- Regular Checking of Emergency Equipment
- Implementation of the Plan when an Emergency Occurs
- Thoroughly analyze and report the incident to prevent recurrence

8.1 Intervention Procedures for Hazardous Substances or Hazardous Situations Mixed with Hazardous Substances that Create/Can Create Risk to Life, Property and/or Environment:

Responding to dangerous substances in our facility that pose/may pose a risk to life, property and/or the environment and to dangerous situations involving dangerous substances will be carried out in accordance with the Appendix-7 Emergency and Response Plan prepared by our facility.



In case of accidents involving dangerous substances at the port facility, the Medical First Aid Guide (MFAG: Medical First Aid Guide) attached to the IMDG code will be used.

8.2 Information on the Possibility, Capability and Capacity of the Coastal Facility to Respond to Emergency Situations

MALZEMENİN CİNSİ	ADET	BULUNDUĞU YER
SEYYAR KÖPÜK TOPU	1	TERMİNAL 36 GÜNEYİ
SEYYAR KÖPÜK TOPU	1	AMONYAK SAHASI
SABİT KÖPÜK TOPU	1	İŞKELE 2
SABİT KÖPÜK TOPU	1	TANK 34 -37 BATISI
DENİZ SUYU YANGIN POMPASI	1	İŞKELE 3 GÜNEYİ
SPRING SİSTEMİ	5	1-5 GRUBU
SPRING SİSTEMİ	6	9-14 GRUBU
SPRING SİSTEMİ	9	15-25 GRUBU
SPRING SİSTEMİ	2	26-27 GRUBU
SPRING SİSTEMİ	6	28-33 GRUBU
SPRING SİSTEMİ	3	34-36 GRUBU
SPRING SİSTEMİ	3	37-39 GRUBU
SPRING SİSTEMİ	1	AMONYAK 201
HORTUM 2.5"	8	PİKAP
HORTUM 2.5"	5	İSG ÜNİTESİ
HORTUM 1.5"	8	PİKAP
HORTUM 1.5"	6	İSG ÜNİTESİ
WAY GET	5	(PİKAP+İSG ÜNİTESİ)
HORTUM SEYYAR KÖPÜK SİSTEMİ 2.5"	2	TERMİNAL SAHA TUVALETİ (KUZEY)
HORTUM SEYYAR KÖPÜK SİSTEMİ 2.5"	2	TERMİNAL OFİSİ GÜNEYİ
NOZUL 2.5"	1	TERMİNAL SAHA TUVALETİ (KUZEY)
KÖPÜK YAPICI	1	TERMİNAL SAHA TUVALETİ (KUZEY)
KÖPÜK YAPICI	1	TERMİNAL OFİSİ GÜNEYİ
KÖPÜK YAPICI	2	İSG ÜNİTESİ
KÖPÜK YAPICI	1	PİKAP
LANS	1	TERMİNAL SAHA TUVALETİ (KUZEY)
LANS	1	TERMİNAL OFİSİ GÜNEYİ
LANS	4	İSG ÜNİTESİ
LANS	1	PİKAP



NOZUL 2,5"	6	PİKAP
NOZUL 1,5"	5	PİKAP
NOZUL 1,5"	4	İSG ÜNİTESİ
NOZUL 1"	1	İSG ÜNİTESİ
MAKARALI HORTUMLAR 1"	3	İSKELE 1
MAKARALI HORTMLAR 1"	8	TERMİNAL 34-39 ÇEVRESİ
MAKARALI HORTUMLAR 1"	1	TERMİNAL 9-14 ÇEVRESİ
MAKARALI HORTUMLAR 1"	2	TERMİNAL 15-23 ÇEVRESİ
MAKARALI HORTUMLAR 1"	1	TERMİNAL 26-27 ÇEVRESİ
MAKARALI HORTUMLAR 1"	1	TERMİNAL 28-33 ÇEVRESİ
MAKARALI HORTMLAR 1"	2	TERMİNAL OFİS GÜNEYİ
MAKARALI HORTMLAR 1"	1	MALZEME AMBARI ÖNÜ
MAKARALI HORTUM 1"	1	İSKELE 6
TEKERLİ MAKARALI HORTUMLAR 1"	1	SOSYAL TESİSLER (ÖZEL MİSAFİRHANE)
TEKERLİ MAKARALI HORTUMLAR 1,5"	34 BOY AV	SOSYAL TESİSLER (KULÜP DOĞUSU)
TEKERLİ MAKARALI HORTUMLAR 1,5"	1	İSG ÜNİTESİ ÖNÜ
MAKARALI HORTUMLAR 1"	1	KONTROL PERONU
MAKARALI HORTUMLAR 1"+1,5"	2	TERMİNAL 01-05 ÇEVRESİ
MAKARALI HORTUMLAR 1,5"	1	TERMİNAL 01-05 ÇEVRESİ
KÖPÜK VARİLİ	200 LT	TANK 34 BATISI
KÖPÜK VARİLİ	400 LT	01-05 KUZEY DOĞU
KÖPÜK VARİLİ	200 LT	İSKELE 1
KÖPÜK VARİLİ	400 LT	T.36 GÜNEYİ
KÖPÜK VARİLİ	1800 LT	TK 25 KUZEYİ
KÖPÜK VARİLİ	400 LT	TK 01-05 DOĞUSU
KÖPÜK VARİLİ	1600 LT	TK 25 KUZEYİ YENİ KÖPÜK
KÖPÜK VARİLİ	400 LT	TERMİNAL SAHA TUVALETİ (KUZEY)
KÖPÜK VARİLİ	400 LT	TERMİNAL OFİSİ GÜNEYİ
KÖPÜK VARİLİ	200 LT	TERMİNAL OFİSİ GÜNEYİ
NOZUL	2	ARAZÖZ
HORTUM (KETEN) 2,5"	7+3	ARAZÖZ
HORTUM (KETEN) 1,5"	6	ARAZÖZ
ACİL MÜDAHALE HORTUMU 1"	55metre	ARAZÖZ
KÖPÜK	500 LT	ARAZÖZ



KÖPÜK YAPICI	1	ARAZÖZ
KÖPÜK LANSI	1	ARAZÖZ
SEYYAR MERDİVEN	9m	ARAZÖZ
SABİT KÖPÜK SİSTEMİ (500 LT)	1	İŞKEL 1
SABİT KÖPÜK SİSTEMİ (4000 LT)	1	TANK 01-05 BATISI
SABİT KÖPÜK SİSTEMİ (1000 LT)	1	TANK 28-33 GÜNEYİ
SABİT KÖPÜK SİSTEMİ (3000 LT)	1	TANK 25 KUZEYİ
SABİT KÖPÜK SİSTEMİ (2000 LT)	1	TANK 26-27 BATISI
SABİT KÖPÜK SİSTEMİ (3000 LT)	3	TANK 34 BATISI
DRAGER X-AM 3000 GAZ ÖLÇÜM CİHAZI	1	İSG ÜNİTESİ
DRAGER X-AM 3000 GAZ ÖLÇÜM CİHAZI	1	İŞKEL 1
DRAGER X-AM 3000 GAZ ÖLÇÜM CİHAZI	1	TERMİNAL
DRAGER X-AM 3000 GAZ ÖLÇÜM CİHAZI	1	TERMİNAL
HONEYWELL ÇOKLU GAZ ÖLÇÜM CİHAZI	1	İSG ÜNİTESİ
HONEYWELL AMONYAK GAZ ÖLÇÜM CİHAZI	1	İSG ÜNİTESİ
HONEYWELL AMONYAK GAZ ÖLÇÜM CİHAZI	1	İSG ÜNİTESİ
TEMİZ HAVA TÜPÜ (Cihaz Komple)	1	İSG ÜNİTESİ
TEMİZ HAVA TÜPÜ (Cihaz Komple)	1	ARAZÖZ
TEMİZ HAVA TÜPÜ (Cihaz Komple)	1	İŞKEL 1
TEMİZ HAVA TÜPÜ (Cihaz Komple)	1	AMONYAK ÜNİTESİ
KİMYASAL KORUYUCU ELBİSE	1	AMONYAK ÜNİTESİ
KİMYASAL KORUYUCU ELBİSE	1	İŞKEL 1
YANGIN ELBİSESİ	4	İSG ÜNİTESİ
YANGIN ELBİSESİ	2	ARAZÖZ

The personnel in charge of hazardous material handling in our facility are experienced personnel who have received all necessary training. We act in accordance with the safety data sheet and international contract codes against leakage and spillage. Marine pollution due to leakage or spillage According to Law No. 5312, communication is provided with the company with which an agreement has been made against marine pollution.

8.3 Arrangements Regarding First Response to Accidents Involving Dangerous Goods

Accidents caused by dangerous substances in our port facility;



- Fire
- Ammonia Gas Leakage
- Natural disasters
- Ship Fire at Sea
- Spread of Liquid Products
- Sabotage
- Explosion

As stated in the Emergency and Response Plan.

It is a document describing the applications to be made in an emergency (fire, leakage, spillage, spillover, conflict at sea, patient rescue, power cut) related to the loads handled at the facility. All information on how to use the guide prepared based on the IMDG Code EmS Guide is available in the Emergency Plan Section.1 Emergency Procedure.

The sections of the IMDG Code EmS Guide, which includes the intervention requirements for emergencies that may arise from the dangerous goods handled at the facility, are given below. It is specified which parts to look at in the cargoes covered by the IMSBC code.

Dangerous Goods	UN NO	EmS Guide	
		Fire	Spills
CONDENSATE	UN 1268	F-E	S-E
FUEL OIL	UN 3082	F-A	S-F
JET A-1 (KEROSEN)	UN 1863	F-E	S-E
UNLEADED GASOLINE	UN 1203	F-E	S-E
CRUDE OIL	UN 1267	F-E	S-E
BITUMEN	UN 3257	F-A	S-P
DIESEL	UN 1202	F-E	S-E
PHOSPHORIC ACID	UN 1805	F-A	S-B
FORMIC ACID	UN 1779	F-E	S-C
VINYL ACETATE MONOMER (VAM)	UN 1301	F-E	S-D
STYRENE MONOMER	UN 2055	F-E	S-D
ACETIC ACID	UN 2789	F-E	S-C
NAOH (CAUSTIC)	UN 1824	F-A	S-B
2-ETHYL HEXANOL (2EH)	UN 2282	F-E	S-D
ETHYL ACETATE	UN 1173	F-E	S-D
SULFURIC ACID	UN 1830	F-A	S-B
BUTYL ACRYLATE	UN 2348	F-E	S-D
METHANOL	UN 1230	F-E	S-D



ISOPROPYL ALCOHOL	UN 1219	F-E	S-D
ETHANOL	UN 1170	F-E	S-D
METHYL METAACRYLATE	UN 1247	F-E	S-D
PARAXYLENE	UN 1307	F-E	S-D
DOWANOL PM	UN 3092	F-E	S-D
METHYLENCHLORIDE (DICHLOROMETHANE)	UN 1593	F-A	S-A
AMMONIA	UN 1005	F-C	S-U
POTASSIUM NITRATE	UN 1486	F-A	S-Q
AMMONIUM NITRATE	UN 2067	F-H	S-Q
SULFUR	UN 1350	F-A	S-G
SEED MEAL	UN 1386	F-A	S-J
SEED MEAL	UN 2217	F-A	S-J
IMSBC Kod Kapsamındaki Tehlikeli Yükler			
AMMONIUM NITRATE FLOUR 2067	Grup B	Respond to fire according to IMSBC Code Annex-1	
POTASSIUM NITRATE UN 1486	Grup B	Respond to fire according to IMSBC Code Annex-1	
SULFUR FLOUR 1350	Grup B	Respond to fire according to IMSBC Code Annex-1	
MONOAMONIUM PHOSPHATE (M.A.P)	Grup (B or C)	Respond to fire according to IMSBC Code Annex-1	
LIGNITE	Grup B	Respond to fire according to IMSBC Code Annex-1	
PETROKOK	Grup B	Respond to fire according to IMSBC Code Annex-1	
CORN GLUTEN	Grup (B or C)	Respond to fire according to IMSBC Code Annex-1	
COTTON SEED	Grup (B or C)	Respond to fire according to IMSBC Code Annex-1	
FLAXSEED	Grup (B or C)	Respond to fire according to IMSBC Code Annex-1	
CORN	Grup (B or C)	Respond to fire according to IMSBC Code Annex-1	
PULP	Grup (B or C)	Respond to fire according to IMSBC Code Annex-1	
RICE BRAN	Grup (B or C)	Respond to fire according to IMSBC Code Annex-1	
SEED MEAL UN 1386	Grup B	Respond to fire according to IMSBC Code Annex-1	
SEED MEAL UN 2217	Grup B	Respond to fire according to IMSBC Code Annex-1	
SOYBEAN	Grup (B or C)	Respond to fire according to IMSBC Code Annex-1	
SUNFLOWER SEED	Grup (B or C)	Respond to fire according to IMSBC Code Annex-1	
PELLETS, GRAINS	Grup (B or C)	Respond to fire according to IMSBC Code Annex-1	
SEED MEALS (Seed Meals and other residues of processed oily vegetables)	Grup B	Respond to fire according to IMSBC Code Annex-1	

MFAG Intervention and Diagnostic Charts:



MFAG Tables contain additional information for special cases, and information about the tables:

- Table 1: Recovery
- Table 2: Cardiopulmonary Resuscitation (CPR)
- Table 3: Oxygen Administration and Controlled Ventilation
- Table 4: Chemical-Induced Disorder of Consciousness
- Table 5: Chemical-Induced Remittance
- Table 6: Toxic Mind Blurring
- Table 7: Eye Exposure to Chemicals
- Table 8: Skin Exposure to Chemicals
- Table 9: Inhalation of Chemicals
- Table 10: Oral Ingestion of Chemicals
- Table 11: Shock
- Table 12: Acute Renal Failure
- Table 13: Pain Relief
- Table 14: Chemical-Induced Bleeding
- Table 15: Chemical-Induced Jaundice
- Table 16: Hydrofluoric Acid and Hydrogen Fluorite
- Table 17: Organophosphate and Carbamate Insecticide
- Table 18: Cyanide
- Table 19: Methanol and Ethylene Glycol
- Table 20: Radioactive Substances

The appendices provide detailed information about drugs and chemicals that may be exposed.

- Appendix 1: Recovery
- Appendix 2: Cardiopulmonary Resuscitation (CPR)
- Appendix 3: Oxygen Administration and Controlled Ventilation



- Appendix 4: Chemical-Induced Disorder of Consciousness
- Appendix 5: Chemical-Induced Remittance
- Appendix 6: Toxic Mind Blur
- Appendix 7: Eye Exposure to Chemicals
- Appendix 8: Skin Exposure to Chemicals
- Appendix 9: Inhalation of Chemicals
- Appendix 10: Oral Ingestion of Chemicals
- Appendix 11: Shock
- Appendix 12: Acute Renal Failure
- Appendix 13: Pain Relief
- Appendix 14: Medication List and Equipment
- Appendix 15: List of Substances

Locations and Contents of First Aid Supplies in the Facility

In case of emergencies or accidents caused by hazardous materials in our Port Facility, first aid materials to be used for intervention are available at the offices and docks. In our facility, full-fledged infirmary service and emergency response ambulance also provide service with 24/7 working principle.

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

According to the order of the senior supervisor, the personnel specified below will be assigned to carry out duties such as ensuring that only the personnel who will take part in the fight against the emergency enter the premises, acting as the chief of public and press affairs, and announcing the information allowed to be published only by the Deputy General Manager - In addition, communication is provided by the Operations Terminal Manager and Production Manager when technical details are required in verbal and written meetings to be held with official institutions.



Flow Chart of Notifications to be Made in Emergency Situations and Points to be

Done:

Notification Procedure to be Followed in the Event of an Accident Containing Dangerous Goods;

- The person who notices the accident immediately notifies the Terminal Manager of the incident.
- Terminal Manager stops all operations in the vicinity.
- The Terminal Manager immediately goes to the scene of the incident to check the notification/notice, evaluate the situation and report (or confirm) the necessary information.
 - Whether anyone is injured, injured or contaminated with substances, On the ship, on the dock, etc. exact scene of crime, container number of the vehicle or other information identifying the cargo lot, IMDG class and other details on the packaging or container (eg UN Number), Identification of any leaks or spills; quantity, colour, structure, odour, smoke, etc. Such cases are determined immediately by the person concerned.
 - Terminal Manager, by checking the notifications about dangerous goods, finds out which dangerous goods are present and what kind of danger the cargo contains.
 - A ready-to-use computer printout (or photocopy) in case local emergency services are called.
- The Terminal Manager reports the incident to the Assistant General Manager of the Facility.
- If the Terminal Manager reports that the incident is serious, he takes everyone out of the area and secures the area with the instruction from the Facility Assistant General Manager.
 - Security measures are taken in the field within the scope of emergency plans.
 - By implementing the Port Operation Emergency and Response Plan; Emergency fire, ambulance, first aid, security and other systems are now activated.



- If the port's own emergency teams need to respond to the accident, they are provided with protective clothing and emergency vehicles from the nearest area to do so without putting themselves at risk.
- The accident may be intervened by the port management team(s) at the accident site, or due to the danger, the teams may need to transport the cargo and/or injured persons from the accident site to a safe area as quickly as possible.
- If the accident is serious, the Terminal Manager calls the local emergency services teams using the system agreed with the Facility Assistant General Manager and giving clear details.
 - Emergency,
 - Reporting point where a guide will meet the teams,
 - Dangerous IMDG class(es) found,
 - The found dangerous substance(s) are detected in no time.
- When emergency services teams arrive at the agreed point, they are given a printout or photocopy of the IMDG data and escorted to the accident site.
- Then the emergency services deal with the accident and make the area safe.
- In the meantime, the Terminal Manager gets in touch with the shipper or other responsible persons, notifies them of the accident, and consults on the handling and removal of the damaged cargo.
- An expert occupational safety expert is also used as a consultant to give independent advice in the port, the relevant occupational safety expert should also be contacted and asked to go to the accident site.
- In case of lack of or insufficient first aid at the accident site, the injured person or persons should be referred to the nearest medical center or hospital in the region.
- When it is safe to do so, the damaged vehicle and packaging and/or container are immediately moved to a safe area for removal.



- (Out of the port area) In the event of a leak, the scene is cleaned and opened as appropriate, using absorbent materials, chemical foams or water.
- In case of fire, the fire is extinguished thoroughly and the crime scene is cleared.
- After the crime scene has been thoroughly inspected and declared safe, the Assistant General Manager of Facility may instruct operations to resume.

8.5 Procedures for Reporting Accidents.

Accidents/incidents related to dangerous goods in our facility will be reported to the Port Authority within 3 hours at the latest by using the VHF radio system or other communication tools. Following this notification, a written report containing the opinions regarding the accident/incident will be sent to the port authority within 24 hours at the latest. Hazardous Substance Incidents Notification Form is given in Annex-16.

8.6 Coordination, Support and Cooperation Method with Official Authorities.

The method of coordination, support and cooperation with official authorities is the same as in the Emergency Action Plan.

8.7 Emergency Evacuation Plan for Emergency Removal of Ships and Marine Vehicles from Shore Facility.

- Ships berthed at our port have to sail from their pier in case of a fire originating from the ship or the coast.
- Uzmar and Arpas tugboat A.Ş., which provides berthing separation services in the port (Ankaş plotaj), with towing power and number of tugboats suitable for the gross tonnage of the ship, for the unloading of the ships from the pier. will be provided by
- The situation that will require the ship to leave the Pier will be decided together by the terminal manager and the ship's captain. However, in order to prevent the ship from damaging the port and other ships in the port, the facility authorities will be able to separate the ship from the pier with the approval of the Ceyhan Regional Port Authority without seeking the consent of the ship's captain.



- Facility officials will also inform the Ceyhan Regional Port Authority about the emergency and will take additional measures to be taken in line with the instructions of the Port Authority.
- Immediately after the decision to leave the ship, Ankaş A.Ş. An announcement of the emergency will be made by informing on the VHF radio channel.
- Ankaş A.Ş. By taking the necessary measures for the emergency departure of the ship without losing time, it will send the required number of fire-equipped tugboats with the required pulling power to leave the ship with the pilot, to the Port.
- The unloading of the mooring ropes from the bollards (Ankaş plotage) during the departure of the ship from the pier will be done by Uzmar and Arpas tugboat A.Ş.
- Elements that need to approach the ship in order to untie the mooring ropes from the bollards will be protected from fire by creating water mist when necessary.
- In cases where it is necessary to interfere with the ship suspended from the pier, the ship's captain and Ankaş A.Ş. Necessary assistance will be provided by the tugboats with the mutual agreement of the authorities.
- In case of emergency other than fire, the above-mentioned actions will be taken.
- On 23.11.2021, Uzmar Uzmanlar Denizcilik Ticaret ve Sanayi Ltd.Şti. A commitment has been taken from

8.8 Procedures for Handling and Disposal of Damaged Dangerous Goods and Wastes Contaminated by Dangerous Goods

According to the "Material Safety Data Sheet (MSDS)" for each dangerous cargo to be handled in our facility, the instructions given in these forms will be followed for the handling and disposal of damaged dangerous cargoes and waste contaminated by dangerous cargoes.



8.9 Emergency Drills and Their Records

Drills

- Practice Practices; In order to be prepared for emergencies within the facility, the personnel in the emergency organization should be prepared for their duties with various drills. The drills should be carried out with the support of specialist organizations when necessary. In order to test the adequacy of the emergency plans and to be prepared for real situations, the drills will be carried out and implemented according to the worst scenarios that may occur in the facility.
- Training Scenarios; In the exercise planning, the worst scenario is foreseen as a single event or a combination of events that the port may encounter. In line with the prepared scenarios, exercises are implemented in the fastest and most effective way.

Emergency Drills to be Made in the Port of the Port Facility;

- The port should be specified in the annual training plans.
- It can be planned as a local or general intervention,
- Safety, spill etc. in exercise scenarios
- Drills can be made with or without notice.
- The drills are based on various emergency scenarios.
- The drills can be done in practice, as well as desk, seminar.
- Different time, day, season and event scenarios for each drill

Some of the Practices are as follows;

- On the blind side of the styrene monomer line on port 6, the flange connection has leaked product from the gasket. The operator, who cleaned the area before the leak, and the OHS unit that controlled it, approved the hot work in the area. After a while, the fugitive grew



and reached the area where the fireworks took place, and then a fire broke out and engulfed the area where the flange connections were. The operator notifies both by radio and by using the emergency telephone number 555.

- At 36° 50' 400" North 035° 53' 861" East Coordinates, Malta flagged M/V ACHAT (9519286 - Call Name: 9HA3568) crashed into the pier during the Berthing Maneuver. The Diesel-Oil Double Bottom tank was damaged due to the impact, and 30 M3 D/O spilled into the sea.
- A toxic cloud scenario was created as a result of the accumulation of ammonia released from the pipeline going from the TK-201 tank to the 100/72 (NPK) evaporator.

Trainings:

All personnel involved in the dangerous goods handling operation at our port facility receive the necessary training specified by the administration. Employees are certified by the authorized institutions and trainers by giving trainings on the IMDG Code, IMSBC Code and IBC code to the employees. Records of these trainings are kept by the human resources department.

These trainings should be designed to provide recognition of the general hazards and legal requirements of the relevant dangerous goods. This training includes defining the types and classes of dangerous cargoes, labeling, marking, packaging, separation and compliance with requirements; purpose description and content of shipping documents, and descriptions of available emergency response documents.

8.10 Information on Fire Protection Systems

The public announcement system used in our business is used all over the factory to inform about emergency situations such as fire, flood and earthquake. The system is connected to the factory radio frequency and it is possible to operate the public announcement system in the field with the radios. In the event of a possible fire in the facility, the security guard notes the name of the informer and the time of the incident. Activates first stage fire personnel. It sounds the emergency siren system for 60 seconds with a wavy sound. In



addition, every day at 12.30 pm, the public announcement system is tested with a test siren and the malfunctioning areas and loudspeakers are reported to the HSE Chief.

Pumps

In the Factory Boiler Room, there are 3 fire pumps, 2 electric and 1 diesel engine, next to the raw water tank.

Fire pump no. 1 (electric): 170 m3/h

Fire pump no. 2 (electric): 400 m3/h

Fire pump no. 3 (diesel): 400 m3/h-Engine: Clarke: Pump: Sterling

In the factory area:

Sea water fire pump (electric): 300 m3/h

Circulation pump (electric): It is used to supply water to the suction lines of 3 fire pumps in the boiler room from the 450 m3/h-22 reserve water tank.

In the Terminal Boiler Room:

2 fire pumps (electric): 150 m3/h

Water Balls

We have 3 mobile and 4 fixed water and foam cannons that can be activated quickly and quickly to be used in oil tank and filling and discharge fires. It can be rotated 360° by means of a 2,5" hose that can be connected, the foamer connection and the handle on it. Controls are carried out by the HSE Directorate.

Foam Systems

The foam systems in the operation are placed in each of the tank areas for easy and fast intervention. The foam, which is generally used in liquid fires and can be injected directly through the systems around the tanks, is 3% fluoroprotein foam. The foam systems used are only under the control of the valves. It can be easily commissioned, cleaned, tested and maintained. Commissioning, testing and cleaning works are under the control of the HSE Directorate.



Transformer Fire Detection Systems

These systems, which are activated in case of any fire in the operating transformers, work according to the smoke detection principle. Each system evaluates the information coming from the detector and calls the fire phone number 555 over the operation switchboard line. The main guard security officer, who receives the notice, immediately informs the fire teams and ensures the transfer to the scene. The outdoor unit has an audible and visual warning.

Jetty Flammable, Flammable and Ammonia Gas Detection System

A light and audible gas detection device has been installed as a precaution against the risk of fire, flashing and explosion that may occur during the handling of liquid fuel or ammonia at the piers. Audible and light alarm units are also placed in office areas and operation areas.

Floating Roof Tanks Fire Detection System

The switch system, located at the top of the Tank 25 and Tan 34-39 group floating roof tanks, which is used extensively by the Terminal Management, Liquid Terminal Unit, is one of the main factory detection systems. This system reports general information about the level and temperature of the tank to 2 control units. One is in the liquid terminal unit and the other is in the main guardhouse security building. The system starts to alarm in three ways. The first is level detection. If the product taken into any of the mentioned tanks exceeds the safety level, the system will alarm and notify the operator that there is more than enough product in the tank. The second is the fault condition.

As a result of the cables reaching any of the tanks do not give feedback (loop), the system detects the malfunction and activates the alarm of the relevant tank. The last one is the fire situation. In case of fire in any of the tanks, one of the conductors transmitting the heat starts to alarm by activating the switch system. Hearing this alarm, the liquid terminal operator and security guard report a fire.



System Rooms Fire Detection System

On the ground floor of the corporate office, there are two separate system rooms, one on the east and one on the west. In these rooms, there are detectors connected to the FM200 gas extinguishing system, and audible and light warning systems. According to the working principle, the first detector will give an audible warning when it detects smoke, and when the second detector detects smoke, the FM200 extinguishing system will be activated by giving a light and audible warning. The system will extinguish the fire in the area by suffocating with extinguishing gas without outside intervention.

Fire Lines and Hydrants

There are hydrants and fire lines placed in order to reach the water supplied by the wells, tanks and pumps within the enterprise. These lines are distributed all over the factory from two branches, the factory boiler room and the terminal boiler room. Hydrants, which are used to make hose connections everywhere, including the piers, generally have the same features. These Hydrants can be equipped with a 2.5" hose connection.

The fire lines in the enterprise are generally fed by the factory and terminal boiler rooms. In addition, an automatic booster system is used to keep the factory fire lines at 6 bar pressure. In case of a possible fire, fire pumps can step in and increase the line up to 10 bar pressure. When boiler operators hear the factory fire siren, they immediately start the fire pumps and do this. It is also possible to provide external support to fire lines. Uninterrupted water support can be provided by connecting to the factory fire lines from the tugboats on the Pier-3 side and the sea water fire pump, with the possibility of running out of clean water sources and the fire lasting longer.

- 4" fire line 513 m
- 6" fire line 1887 m
- 8" fire line 5369 m
- 10" fire line 666 m
- There is a total of 9135 m fire line, of which a 12" fire line is 700 m.



The tugboat company is responsible for the maintenance of all fire extinguishing systems on the tugboats, keeping them operational immediately and training the tugboat and boatmen who will respond to the fire in the event of a fire.

Water Tanks

Water transfer from the well pump to the facility is made with an 8" line. With this line, water is pumped to the raw water tanks of the Operation and Terminal boiler rooms. There are currently 3610 m³ and sea water intake structures in the operation area.

Water Tanks	m ³
Fabrika	1.160+300+1500
Terminal	500+150
Kuyusu	500

Mobile (Mobile) Fire Equipment

There is a pioneer fire vehicle allocated to the use of the OHS Unit in the enterprise. OHS personnel using this vehicle take field tours at certain periods during the day. The open body of the vehicle is equipped with emergency equipment for immediate response in possible emergencies. These equipments;

The OHS Unit is responsible for the maintenance and operation of the equipment. In a possible emergency, it is the duty of the OHS Unit to arrive at the scene as quickly as possible and to intervene in the situation safely.

In order to be able to intervene immediately in case of a fire that may occur in the vicinity, in the terminal area or in the tank areas, which may cause danger, there is 1 Mercedes brand 1999 fire extinguisher equipped with firefighting equipment. Vehicles are equipped with emergency equipment for immediate response in possible emergencies. These equipments; Fire Clothes



The fire suits used by the OHS Unit personnel in the event of a possible fire are the original firefighting suits and have been supplied from the beginning to provide full protection against heat, gas and fire situations. These suits are made of fire resistant material and are equipped with instruments to increase visibility even in the absence of light. A safe response can be achieved by integrating a clean air tube into the fire suits.

The protective cap has a phosphorescent outer surface. In environments with little or no light, it glows green, making the attendant clear in the dark. The transparent face shield that goes down to the front of the face allows to get as close to the flame as possible. It provides full security against leaks with a full face ski mask and a foil covering the nape area.

The fire suit consists of two upper and lower suits and cannot be used independently of each other. They are designed according to EN 469 standard and directive 89/686/EEC. Thick fabric made of heat resistant material is used.

The fire boot is from the foot to the knee, with a composite toe, flame resistant, hard sole and in the form of a boot.

Educational Tools

Within the framework of the regulations and management systems of the enterprise, fire trainings are held with the OHS Unit personnel or other unit personnel at regular intervals. During these trainings, the characteristics of fire extinguishers and how to intervene in which type of fire are explained. In addition, the operation of the event and equipment are introduced to the new personnel. In addition to the trainings, drills are also carried out with 2 vehicles and patient transport ambulances affiliated to the HSE Department.

8.11 Procedures for Approval, Inspection, Testing, Maintenance and Availability of Fire Protection Systems

In our facility, a machine registered in the Union of Chambers of Turkish Engineers and Architects (TMMOB) is selected by selecting the equipment in the prescribed standards, taking into account the fire equipment, facility type, the characteristics and number of the ship and marine vessel to be berthed, the type and amount of dangerous cargo to be handled and stored, the capacity and characteristics of the facility. The fire plan approved by the engineer is prepared and approved.



Fire equipment is tested every year in accordance with the standards and is certified by the organizations accredited by TÜRKAK as the "Inspection Agency" for fire fighting.

Fire equipment located and mobile in the facility is positioned on site according to current local regulations and regional hazards in the facility. Periodic controls of the equipment used are carried out by the HSE Chief, Control Chief and Auxiliary Facilities Chief, and mechanical parts and other parts are maintained.

8.12 Precautions to be Taken When Fire Protection Systems Do Not Work

In case the fire protection systems do not work in our port facility, firstly the possibilities of using the facilities of the neighboring facility are investigated, and then the local fire department in our region is informed. Support is requested from the contracted tugboat companies. The incident is intervened by using all the facilities of the region.

8.13 Other Risk Control Equipment

Other risk control equipment is specified in the emergency and response plan.

Risks of Dangerous Goods Classes and Additional Measures to be Taken

CLASS 1 EXPLOSIVES

Key Risks:

- Drop of the load
- fire
- Explosion of the load
- Spillage or impact during handling

MEASURES TO BE TAKEN

- Necessary warning signs should be placed against the possibility of fire in the port area and fire extinguishing systems should be placed.
- If there is this type of material in fire environments, the firefighting process should be done behind a protective curtain.



- It is recommended to use plenty of water for fire extinguishing.
- Equipment and protective materials that will not cause sparks should be used for leak cleaning.
- Explosive wastes should be stored in a separate area from other wastes. It should be removed from the port for disposal as soon as possible.

CLASS 2 GASES

Key Risks:

- Explosion
- Suffocation (not getting enough oxygen in breathing)
- Burns
- Poisoning

MEASURES TO BE TAKEN

- Necessary warning signs should be placed against the possibility of fire and fire extinguishing systems should be placed.
- Try to cool it by keeping plenty of water outside the burning flammable gas container.
- Containers with flammable gas have the risk of explosion even after cooling with water.
- For this reason, the cooled boxes and containers should be taken to the necessary protection areas against the risk of explosion.
- Leaky cargoes containing toxic gas should never be approached, and environmental safety should be obtained by informing the experts.
- Extinguishing agents for gas fires: KKT, CO2 and Halon. Places under the threat of Toxic Gases should not be entered without a respirator.
- It is not possible to apply a method for disposal because the gases that become waste are stored in the open area.



- However, if it is required to be stored indoors, a ventilation system should be installed in the storage area.

CLASS 3 FLAMMABLE LIQUIDS

Key risks:

Fire or explosion

Irritation

Burns

Poisoning

Class 3 - Includes flammable liquids with a flash point below 61°C, liquid desensitized explosives.

MEASURES TO BE TAKEN

- They are easily flammable and combustible liquids. (Ex. Gasoline, diesel, kerosene)
- Considering the possibility that there may be suffocating gas escape in the closed environment in case of any leakage, the environment should be ventilated for a while before the intervention. In case of burning, water should not be used, dry powder or foam fire extinguishers should be used.
- Extinguishing Agents: Foam, KKT (Dry Chemical Powder), CO2 and Halon.
- In case of leakage from the containers containing such substances, they should be cleaned using suitable absorbent kits and the waste liquids obtained should be disposed of using appropriate methods. The container with the leak should be taken into the leak pool.

CLASS 4 SOLID FLAMMABLES

Key Risks:

Explosion

Burns

Poisoning



MEASURES TO BE TAKEN

- When the loads with red - white striped labels are on fire, they should be treated with plenty of water.
- All kinds of fire extinguishers are effective on these loads.
- Carbon dioxide fire extinguishers should not be used for loads with half red and half white labels, dry powder fire extinguishers should be preferred. Water should never be used, as very high heat is generated in the fires of light metals such as aluminum and magnesium.
- Water should never be used for loads with blue labels.
- When in contact with water, these loads cause the formation of flammable gases and further intensification of the flame. Therefore, dry powder fire extinguishers should be used.
- Hazardous wastes should be stored in hazardous waste storage containers and sent to Disposal Facilities in accordance with the procedure for disposal.

CLASS 5 OXIDIZING AGENTS AND ORGANIC PEROXIDES

Key Risks:

- Explosion
- fire
- Starting a fire
- Burns
- Poisoning
- Perishable (decomposition)

MEASURES TO BE TAKEN

- Substances that, although not combustible themselves, cause the combustion of other substances by forming oxygen or otherwise.



- Substances that are sensitive to self-explosive decomposition, very rapid burning, impact or friction, and that are harmful to the eyes are also within this scope. (eg Hydrogen peroxide, Calcium carbonate, Ammonium nitrate, chromic acid)
- In case of burning of such materials, it should be intervened with fire extinguishers containing plenty of water or dry powder.
- The use of any material to prevent contact with air should not be used in the fire of oxidizing materials, as it will cause the fire to grow. Contact with skin should be avoided.
- The container with leakage should be taken to the leakage pool. Chemical material leaking onto the floor should be cleaned using chemical absorbent kits.
- Absorbent kits used in cleaning and the residues of the cleaned materials should be stored in the hazardous waste storage area.

CLASS 6 TOXIC (TOXIC) AND INSECTABLE SUBSTANCES

Class 6.1

Key Risks:

- Inhalation, ingestion, and skin contact of vapors or gases
- Acute and chronic poisoning
- Difficult to control infiltration through containers
- Toxic cloud spread and impact of remote areas
- Requirement to use respiratory equipment

Class 6.2

Key Risks:

- Illness
- Infection
- Epidemic and infectious diseases



Category A: (High risk of infection!)

Category B: (Low risk of infection!)

MEASURES TO BE TAKEN

- They are toxic or disease-causing loads if swallowed or inhaled.
- (eg Methyl bromide, arsenic, Methyl alcohol, medical wastes)
- In case of any leakage, there should be no intervention as there will be toxic gas release, the authorities should be informed by moving away from the environment.
- The container with the leak should never be interfered with. Support should be sought from authorized and trained persons in this regard.

CLASS 7 RADIOACTIVE SUBSTANCES

Key Risks:

- Undetectable by human senses
- Packages or containers need to be cooled in case of fire

MEASURES TO BE TAKEN

- Radioactive materials that emit ionizing rays. They cause radiation-related diseases.
- (For example, active gamma sources used in radiotherapy; Cobalt Co-60, Po-210)
- Radioactive substances are carcinogenic and deadly substances in case of contact or approach.
- It should definitely be avoided. In cases where intervention is required, the area will be evacuated immediately.
- Cekmece Nuclear Research and Training Center (ÇNAEM) should be applied.
- Cekmece Nuclear Research and Training Center (ÇNAEM) should be applied for disposal.



CLASS 8 CORROSIVE SUBSTANCES

Key Risks:

- Contact is necessary for damage to occur
- Reacts with metals to form flammable and/or explosive gases
- Causes damage to eyes by contact and respiratory system by inhalation.
- Glasses, masks, protective clothing, and acid protective gloves should be used, since the vapors of these types of substances are dangerous when inhaled or in contact with the eyes.
- Acid and alkaline corrosive substances that produce gas in contact with metals.

(Ex. Hydrochloric Acid (Spirit of Salt), Sulfuric Acid, Nitric Acid (Kezzap), Sodium Hydroxide (Caustic), Potassium Hydroxide, Sodium Hypochlorite (bleach), Batteries)

MEASURES TO BE TAKEN

- Since the vapor of this type of substance is dangerous when inhaled or in contact with eyes, it should be approached with glasses, mask, protective clothing, acid protective gloves.

CLASS 9 VARIOUS ITEMS AND CARGOS

Class 9 is a group of miscellaneous dangerous goods and goods. It includes loads that are judged to be dangerous but do not meet the definitions in other classes. This certainly does not mean that these substances are less dangerous than those in other classes. It should be treated with the same attention and care shown to others.

9. OCCUPATIONAL HEALTH AND SAFETY:

9.1 Occupational Health and Safety Measures

- Work should be done in accordance with legal regulations, company procedures and instructions.
- Necessary work permits must be obtained before starting work.
- HSE rules and announcements in effect at the workplace are posted on notice boards so that employees can read them. All employees act by reading these rules and



announcements. • Written or verbal rules announced or directly communicated by department and unit managers must be followed.

• Security measures, instructions and notices regarding HSE should be followed. • If employees have a suggestion for a better method of instructions regarding the work done, the situation should be shared with the supervisor first.

• Working places; must be in tidy, clean and safe condition. Unnecessary materials should not be kept in the working places. Waste should never be thrown on the ground. The wastes generated as a result of the work should be sent to the relevant waste site following the completion of the work.

• How to do every job should be thoroughly examined beforehand and if it is not safe, work should be started.

• It should not interfere with works that do not have duties and responsibilities.

• Smoking should not be allowed outside the designated smoking areas.

• Must comply with all health and safety signs and signs.

It is obligatory to wear personal protective equipment (work clothes, hard hat, work shoes, gloves, mask, earplugs, etc.).

• It is forbidden to wear loose, torn and hanging clothes. Absolutely nothing should hang out of pockets, neck, arm, waist.

• High risk and dangerous work should not be done alone, there should be an observer or other additional precautions should be taken.

• Misleading and inaccurate information should not be given to the relevant supervisors and managers about the job.

• Regardless of the size of the incident, accidents, incidents, near misses or risky situations that may cause all injuries must be reported to the supervisors and the Workplace HSE Unit and recorded.

• Injuries and incidents requiring first aid should be immediately reported to supervisors, Workplace HSE Unit and Workplace Physician and recorded. Any person injured in the workplace, no matter how minor, should go to the workplace infirmary and report the situation to their supervisor.

• Extreme care should be taken not to trip over or slip while walking around the workplaces, working on slippery places, moving and rotating parts. Oily and slippery areas should be cleaned or reported to the relevant persons. Work should not be started in these areas without taking the necessary safety precautions.



• It is essential to use pedestrian roads in the workplace area. You should only walk and climb stairs in areas where there are suitable passages. Do not pass between or over the pipes. It should not be jumped from high places compared to the current location.

• Do not stand or walk under suspended objects.

• Tensioned wires and ropes should not be jumped over.

• The maximum speed limit for vehicles within the facility is 20 km/h. Unless otherwise indicated by the warning sign, this speed limit should be followed. Vehicles must be parked in the direction of escape within the facility.

• There are special areas within the facility that cannot be entered unless authorized or assigned, or areas where access is temporarily or permanently prohibited. In these regions; warning signs, signs, lines or safety strip. These areas should never be entered. Warning signs or safety strips in these areas should not be damaged, and if given, the relevant supervisor should be informed immediately.

• It is forbidden to bring alcoholic beverages, drugs or to come under the influence of these substances.

• Occupational health and safety specialists identify all risks in the facility and waiting for the employees with a team formed in the field and try to develop measures related to them and minimize these risks. As a result of this study, he identifies the lack of education, etc. and starts working to eliminate them.

• It discusses the deficiencies found within the scope of the risk analysis and the deficiencies identified in the field reports at the OHS boards held every month with the other board members, decides on the corrections and publishes them.

9.2 Kişisel Koruyucu Kıyafetler Hakkında Bilgiler ile Bunların Kullanılmasına Yönelik Prosedürler

Kişisel Koruyucu Donanım: Çalışanı, yürütülen işten kaynaklanan, sağlık ve güvenliği etkileyen bir veya birden fazla riske karşı koruyan, çalışan tarafından giyilen, takılan veya tutulan, bu amaca uygun olarak tasarımlı yapılmış tüm alet, araç, gereç ve cihazları, kişiyi bir veya birden fazla riske karşı korumak amacıyla üretici tarafından bir bütün haline getirilmiş cihaz, alet veya malzemeden oluşmuş donanımı, belirli bir faaliyette bulunmak için korunma amacı olmaksızın taşınan veya giyilen donanımla birlikte kullanılan, ayrılabilir veya ayrılamaz nitelikteki koruyucu cihaz, alet veya malzemeyi, kişisel koruyucu donanımın rahat ve işlevsel bir şekilde çalışması için gerekli olan ve sadece bu tür donanımlarla kullanılan değiştirilebilir parçalarını ifade eder.

Mevcut riskleri yok etmek ya da azaltmak için öncelikli olarak mümkünse tehlikeleri yerinde azaltmak ve toplu koruma tedbirlerini tercih etmek suretiyle, SEÇ Risk



Değerlendirme Prosedüründe belirtilen tehlikeler ortadan kaldırılmalıdır. Ancak kontrol veya bertarafı mümkün olmayan bütün tanımlanmış riskler ile ilgili olarak KKD kullanımı gereklidir. Bu riskler ile ilgili olarak, çalışanları koruyacak KKD seçilirken Kişisel Koruyucu Donanımların İşyerlerinde Kullanılması Hakkında Yönetmelik ekinde verilmiş olan tabloya paralel olacak şekilde özel bir risk değerlendirmesi yapılır.

Bu risk değerlendirmesi kapsamında, KKD önerileri ile ilgili olarak, kullanılan kimyasal maddeler ile ilgili Güvenlik Bilgi Formları (GBF) gözden geçirilir. İş koşulları veya görevler değiştiği zaman, var olan tehlike/risk değerlendirmeleri gözden geçirilir. İşverenlerin, çalışanlara uygun ve yeterli KKD'yi temin etmesi zorunludur. KKD'lerin uygunluğuna var olan sertifikalarının CE, TSE ve Avrupa Normları gibi ulusal ve uluslararası standartlara uygunlukları kontrol edilerek karar verilir. KKD seçimi aşağıdaki unsurlara dayandırılır. Kişisel Koruyucu Donanımlarla ilgili detaylı tüm bilgi Toros Tarım entegre yönetim sistemi içinde SEC-GM-PR-028 Kişisel Koruyucu Donanım (KKD) Prosedürün de yer almaktadır.

KİŞİSEL KORUYUCU DONANIMLARINDA EN STANDARTLARI

Kafa Koruyucularında EN Standartları

EN 397 Bareti
EN 443 Yangın (Savunma) Bareti
EN 812 Bariyerli Kep

Kulak Koruyucularında EN Standartları

EN 352 - 1 Kulaklıklar
EN 352 - 2 Kulak tıkaçları
EN 352 - 3 Kulaklıklı baretlər

El Koruyucularında EN Standartları

EN 374 Kimyasal maddəye mikro organizma əldivenləri
EN 374 - 2 Kimyasal maddəyə içine alma direnci (3 Kademe)
EN 374 - 3 Kimyasal maddəyə içine alma direnci (6 Kademe)
EN 381 - 1 Çelik örgü əldivenlər
EN 388 Antistatik məkanik iş əldivenləri
EN 407 Sıçrış iş əldivenləri
EN 420 Genel aməci əldivenlər
EN 421 Iyonize işsizlər. Radyasyona qarşı əldivenlər
EN 511 Soguk iş əldivenlər
EN 659 Yangın mücadele əldivenlər
EN 60903 Elektrik risklərinə qarşı əldivenlər
EN 60903 Parmaksız özel aməci əldivenlər

Emniyet Kemerlerinde EN Standartları

EN 341 Yüksekli güvenli indiren sistemlər/əparatlar
EN 353 1 Düşməyi önləyen/frenleme sistemi
(Dikey hat üzərində)
EN 353 2 Düşməyi önləyen/frenleme sistemi
(Esnək elastik hat üzərində)
EN 354 Emniyet halatları (Lanyard)
EN 355 Yüksekən ani düşməyi önləyici önləyici şok (enərji) absorberləri ve emniyyət halatları
EN 358 Bel tipi emniyet kemerləri və emniyyət halatları
EN 360 Yüksekən ani düşməyi önləyici, geri sərməli və inerti (ataletli) tipi makaralar, əparatlar və örgü kələmləri halatları
EN 361 Parasıtlı tipi emniyet kemerləri
EN 362 Emniyet kancası
EN 363 Düşməyi durduran sistemlər

AYAK KORUYUCULARINDA EN STANDARTLARI

EN 20345 Güvenlik ayakkabısı 200 jull
EN 20346 Güvenlik ayakkabısı 100 jull
EN 20347 Güvenlik ayakkabısı minimal risk
EN 381 8 Çelik örgü tozluklar
EN 381 9 Çelik örgü tozluklar

Göz Koruyucularında EN Standartları

EN 166 Genel özellikləri
EN 167 Optik test metodları
EN 168 Farklı optik test metodları
EN 169 Kaynak Filtreleri
EN 170 Ultraviol Filtreleri
EN 171 Infrəet Filtreleri
EN 175 Kaynak siperləri başlıkları
EN 207 208 Laser Filtreleri
EN 379 Elektronik kaynak başlıkları

Solunum Sistemi Koruyucularında EN Standartları

EN 136 Tam yüz maskələri
EN 137 Solunum tüp və sırtılıkları
EN 139 Temiz hava besləməli maskələr
EN 140 Yarım yüz maskələr
EN 14387 Gaz buhar filtreleri
EN 143 Zərərcik (partikül) filtreleri
EN 12941 Kendindən hava besləməli başlıq maskələr
EN 14594 Temiz hava besləməli başlıqlar
EN 270 Kompresörden temiz hava besləməli başlıqlar
EN 403 Kacış maskələr
EN 405 Bakım gerektirəmeyen gaz-buhar maskələr
(Filtreleri deqışdırılmayan maskələr)

Gövde Koruyucularında EN Standartları

EN 340 Genel iş elbiseleri
EN 343 Yağmurluk
EN 373 Ergimis metale koruma sağlayan elbiseler
EN 412 Kəsilməye qarşı önlük
EN 444 Siv. Gaz Kimyasal koruyuculu elbiseler
EN 470 Önlüklerin genel özellikləri
EN 467 Siv kimyasallara qarşı koruyucu giysilər
EN 14605 Kimyasal koruyucu elbise
EN 471 Relektif (fosforlu) işgətli elbiseler
EN 469 EN 531 işi və əlemdən koruyucu donanımlar
EN 863 Makinələrdən (dəlinmələr, kəsilmələr, vb.) Koruma sağlayan elbiseler
EN 1073 1 Radyoaktiv kirilişlə qarşı elbiseler



9.3 Confined Space Entry Permits and Precautions Procedure

Closed Area: It is a general definition used for working areas with limited entrance and exit due to their size, lack of a ventilation system with sufficient capacity to expel the dangerous atmosphere harmful to human health, and/or where the oxygen concentration is insufficient or higher than normal or may be. A closed area need not be completely enclosed as a structure, and an area with any of the following characteristics can also be considered a closed area.

- Situations where entry of the employee's head and shoulders into an enclosed volume is necessary or foreseeable,
- Structures that are not designed to have permanent employees inside,
- Areas with limited or restricted entry/exit,
- At least semi-enclosed areas with hazardous conditions for the individual (eg moving parts, electricity, etc.)
- Areas that contain or have the potential to contain hazardous atmospheres (eg dust, liquid, vapor, gas or vacuum)
- Areas that contain, or have the potential to contain, a solid or liquid material capable of attracting the intruder eg: storage tanks, closed channels, underground channels, sewers, tankers, process tanks/vessels, boilers, open more than 1.5 meters deep with only one entrance where exit is difficult channels, tunnel, pipelines etc. is considered a closed area.

In all fields; The principles to be applied in all studies within the scope specified in the definition of entry to closed areas are given below.

1. Entrances to closed areas; Sure Entry Permit Form and Work Permit Form (İİF) must be filled.
2. The validity period of the Sure Entry Permit is 1 (one) day. Confined area entry form should be updated at shift changes.
3. It is obligatory to obtain a permit for all enclosed spaces.
4. Before and after entry; The entire work area should be checked to identify potential hazards.
5. The closed area to be entered must be prepared.
6. It is necessary to measure and analyze the atmosphere of the enclosed space.
7. The confined space must be classified as specified in this procedure.
8. Necessary conditions must be provided for safe entry to the confined space.



9. During indoor work; potential hazards in the work area should be identified.

10. During the work done in a closed area; The effects of potential hazards outside the work area should be determined.

11. The personnel who will do the work should use the necessary PPE.

12. Adequate lighting is provided for works to be carried out indoors. Only mobile lamps with battery, battery or 24 volt voltage are used indoors.

13. It is forbidden to work in closed areas without an observer. The observer should be competent in the use of emergency equipment and ready to initiate the emergency procedure. Under no circumstances should the observer enter the confined space. The duties and responsibilities of the observer are as follows.

- To be equipped for communication in case of emergency.
- To be in constant visual and/or auditory contact with the employees inside the closed area.
- To keep a record of the name information of the employees who enter the closed area on the Sure Entry Permit.
- To know the precautions to be taken during the entrance.
- To have necessary safety equipment in case of emergency.
- To keep a copy of İİF and Emin Entry Permits at the point of entry.
- Not to leave the closed area entrance area as long as the work continues in the closed area.
- To notify the fire department of the facility in case of emergency and to stay in place until the fire department arrives and provide the necessary support.
- In the event of an emergency outside the closed area; to ensure that the employees in the closed area go out and to leave the area by placing a no entry sign.

14. The personnel assigned to the entrance works to closed areas should have received the necessary training on the subject.

15. Continuous gas measurement devices are used in closed areas, in case of work that may affect the atmosphere in the indoor area (eg welding, cutting, solvent paint, jobs that require the use of hazardous chemicals, etc.). Continuous gas measuring devices to be used in indoor works should be compatible with the potentially dangerous gases in the area to be worked and should give an audible and visual alarm in case of any limit exceeding. Portable gas measuring devices are procured from the HSE Directorate to be used during the indoor work.



Confined Space Identification and Classification

All closed areas within the facility site must be identified and recorded. Closed areas are recorded by the HSE Directorate with the SEC-GM-LT-017 Indoor Area List and relevant information is updated when necessary. All areas with indoor working potential in the field are marked with warning signs as well as the necessary physical measures to prevent unauthorized or unauthorized access by the employees. The closed areas in the facilities are classified as follows.

- a) LESS HAZARDOUS CLASS: Entrance class to closed areas that are isolated from dangerous gas and smoke, the atmosphere test has been done and it has been determined that it is suitable for breathing, it is ensured that there is no substance that will create dangerous gas, and that can work without the need for any respiratory equipment during the entry; Less Hazardous Class. In Low Hazard Class entrance, there is no need for continuous use of breathing equipment.
- b) DANGEROUS CLASS: Hazardous Class Entry is valid for situations where the requirements set for Low Hazard Class entry are not fully met. Even at the entrance of the Dangerous Class, the ambient atmosphere is not always dangerous for the employee. But in Dangerous Class entrances; All personnel who will work indoors should use respiratory equipment and have received the necessary training.
- c) MOST DANGEROUS CLASS: The type of entry where the atmosphere of the enclosed space to be entered is a permanent danger to the health of the worker; It is "Very Hazardous Class Entry". It should be noted that this class entry is a work that requires expertise.

The following requirements must be met at Very Hazardous Class entrances;

- Written approval must be obtained from the Department Manager and HSE Manager.
- The Department Manager and HSE Manager must approve the safe working method and the precautions to be taken.
- All other requirements specified in the Hazardous Class Entry must be met.

Entry to Confined Areas

Before starting to work in closed areas, the area where the work will be done and the entrance of the closed area should be equipped with the necessary warning signs. During the preparation for entry into closed areas, a red no entry sign should be placed at the entry point. After all the conditions for entry are fulfilled, the green entry letter should be placed.

When entering closed areas; analyzes of the hazards that may occur, the necessary precautions should be taken and the use of protective equipment should be ensured. The necessary permits (Hot Work Permit, Sure Entry Permit, etc.) to enter closed areas must be taken, and the Work Permit Form (İİF) must be filled. After the completion of all the items in



the permit to enter closed areas, the approval of the site supervisor, the person in charge of the entering team and the officer authorized by the HSE Directorate, closed areas can be entered. Sure Entry Permit is issued for a single shift, updated at shift changes. Sure entry permit is only given to the person who will enter the closed area.

In emergencies, the observer will make the necessary first response. Therefore, it should be accompanied by a rescue rope, safety belt, oxygen cylinder, fire extinguisher, radio and should be tried and checked before entering. At least one person may also need to be within audible distance. If necessary, the Search and Rescue Team should be notified immediately.

In order to determine the time to pass in the closed area, this time should be decided in the plan made before the entrance to the indoor area and this time should be followed. The person inside should go out and rest at the intervals determined in the plan, explain the conditions inside the closed area to those waiting outside, and if necessary, revision should be made during the time that will pass inside.

It is necessary to provide communication between the closed area and the outside. For emergencies, a rescue team must be aware of the closed area entry and operation.

10. OTHER ISSUES

10.1 Validity of Dangerous Goods Conformity Certificate

The "Dangerous Goods Conformity Certificate" owned by the facility is valid until 21.01.2026.

10.2 Duties Defined for Dangerous Goods Safety Advisor

- Monitors compliance with the requirements for the transport of dangerous goods.
- Provides suggestions to the coastal facility regarding the transportation of dangerous goods.
- Procedures for controlling that the dangerous goods arriving at the facility are properly identified, the correct shipping names of the dangerous goods are used, certified, packaged, labeled and declared, loaded and transported safely to the approved and legal packaging, container or cargo transport unit, and reporting the control results.
- Loading/discharging procedure for handled and temporarily stored dangerous goods,
- Whether the shore facility employees have received appropriate training, including the changes made in the legislation, and whether these training records have been kept,
- Determination of the necessary measures against the reoccurrence of accidents, incidents or serious violations and evaluation of the implementation,
- To what extent the rules regarding the selection of subcontractors or 3rd parties and the transportation of dangerous goods are taken into account,



- Determining whether the employees in the transportation, handling, storage and loading/unloading of dangerous goods have detailed information about the operational procedures and instructions.
- Appropriateness of the measures taken to be prepared for the risks during the transportation, handling, storage and loading/unloading of dangerous goods.
- Procedures for all mandatory documents, information and documents related to dangerous goods.
- Procedures for the safe berthing, mooring, loading/discharging, sheltering or anchoring of ships carrying dangerous goods to the shore facility day and night.
- Procedures for additional measures to be taken according to seasonal conditions for the loading, unloading and limbo operations of dangerous goods.
- Procedures for fumigation, gas measurement and degassing operations. Procedures for keeping records and statistics of dangerous goods,
- The accuracy of the issues regarding the possibility, capability and capacity of the coastal facility to respond to emergencies,
- Compliance of the regulations for the first interventions to be made for the accidents involving dangerous substances,
- Procedures for handling and disposal of damaged dangerous cargoes and waste contaminated by dangerous cargoes,

10.3 Issues Regarding Carriers of Dangerous Goods Carrying Dangerous Goods Coming to/Leaving the Coastal Facility by Land (Documents Required to Carry Dangerous Goods at the Entry/Exit from/to the Port or Coastal Facility Area, Equipment and Equipment That These Vehicles Have to Carry; Speed Limits in the Port Area etc.) . considerations)

10.3.1 Documents to be Carried:

- Transport Document
- Dangerous Goods Transport Driver Training Certificate (SRC-5),
- Picture identification document (ID card, driver's license or passport) for each personnel on duty in the vehicle,
- Written instruction prepared by the transporter to be given to the driver,
- Multi-Mode Dangerous Goods Transportation Form for dangerous goods transported in more than one mode,



- Valid ADR certificate of conformity for vehicles
- Photocopy of the transport permit obtained from the relevant/authorized authorities for the transport of dangerous goods,
- Dangerous Goods and Hazardous Waste Compulsory Liability Insurance policy for vehicles carrying dangerous goods

10.3.2 Equipment and Equipment that Vehicles Must Have:

- Portable fire extinguishers,
- At least one chock suitable for the diameter and maximum mass of the wheel for each vehicle,
- 2 Sewable warning signs
- Eye rinse liquid
- Warning vest
- Portable lighting apparatus
- A pair of protective gloves
- Eye protection goggles
- Emergency mask
- Spade
- Drainage seal
- Collection container

10.3.3 Speed Limits in the Port Area:

The speed limits determined by our facility and on the traffic warning signs will be obeyed. The speed limit in our facility is 20 km and it is determined by warning signs.



10.4 Issues Regarding Carriers of Dangerous Goods Coming to/Leaving the Coastal Facility by Sea (Day/Night Signs to be Displayed by Ships and Marine Vehicles Carrying Dangerous Goods at the Port or Coastal Facility, Cold and Hot Working Procedures on Ships, etc.)

10.4.1 Day/Night Signs to be Displayed by Ships and Marine Vehicles Carrying Dangerous Goods at the Port or Coastal Facility:

The ship arriving at the coastal facility and carrying dangerous goods will have the international sign code "B" (Burak Sanjak) during the day and 2 Fixed Red Lights at night.

10.4.2 Cold and Hot Working Procedures on Ships Carrying Dangerous Goods in the Coastal Facility

Ships carrying dangerous goods in the coastal facility will obtain the necessary permission from the Port Authority for the cold and hot works to be carried out and will inform the coastal facility authorities.

The hot working principles to be done on the ships in the coastal facility and carrying dangerous goods are as in ANNEX-18 of the "SEC-GM-PR-029_0 HOT WORKING PROCEDURE" of our facility.

Ships and marine vessels in the port areas, unless permission is obtained from the port authority, stated in the 22nd article of the Ports Regulation; repair, blasting and painting, welding and other hot work cannot be carried out to sea lifeboat and/or boat lowering or other maintenance work. If the ships and marine vehicles that will carry out these works are in the coastal facility, they must coordinate with the coastal facility management.

The above-mentioned works on ships in the port, including ships carrying dangerous goods, are subject to the permission of the Port Authority. Unless the necessary coordination is made with the port operator, this kind of work cannot be done on the ship.

Minimum Safety Requirements for Performing Hot Work

- a. Before starting the hot work on the ship's deck or on the quay, the company officer or the ship agency that will carry out the hot process should have obtained written permission from the port authority that the said hot process can be carried out.
- b. In addition to the safety measures requested by the port authority, the company officer who will perform the hot work together with the ship and / or the dock supervisor should take all kinds of additional safety measures at the ship and / or quay before starting the hot work.



These measures include:

- Inspection of the local area and adjacent areas, including tests performed by accredited testing organizations to verify that areas are free from flammable and/or explosive atmospheres and, where appropriate, not deficient in oxygen;
- Removal of dangerous goods and other combustible materials and objects from work areas and adjacent areas.
- Effective protection of combustible structural elements (eg beams, wooden partitions, floors, doors, wall and ceiling coverings) against accidental ignition
- Sealing open pipes, pipe passages, valves, joints, gaps, and open parts to prevent flames, sparks and hot particles from spreading from work areas to adjacent areas or other areas
- A sign with hot work authorization information and safety precautions should be hung in the work area and also at all work area entrances. Authorization information and safety precautions should be easily visible and clearly understood by everyone involved in the hot work process.

The following points should be considered while performing hot work:

- Checks should be made to verify that the conditions have not changed
- At least one fire extinguisher or other suitable fire extinguishing equipment should be available in an easily accessible place for immediate use during hot work.
- During hot work, after the completion of the hot work and when sufficient time has passed after the completion of the work in question, a fire detector should be placed in the area where the hot work is carried out and in adjacent areas where danger may arise due to heat transfer.

10.5 Additional Considerations to be Added by the Shore Facility.

This guide is based on the 7th article of the Regulation on the Transport of Dangerous Goods by Sea and Loading Safety published in the Official Gazette dated 14 November 2021 and numbered 231659, and the Ministry of Transport and Infrastructure dated 20 April 2022 and E-63137251-010.07.01-281879. Prepared in accordance with the Implementation Instruction No.



Cases Not Included in This Guide:

In cases where there is no provision in this Guide, the provisions of the International Code for Dangerous Goods Transported by Sea (IMDG Code), IMSBC Code, IBC Code and other relevant legislation are applied.

Update and Distribution of the Guide:

One copy of this guide will be available at the Ceyhan Regional Port Authority, and the other copy at the Ceyhan Operations Port Facility Terminal Directorate. The distribution and announcement of the guide to all relevant port workers, facility users, cargo authorities and public authorities will be provided by the Terminal Directorate.

Changes in this guide will be made by the Terminal Management according to the changing legislation and conditions.

All relevant facility personnel, cargo authorities and public authorities and facility users will be able to access this guide from the Ceyhan Operation Port Facility website.

Approval and Execution:

The approval authority of this guide is Ceyhan Regional Port Authority. This guide will enter into force after it is approved by the Ceyhan Regional Port Authority. Ceyhan Regional Port Authority and Ceyhan Enterprise Port Facility Terminal Directorate are responsible and responsible for the execution of this guide.

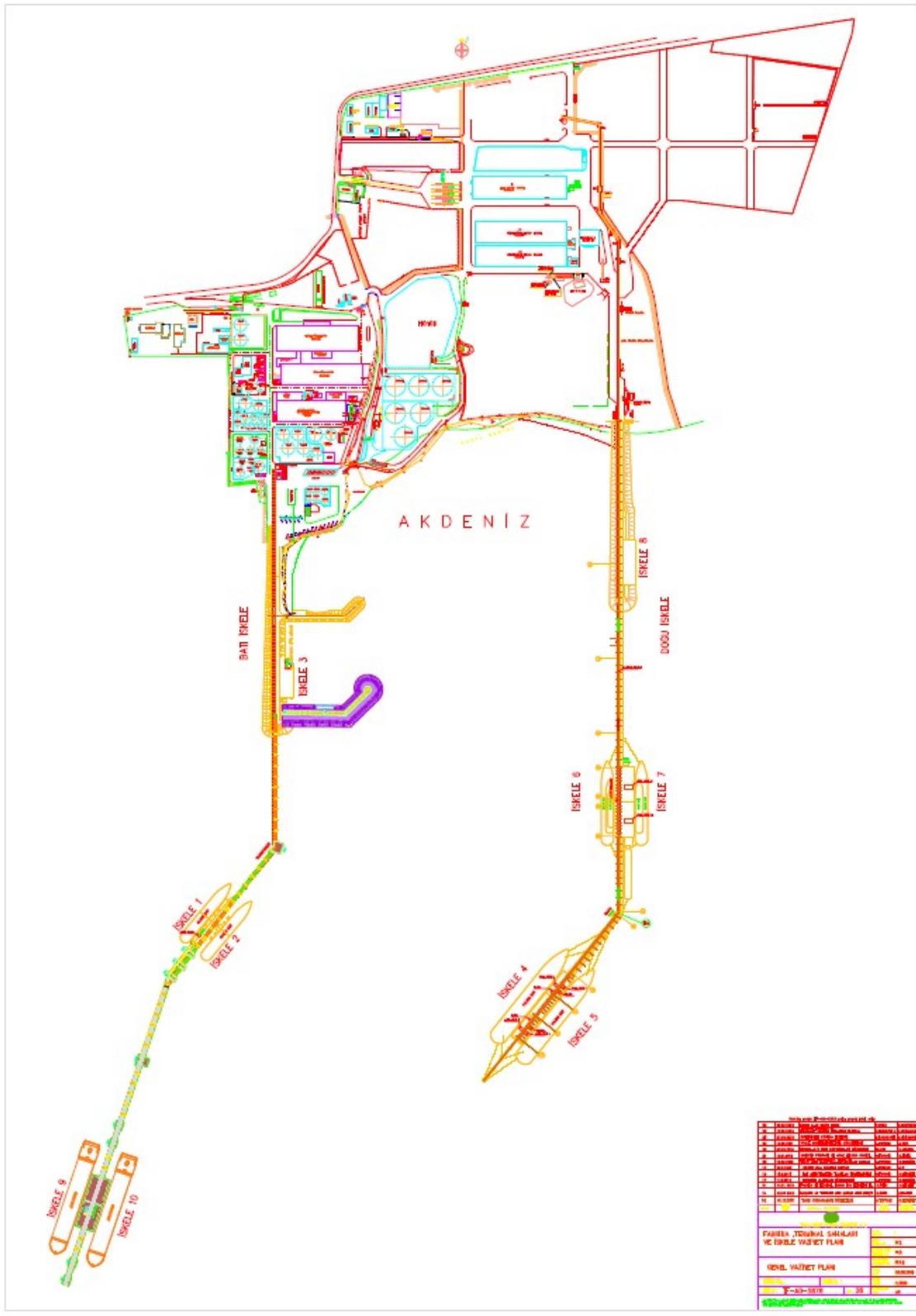
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Harbor Master

ANNEXES

ANNEX-1: Ceyhan Port Facility General Layout





ANNEX-2: Ceyhan Port Facility Panoramic Photo





ANNEX-3: Emergency Contact Points and Contact Information

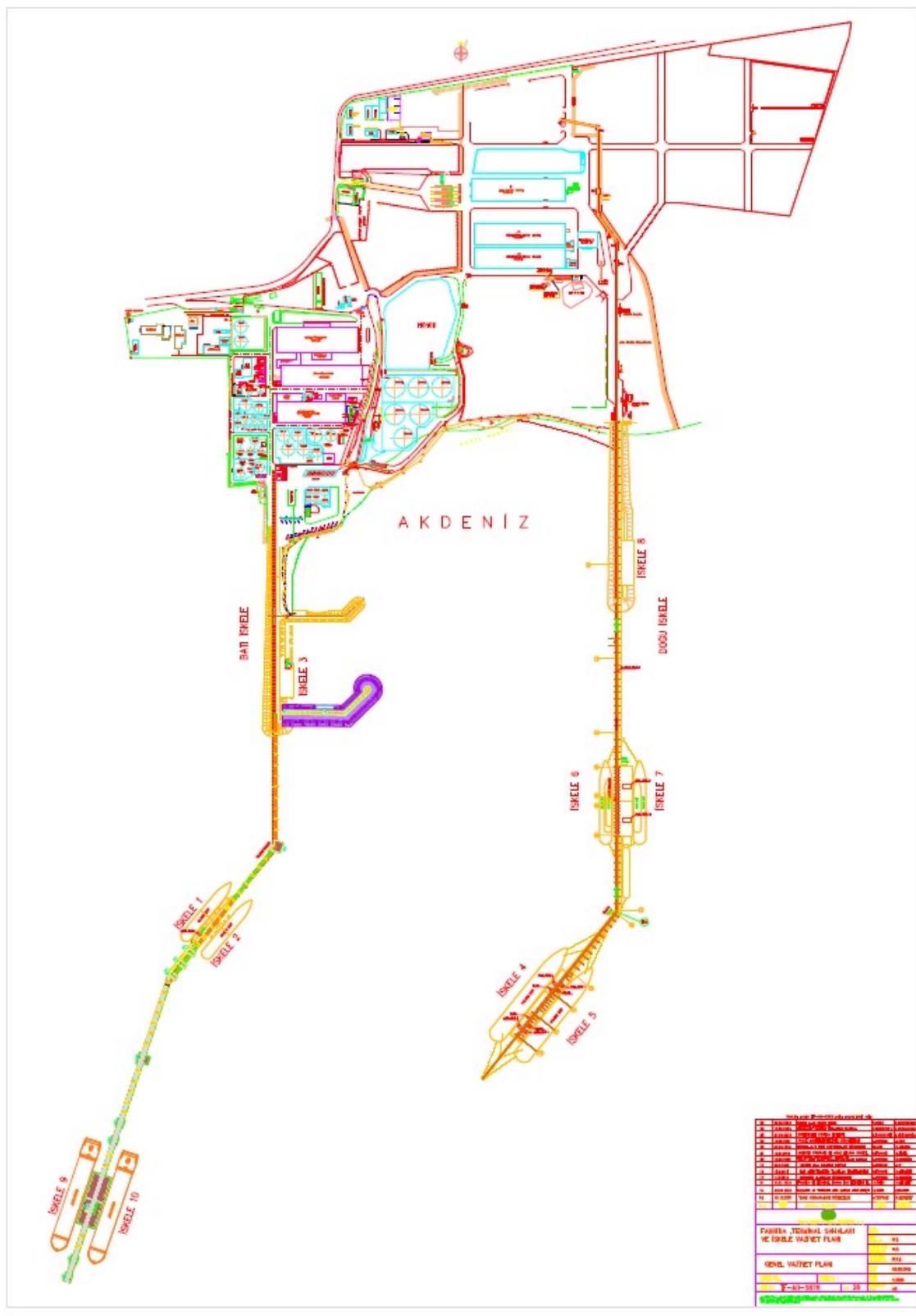
INSTITUTION NAME	DUTY	TELEPHONE NUMBER
FIRE REPORT LINE		110
EMERGENCY SERVICE		112
COAST GUARD REPORT LINE		158
CONSTABULARY		156
POLICE		155
TRAFFIC POLICE		154
FOREST FIRE REPORT LINE		177
Ceyhan Senior Port Authority	Central	0 322 639 21 38-39
BOTAŞ Oil Firms Ceyhan	Central	0 322 639 24 65
BOTAŞ Coast Guard Command	Central	0 322 613 58 59
TAYSEB Ovary Free Zone Management	Central	0 322 634 20 80
TAYSEB Ovary Free Zone Revenue Office	Central	0 322 634 21 27
Ceyhan Public Hospital	Central	0 322 613 13 62
Ceyhan Çınar Private Hospital	Central	0 322 611 30 30
Ceyhan District Governorship	Central	0 322 613 90 90
Ceyhan Mayorship	Central	0 322 613 40 20
Ceyhan District Police Department	Central	0 322 613 10 06



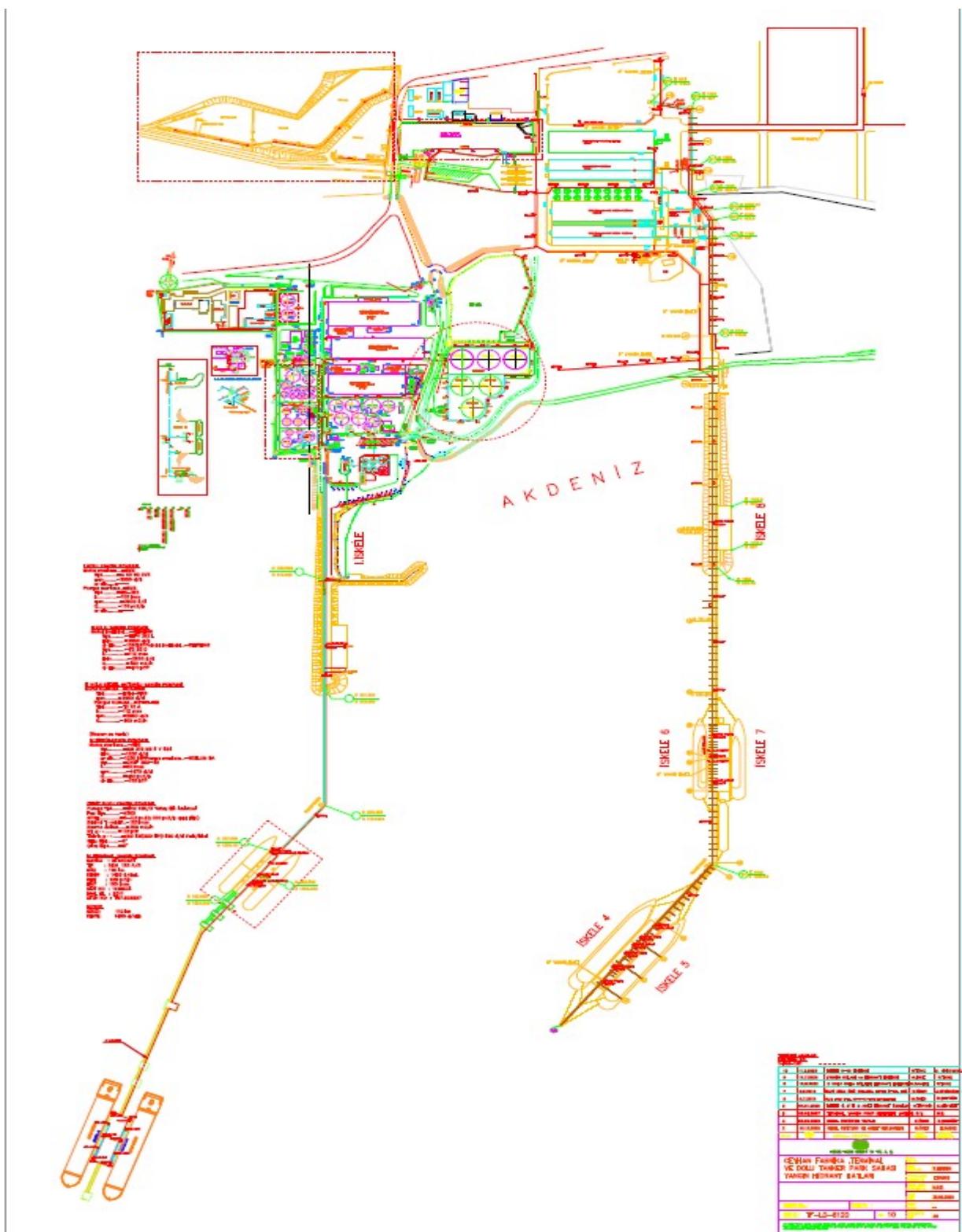
Ceyhan District Constabulary Command	Central	0 322 613 11 08
Customs Enforcement	Central	0 322 634 22 22
Main Search and Rescue Coordination Centre (Ankara)	Central	0 312 231 91 05-232 47 83
Undersecretariat of Maritime Affairs Regional Directorate	Central	0 324 341 58 11 -341 58 76
Adana Governorship	Central	0 322 459 27 43-22 88-13 99
Adana Police Headquarters	Central	0 322 435 31 95
Adana Environment and Urbanisation Provincial Directorate	Central	0 322 235 14 06
Adana Disaster and Emergency Provincial Directorate	Central	0 322 227 28 54-55
Adana Civil Defense Search and Rescue Unity Directorate	Central	0 322 394 36 74-75
Adana Provincial Directorate of Health	Central	0 322 344 03 03
Provincial Directorate of food, agriculture and livestock	Central	0 322 344 16 16 -344 17 17-344 18 18
Adana Meteorology 6th District Office	Central	0 322 321 13 98



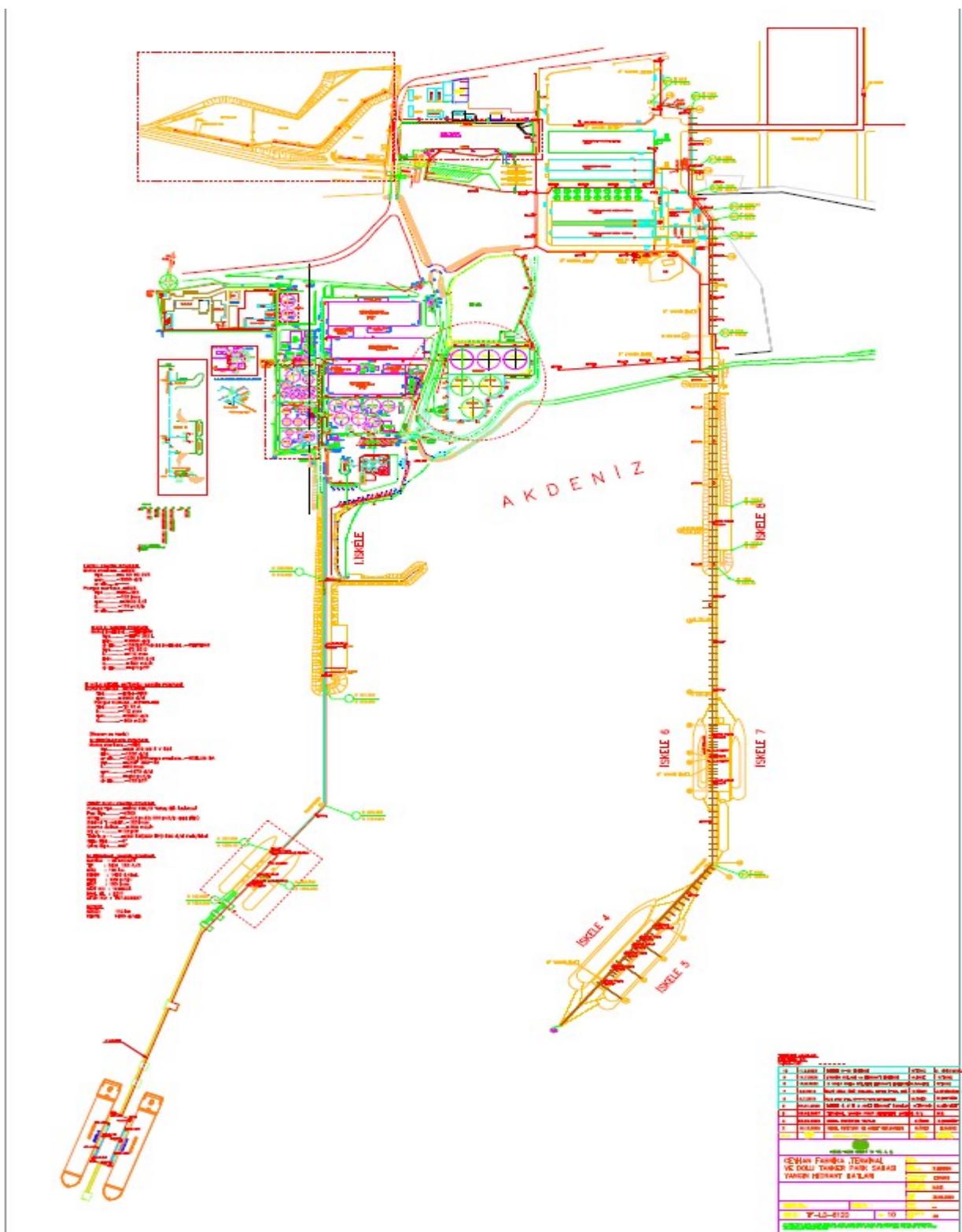
ANNEX-4: General Layout of Handling Areas of Dangerous Cargoes



ANNEX-5: Fire Plan of Handling Areas of Dangerous Cargoes



ANNEX-6: General Fire Plan of The Facility



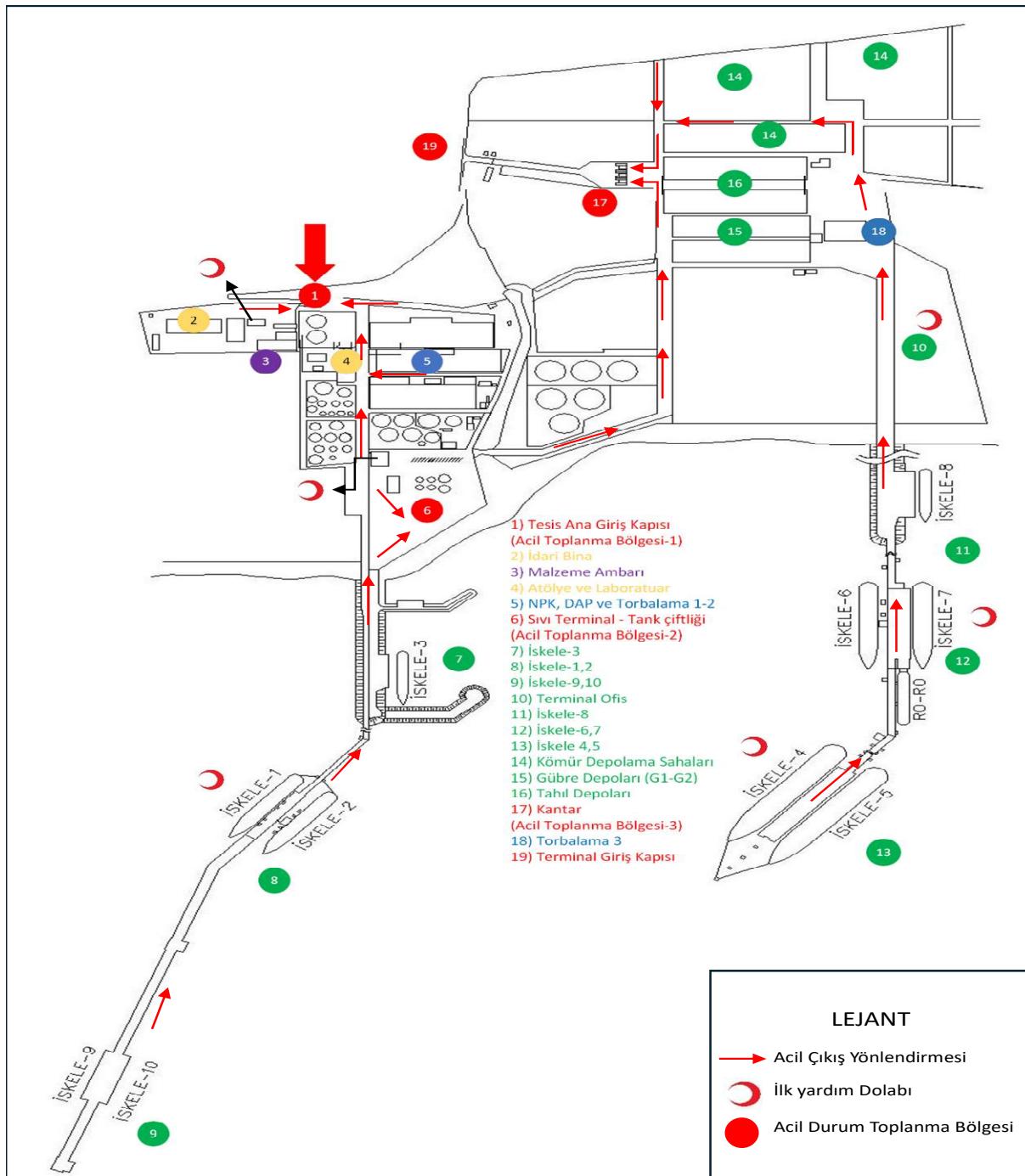




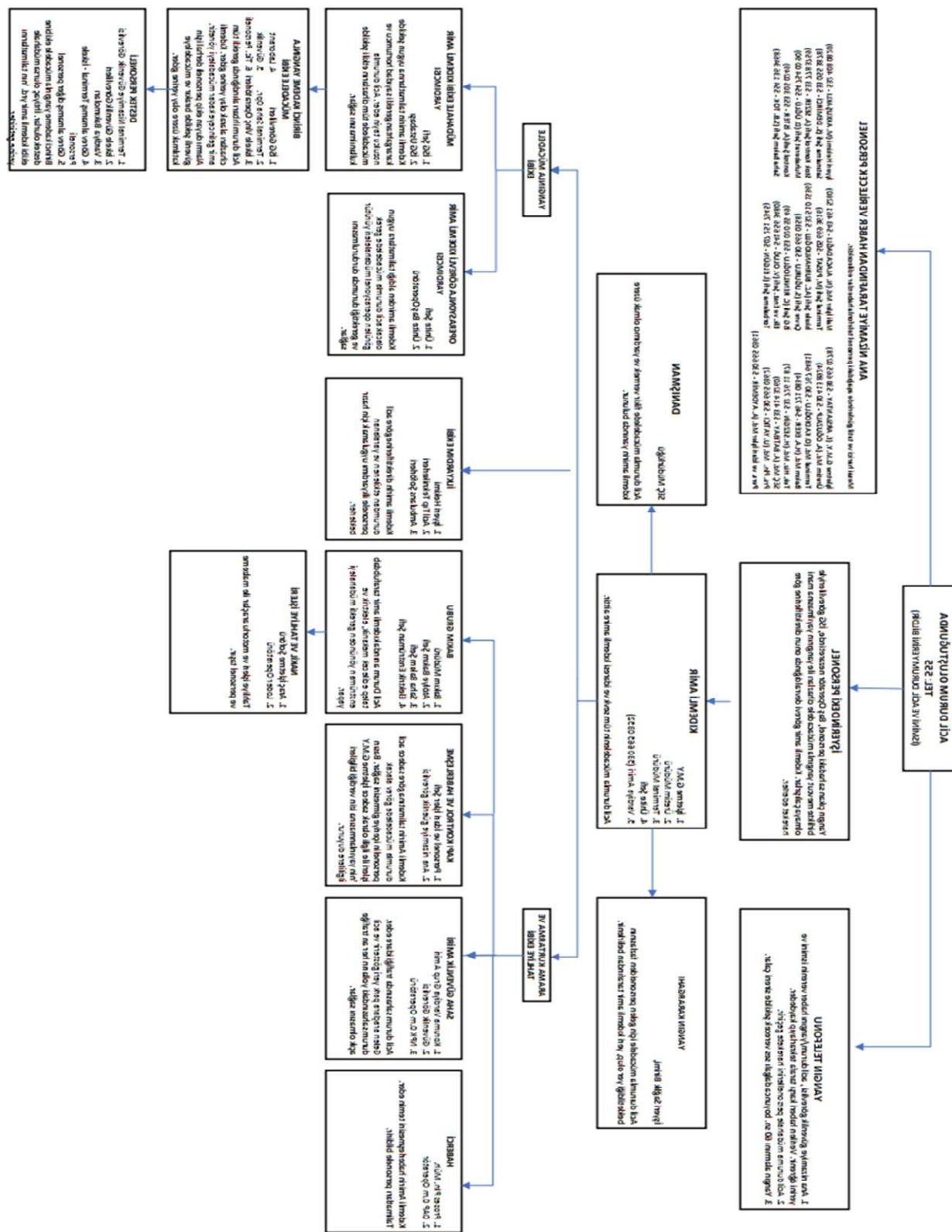
ANNEX-7: Emergency Plan

Published on the Company-Specific Web Site within the Scope of KVKK. Our facility is kept as a controlled copy in its offices.

ANNEX-8: Emergency Muster Points Plan



ANNEX-9: Emergency Management Scheme



ANNEX-10: Dangerous Goods Manual



This guide has been prepared for the relevant port personnel to learn and recognize the dangerous cargo classes and labels, signs, dangerous cargo handling rules.

The cargo groups that are allowed to be handled at our facility within the scope of the Dangerous Cargo Conformity Certificate owned by our terminal are as follows;

1. Dangerous Liquid Bulk Cargoes within the Scope of MARPOL ANNEX-1 and IBC Code (Petroleum and Petroleum Products - Chemical and Similar Dangerous Bulk Cargoes)
2. Liquefied Gas Cargoes within the Scope of the IGC Code
3. Packaged Dangerous Goods Covered by the IMDG Code
4. Dangerous Solid Bulk Cargoes Covered by the IMSBC Code
5. Asphalt and Bitumen Loads

Handling operations of dangerous goods belonging to these 4 different groups are carried out under the international conventions listed below.

- International Maritime Dangerous Goods Code (IMDG Code).
- International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code)
- International Maritime Solid Bulk Cargo Code (IMSBC Code)
- International Code for the Construction and Equipment of Ships Carrying Dangerous Liquefied Gas (IGC Code)
- ISGOTT
- MARPOL

In addition to the international conventions mentioned, the following procedures have been prepared for the safe handling of dangerous goods by the terminal.

TR-C-PR-017-MARPOL APPENDIX-1 AND IBC CODE – Operation Procedure for Safe Handling of Liquid Bulk Dangerous Goods

TR-C-PR-018-IGC CODE – Safe Handling Operation Procedure of Bulk Dangerous Goods in Liquefied Gaseous State

TR-C-PR-019-IMDG CODE – Safe Handling of Packaged Dangerous Goods Operation Procedure

TR-C-PR-020-IMSBC CODE – Operation Procedure for Safe Handling of Solid Bulk Dangerous Goods

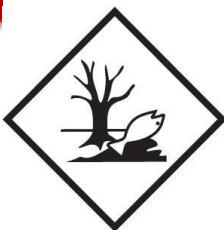
TR-C-PR-021-Safe Handling of Asphalt/Bitumen Cargo Operation Procedure

MARPOL Annex-1 Hazardous Liquid Bulk Cargoes (Petroleum and Petroleum Products)
Characteristics

Condensate (UN 1268)

Tehlike Etiketi

Nr. 3

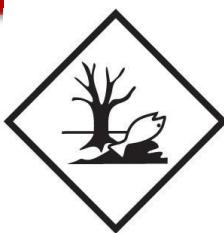
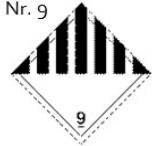


- It is in Class 3 (Flammable Liquids) category.
- Easily flammable. Forms explosive mixture with air at ambient temperature.
- It creates toxic gases as a result of combustion.
- Personnel in charge of land tanker operations should use appropriate PPE.
- It is handled at the berths 1, 2, 9 and 10 at the facility.
- In land tanker operations, unloading is performed from tanker to tank.
- Due to its high volatility, it is stored only in floating roof tanks at the terminal.

Fuel-Oil (UN 3082)

Tehlike Etiketi

Nr. 9



Farklı tehlikeleri olan maddeler

- It is in Class 9 (Substances with Different Hazards) category.
- It is in the category of "Marine Pollutants" as an additional risk.
- It is handled at a temperature of approximately 45-50°C at the terminal.
- Hazardous reactions do not occur in normal storage and handling operations.
- It is handled at the berths 1, 2, 9 and 10 at the facility.



- In land tanker operations, unloading is performed from tanker to tank.
- Personnel in charge of land tanker operations should use appropriate PPE.

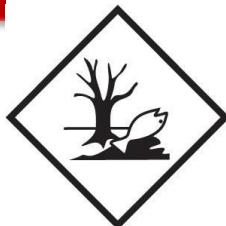
Kerosene (Jet A-1) (UN 1863)

Tehlike Etiketi

Nr. 3



Yanıcı Sıvı
Maddeler



- It is in Class 3 (Flammable Liquids) category.
- Easily flammable. Forms explosive mixture with air at ambient temperature.
- It creates toxic gases as a result of combustion.
- Personnel in charge of land tanker operations should use appropriate PPE.
- It is handled at the berths 1, 2, 9 and 10 at the facility.
- Since its vapor is heavier than air, it can leak into the sewer network and reach remote ignition sources.
- In land tanker operations, loading is made from tanks to tankers.
- If the hydrocarbon vapor concentration in the shore tanks is more than 1% and the oxygen concentration is less than 20%, oxygen should not be entered without a mask.
- Pump etc. to prevent static electricity from accumulating. equipment such as

Diesel (UN 1202)

Tehlike Etiketi

Nr. 3

Yanıcı Sıvı
Maddeler

- It is in Class 3 (Flammable Liquids) category.
- It creates toxic gases as a result of combustion.
- Personnel in charge of land tanker operations should use appropriate PPE.
- It is handled at the berths 1, 2, 9 and 10 at the facility.
- Since its vapor is heavier than air, it can leak into the sewer network and reach remote ignition sources.
- In land tanker operations, loading is made from tanks to tankers.
- If the hydrocarbon vapor concentration in the shore tanks is more than 1% and the oxygen concentration is less than 20%, oxygen should not be entered without a mask.
- Pump etc. to prevent static electricity from accumulating. equipment must be grounded.
- After filling the tank, wait for 2 minutes before opening the covers or manholes in tanker compartments and similar sized tank fillings.

Gasoline (UN 1203)**Tehlike Etiketi**

Nr. 3

Yanıcı Sıvı
Maddeler

- It is in Class 3 (Flammable Liquids) category.

- Easily flammable. Forms explosive mixture with air at ambient temperature.
- It creates toxic gases as a result of combustion.
- Hazardous combustion products may include: A complex mixture of airborne solid and liquid particles and gas (smoke), carbon monoxide, unspecified organic and inorganic compounds. Its vapor is heavier than air, spreads along the floor and may ignite at a distant point. Floats on water and is re-ignitable
- Personnel in charge of land tanker operations should use appropriate PPE.
- It is handled at the berths 1, 2, 9 and 10 at the facility.
- In land tanker operations, loading is made from tanks to tankers.
- If gasoline leakage is detected in the open environment, keep away all kinds of objects that can cause ignition and spark, prohibit the entry of motor vehicles around the leak.
- After filling the tank, wait for 2 minutes before opening the covers or manholes in tanker compartments and similar sized tank fillings.

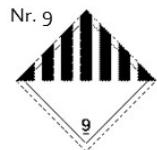
Crude oil (UN 1267)



- It is in Class 3 (Flammable Liquids) category.
- Easily flammable. Forms explosive mixture with air at ambient temperature.
- Personnel in charge of land tanker operations should use appropriate PPE.
- It is handled at the berths 1, 2, 9 and 10 at the facility.
- In land tanker operations, unloading is performed from tanker to tank.
- It produces toxic H₂S gases.

Bitumen (UN3257)

Tehlike Etiketi



Farklı tehlikeleri olan maddeler



- It is in Class 9 (Substances with Different Hazards) category.
- It is in the category of "Marine Pollutants" as an additional risk.
- It is handled at a temperature of approximately 140-150°C at the terminal.
- Hazardous reactions do not occur in normal storage and handling operations.

IBC Code Hazardous Liquid Bulk Cargoes (Chemical and Similar Dangerous Bulk Cargoes) Characteristics

Phosphoric Acid (UN 1805)

Tehlike Etiketi



aşındırıcı

- It is in Class 8 (Abrasives) category.
- It is not flammable. Hydrogen may be formed in contact with metals. May form dangerous flammable gases or vapors in case of fire.
- It is handled at the berths 1,2,6 and 7 at the facility.

Formic Acid (UN 1179)

Tehlike Etiketi
İlave tehlikeleri:


- It is in Class 8 (Abrasives) category.
- It is handled at the pier No. 6 and 7 at the facility.
- Vapors may form explosive vapor/air mixtures with air above 69°C. May emit flammable hydrogen gas when in contact with metals.
- Toxic carbon monoxide gas is released when this substance is heated or in contact with strong acids (sulfuric acid).
- In case of fire, water spray, alcohol-resistant foam, dry chemical powder or CO2 are used.

Vinyl Acetate Monomer VAM (UN 1301)
Tehlike Etiketi


- It is in Class 3 (Flammable Liquids) category.
- Easily flammable. Forms explosive mixture with air at ambient temperature.
- It is handled by pipeline only at the pier No. 6 and 7 at the facility.
- Since its vapor is heavier than air and accumulates on the ground, the risk of ignition is high.
- While cleaning the spilled areas, take the wind behind you absolutely.
- In case of fire, water spray, alcohol-resistant foams, dry chemical powder or CO2 are used.

Styrene Monomer (UN 2055)

Tehlike Etiketi

Nr. 3



Yanıcı Sıvı
Maddeler

- Class 3 (Flammable Liquids) category
- It is handled by pipeline only at the pier No. 6 and 7 at the facility.
- Steam is heavier than air. Vapors may travel across the floor and reach remote sources of ignition, creating a flammable fire hazard.
- Flammable vapors may be present even at temperatures below the flash point.
- Aspiration into the lungs during swallowing or vomiting may cause chemical pneumonitis, which can be fatal.
- Reacts with strong acids, which may cause fire and explosion.
- In case of fire, water spray, alcohol-resistant foams, dry chemical powder or CO₂ are used.

Acetic Acid (UN 2789)

Tehlike Etiketi

İlave tehlikeleri:



Nr. 8

aşındırıcı



Nr. 3

Yanıcı Sıvı
Maddeler

- It is in Class 8 (Abrasives) category.
- It is handled at the pier No. 6 and 7 at the facility.
- Above 39°C, explosive vapor/air mixture may form.
- Inhalation of vapors causes pulmonary edema.
- As a result of its combustion, poisonous carbon monoxide gas is produced.
- In case of fire, water spray, alcohol-resistant foams, dry chemical powder or CO₂ are used.

Caustic Soda (UN1824)

Tehlike Etiketi



- It is in Class 8 (Abrasives) category.
- It is handled at the pier No. 6 and 7 at the facility.
- It is not flammable. In contact with moisture or water, it can ignite combustible materials by generating sufficient heat.
- This substance is a strong base, reacts violently with acids and is corrosive, forms flammable/explosive gas with the humidity of the air and metals such as zinc, aluminum, tin and lead with water.
- This substance is irritating to eyes, skin and severely irritating to the respiratory system. It has a corrosive effect if swallowed. Inhalation of aerosols causes pulmonary edema.
- In case of fire, water spray, foam, dry chemical powder or CO₂ are used.

2-Ethyl Hexanol (UN2282)

Tehlike Etiketi



- It is in Class 3 (Flammable Liquids) category.
- It is handled by pipeline only at the pier No. 6 and 7 at the facility.
- Above 41°C, explosive vapor/air mixture may form.
- Vapors are heavier than air and may spread on the floor. Vapors may form explosive mixtures when mixed with air.
- As a result of combustion, it produces carbon monoxide and carbon dioxide gases.



- In case of fire, alcohol-resistant foams, dry chemical powder or CO2 are used. The use of water jets is not recommended.

Ethyl Acetate (UN1173)

Tehlike Etiketi

Nr. 3



Yanıcı Sıvı
Maddeler

- It is in Class 3 (Flammable Liquids) category.
- It is handled by pipeline only at the pier No. 6 and 7 at the facility.
- It is a highly flammable substance.
- Heating may cause severe combustion and explosion. Reacts with strong oxidants, bases and acids. Affects aluminum and plastics.
- Highly flammable gases such as ethanol may be released.
- By inhalation, it can irritate the respiratory tract as a result of exposure to high concentrations. It can irritate the membranes of the nasal mucosa.
- In case of fire, alcohol-resistant foams, dry chemical powder or CO2 are used. The use of water jets is not recommended

Sulfuric Acid (UN1830)

Tehlike Etiketi



aşındırıcı

- It is in Class 8 (Abrasives) category.
- It is handled by pipeline only at the pier No. 6 and 7 at the facility.



- This substance is a strong oxidizer, reacts strongly with combustible and reducing substances. This substance is a strong acid, reacts with bases and corrodes almost all metals producing flammable/explosive gas.
- This substance is strongly corrosive. Causes damage to eyes, skin and respiratory system. Irritating if swallowed. Inhalation of aerosols of the substance causes pulmonary edema.
- Evaporation at 20°C is negligible. However, in the form of a spray, the particles in the air reach harmful concentrations very quickly.
- In case of fire, water spray, foam, dry chemical powder or CO₂ are used.

Butyl Acrylate (UN2348)



- It is in Class 3 (Flammable Liquids) category.
- It is handled by pipeline only at the pier No. 6 and 7 at the facility.
- Above 36°C, explosive vapor/air mixture may form.
- During a fire, the smoke may contain the original substance as well as unspecified toxic and/or irritating compounds.
- Excessive vapor concentrations are possible and a single exposure can be dangerous. May cause irritation to the respiratory tract.
- Dry sand, dry chemical powder or alcohol-resistant foam is used in case of fire.

Methanol (UN1230)

Tehlike Etiketi ilave tehlikeleri

Nr. 3



Yanıcı Sıvı
Maddeler

Nr. 6.1



zehirli

- It is in Class 3 (Flammable Liquids) category.
- Indicates toxicity as an additional hazard.
- It is handled by pipeline only at the pier No. 6 and 7 at the facility.
- Vapors are heavier than air. Forms explosive mixtures with air at atmospheric temperature.
- As a result of combustion, it produces carbon monoxide and carbon dioxide gases.
- In case of fire, water spray, alcohol-resistant foams, dry chemical powder or CO₂ are used. The use of pressurized water jets is not recommended.

Isopropyl Alcohol (UN1219)

Tehlike Etiketi ilave tehlikeleri

Nr. 3



Yanıcı Sıvı
Maddeler

Nr. 6.1



zehirli

- It is in Class 3 (Flammable Liquids) category.
- Indicates toxicity as an additional hazard.
- It is handled by pipeline only at the pier No. 6 and 7 at the facility.
- This material, which is heated or exposed to fire, may explode and polymerize. It emits acrid smoke and gases when heated to decomposition.
- Easily ignited by heat, sparks or flame. Vapors may explode when mixed with air.

- They can spread from a distance after the vapor or gas ignites. Vapors can form explosive mixtures with air when heated. Most vapors are heavier than air. It spreads on the floor and accumulates in closed areas (sewers, basements, tanks).
- It produces flammable hydrogen gas as a result of contact with metals.
- In case of fire, water spray, alcohol-resistant foams, dry chemical powder or CO₂ are used.

Ethanol (UN1170)

Tehlike Etiketi

Nr. 3



Yanıcı Sıvı
Maddeler

- It is in Class 3 (Flammable Liquids) category.
- It is handled by pipeline only at the pier No. 6 and 7 at the facility.
- Easily ignited by heat, sparks or flame. Vapors may explode when mixed with air.
- Its volatility is quite high.
- Dangerous flammable gases or vapors may develop in case of fire.
- In case of fire, water spray, alcohol-resistant foams, dry chemical powder or CO₂ are used. The use of pressurized water jets is not recommended.

Methyl Methacrylate (UN1247)

Tehlike Etiketi

Nr. 3



Yanıcı Sıvı
Maddeler

- It is in Class 3 (Flammable Liquids) category.
- It is handled by pipeline only at the pier No. 6 and 7 at the facility.



- May create highly flammable gas and vapor.
- The product's handling temperature should not be above 25°C.
- Product vapors are heavier than air and can accumulate on the ground, in pits and ducts, and in high concentrations.
- In case of fire, water spray, alcohol-resistant foams, dry chemical powder or CO2 are used. The use of pressurized water jets is not recommended.

Paraxylene (UN1307)



- It is in Class 3 (Flammable Liquids) category.
- Use foam, dry chemical or carbon dioxide (CO2) extinguishers to extinguish in case of fire.
- Easily ignited by heat, sparks or flame. Vapors may explode when mixed with air.
- They can spread from a distance after the vapor or gas ignites. Vapors can form explosive mixtures with air when heated. Most vapors are heavier than air. It spreads on the floor and accumulates in closed areas (sewers, basements, tanks).

Methylene Chloride (Dichloromethane) (UN1593)

Tehlike Etiketi

Nr. 6.1



zehirli

- It is in Class 6.1 (Toxic Substances).
- Avoid breathing dust/fume/gas/mist/vapour/spray.
- Remove person injured by inhalation to fresh air and keep in a position comfortable for breathing. If you feel unwell, call the National Poison Control Center on Phone 114 or the doctor/physician.
- In case of contact with eyes, rinse immediately with running water for 15 minutes. Consult medical personnel. Appropriate emergency eyewash should be available nearby.
- During a fire, the smoke may contain the original substance as well as unspecified toxic and/or irritating compounds. Hazardous fire by-products can be: Hydrogen chloride. Carbon monoxide. carbon dioxide

Dowanol PM (UN 3092)

Tehlike Etiketi

Nr. 3



Yanıcı Sıvı
Maddeler

- It is in Class 3 (Flammable Liquids) category.
- Chemical resistant gloves should be used against this material for long-term or long-term use.
- During a fire, the smoke may contain gases that can be toxic and/or irritating. May release carbon monoxide and carbon dioxide.
- Product vapors are heavier than air and can accumulate on the ground, in pits and ducts, and in high concentrations.



- In case of fire, water spray, alcohol-resistant foams, dry chemical powder or CO₂ are used. The use of pressurized water jets is not recommended.

Crude Sunflower Oil

- Eye protection goggles should be worn.
- For skin and body protection; Apron and gloves should be worn.
- In case of contact with eyes, flush with plenty of water or eyewash solution for 15 minutes. If irritation persists, seek medical attention.
- Be sure to read the MSDS before the operation.

Ethylene Glycols (MEG-DEG)

- During the fire; use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- Clean the slippery floor immediately when spilled and prevent accidents.
- Use protective equipment to prevent skin and eye contact and inhalation of vapors.
- If it gets into eyes, immediately rinse thoroughly with plenty of water and consult a doctor.
- Be sure to read the MSDS before the operation.

LAB

- Eye protection goggles should be worn.
- For skin and body protection; gowns and gloves should be worn.
- In case of contact with eyes, flush with plenty of water or eyewash solution for 15 minutes. If irritation persists, seek medical attention.
- During the fire; use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- Be sure to read the MSDS before the operation.

IMSBC Code Hazardous Solid Bulk Cargo Specifications

Potassium Nitrate (UN 1486)

Tehlike Etiketi

Nr. 5.1



Yakıcı maddeler

- It is a product that oxidizes when wet. It is easily ignited by mixtures containing flammable substances and can burn violently.
- It is a hydroscopic product and caking when wet.
- It must be stacked separately from food materials.
- This load should be kept as dry as possible. This load should not be handled during precipitation. During the transportation of this load, all the covers that are not working in the warehouses where this load is loaded or will be loaded should be closed.
- All necessary precautions should be taken to prevent the contact of flammable materials with the product.
- In case of a possible fire, the fire should be intervened with water. It is important that the water to be used is in the form of a spray.

Ammonium Nitrate (UN 2067)

Tehlike Etiketi

Nr. 5.1



Yakıcı maddeler

- It shows flammable feature. Fires that may occur on ships carrying this substance create a risk of explosion by being contaminated with the substance.
- When exposed to high temperatures, they decompose and release toxic and flammable gases on the deck and in the holds.
- In case of dusting, it is irritating to the skin.



- Combustible materials (especially liquids), chlorates, bromates, chlorites, hypochlorites, permanganates, fibrous materials (cotton etc.) and metal powders should be completely stacked in separate sections.
- It should not be stacked next to any tank or double-deck fuel tank heated to 50°C or more.
- This load should be kept as dry as possible. This load should not be handled during precipitation. During the transportation of this load, all the covers that are not working in the warehouses where this load is loaded or will be loaded should be closed.
- Where the temperature of the load is above 40°C, loading is not acceptable for this load.
- It will provide maximum ventilation in case of fire, and the possibility of opening the hatches of the ship in case of water application in case of emergency and the risks that may result in the stability of the ship due to the fluidization of the cargo as a result will be taken into consideration.
- Fuel supply will not be allowed under any circumstances. Fuel pumping will not be permitted in the vicinity of the holds where this load is located, except in the engine room.
- Persons who may be exposed to the dust of the load should wear protective glasses or similar dust goggles and dust filter masks.

Sulfur (UN 1350)



- The product should not be heated too much due to fire hazard. This product is flammable. Product spilled on the ground may form flammable dust clouds in the air. There is no fire hazard if stored at ambient temperature. It is a hydroscopic product and caking when wet.
- Special precautions should be taken against dust formation during storage, sweeping and spilling.
- In case of big fires, the fire department should be informed. Foam, dry chemical and water mist should be used. If strong water is thrown, it may cause the fire to spread.



Seed Meals (UN 1386-UN 2217) and Seed Meals and Other Residues of Processed Oily Vegetables (Applicable for Group B Loads)

- It is self-heating and may ignite if it gets wet or contains an excessive amount of unoxidized oil.
- It may oxidize, causing a decrease in oxygen in the cargo space.
- It can produce carbon dioxide gas.
- Natural or mechanical surface ventilation shall be provided as necessary to remove residual solvent vapor.
- Care must be taken when using mechanical ventilation to prevent the load from self-heating.
- This load will be kept as dry as possible.
- This load will not be handled during precipitation. During the handling of this cargo, all inoperative holds of the cargo spaces where this cargo is loaded or will be loaded will be closed.
- It will be accepted for loading if the cargo does not contain flammable solvents and a certificate stating the oil and moisture content is issued by an accredited institution by the competent authority of the country of shipment.

Coal (Group A or B and A Loads)

Coal (bituminous and anthracite) or lignite coal is a natural, solid, flammable material consisting of amorphous carbon and hydrocarbons.

- Coals can release methane, a flammable gas. Methane/air mixtures containing 5% to 16% methane are explosive, sparks or open flames such as electrical or frictional sparks, striking a match or lighting a cigarette may be sufficient to cause an explosion. Methane is lighter than air and therefore accumulates at high points in cargo volumes or other confined spaces. If cargo volumes are not tightly sealed, methane may leak into confined spaces adjacent to the cargo volume.
- Coals can oxidize, causing depletion of oxygen in the cargo volume and increased concentrations of carbon dioxide or carbon monoxide. Carbon monoxide is an odorless gas slightly lighter than air, its mixtures with air in the range of 12-75% by volume are flammable. Toxic if inhaled, it binds to hemoglobin in the blood 200 times more than oxygen.
- Some coals can self-heat in the load volume and self-heating may cause self-combustion. Various flammable and toxic gases, including carbon monoxide, may be produced.



- Some coals may react with water to release acids that can cause corrosion. Various flammable and toxic gases, including hydrogen, may be produced. Hydrogen is an odorless gas, lighter than air, and mixtures of 4% to 75% by volume with air are flammable.

Port personnel should be reminded of the smoldering feature of coal, especially as a result of contact with water during transportation.

- Port personnel should be reminded of the coal's ability to produce METHANE gas and the risk of POISONING, DEATH and explosion as a result.
- Since the start of combustion in the warehouse will cause the formation of CARBON MONOXIDE, the port personnel should be reminded that the amount of carbon monoxide above 50 ppm indicates combustion in the warehouse and that there is not enough oxygen.
- Before the start of the ship evacuation operation, Cargo Information from the captain and the daily gas and temperature measurements (Gas Monitoring- CH4 - Temperature) measured by the ship personnel during the cruise should be given to us.
- Ship discharge plan (discharging plan) is made by us together with the ship's authority.
- Before evacuation, hatch covers will be opened and ventilation will be performed.

In case of fire, the measures specified in the Emergency and Response Plan are implemented.

- All port personnel should be warned against the risks of METHANE and CARBON MONOXIDE gases that will occur in the warehouses, and the warehouses should be ventilated and entered into the warehouses upon arrival of the ship. In case of burning, a safe and suitable area should be determined outside the stock area where the goods can be taken from the warehouse and laid to be cooled.
- Onboard cooling system (pressurized water squeezing), breathing apparatus (excavators to work in the warehouse) should always be available at the port.
- Gas measurements are not only in the warehouses, if there will be work; It should also be done in closed areas adjacent to the warehouse, in closed areas such as roller shutters, warehouses, portholes on the deck. Port personnel should be reminded not to enter a closed area where measurements have not been made for any reason. Evacuation officers should not enter the void spaces between the holds, for whatever reason.
- Since methane gas is lighter than air, it will accumulate at the top of the closed section. Therefore, as long as the evacuation continues, gas measurements should be continued in the excavators working in the warehouses.



- A construction machine operator and those working in the warehouse should never be left alone in the warehouse. Employees inside the warehouse are constantly observed by the helm from outside the warehouse.
- Evacuation workers should be warned not to enter the void spaces between the holds and the closed areas on the deck without measuring.
- If the combustion is close to the surface, the coal in this area can be extinguished by taking it to the beach. If the coal is on fire on the beach, it is appropriate to spray intense water, spray foam or throw sand on it.
- Water should not be sprayed into the warehouse. However, for cooling purposes, cold water can be applied to the outside of the warehouse.
- If the location of the heating is uncertain, it can be expected that foam will be sprayed on the warehouses, the lids will be closed, and the combustion will stop by consuming the oxygen.

Petcoke

- Uncalcined petroleum coke is prone to self-heating and ignition when not loaded and transported in accordance with the provisions of the IMSBC Code.
- This cargo is not flammable or has a low risk of fire.
- It will be stacked separately from food materials.
- Class 1 should be separated longitudinally from all goods of divisions 1.1 and 1.5 by a complete intervening partition or hatch.
- It must be separated from all other dangerous goods and dangerous goods (packaged goods and solid bulk materials) by a complete partition or warehouse.
- Loading operations are carried out in accordance with the provisions of Chapters 4 and 5 of the IMSBC code.
- When cargo is loaded into a cargo hold on a tank containing fuel or other material with a flash point below 93°C, cargo with a temperature of 55°C or higher will not be loaded into the cargo hold unless it is part of the cargo. Cargo with a temperature of 44°C or less is loaded into a layer of at least 0.6 m thick throughout the cargo area before loading cargo with a temperature of 55°C or higher.
- When the cargo with temperature of 55°C or higher is loaded in accordance with the above requirement and the thickness of the layer of cargo to be loaded is greater than 1.0 m, the cargo will be loaded in a thick layer first.
- After the installation process specified in the above paragraphs is completed, the installation process can be started.



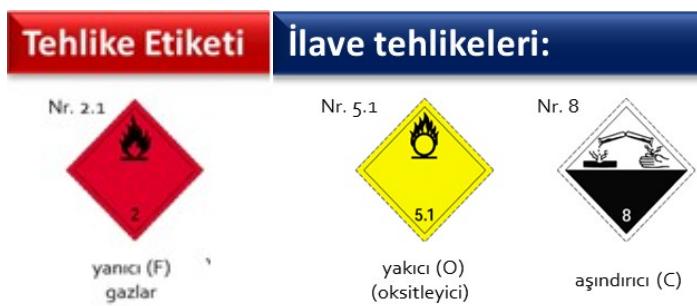
- This cargo will not be loaded when the temperature of this cargo exceeds 107°C.

Monoammonium Phosphate (M.A.P)

- It has a pH of 4.5 and can be highly corrosive to eyes and skin in the presence of moisture.
- This load can easily ignite.
- This load is non-flammable and has a low risk of fire.
- This load will be kept as dry as possible. It will not be handled during precipitation. During its handling, all inoperative holds of the cargo spaces where this cargo is loaded or will be loaded will be closed.
- Trimming is done according to the relevant provisions required in chapters 4 and 5 of the IMSBC Code,
- Since it is a caking product, the pieces in the form of lumps during discharge should be dispersed and the ship should be evacuated.
- Persons involved in cargo handling will wear protective clothing, goggles and a dust filter.

IGC Code Hazardous Liquefied Gas (Ammonia) Properties

Ammonia (UN 1005)



- It is in Class 2 (Gas) category.
- It is handled as liquid at a temperature of -33°C in the facility.
- Liquid ammonia splashes cause severe cold burns on the skin. Moist ammonia vapor irritates the skin.
- Ammonia smells in the range of 5-25 ppm. Causes mild irritation with prolonged exposure at concentrations in the 50-100 ppm range. If inhaled for a long time between 400-700 ppm, it causes irritation in the upper respiratory tract, eyes, nose and larynx. Short-term exposure at higher concentrations (above 1000 ppm) can severely irritate the eyes and upper respiratory tract. In environments above 2000 ppm, it can cause serious damage to the lungs in a very



short time and can be fatal, can cause edema in the lungs 48 hours after exposure and cause death.

- Ammonia vapor and liquid spills are difficult to ignite outdoors. If the mixture of ammonia and air is within the limits (16-27%) in a closed area, it may cause an explosion if ignited.

General Rules to be Applied in Handling Operations

- Absolutely do not smoke except in the designated areas on the docks.
- Avoid food and beverage consumption during handling operations.
- After the contact of chemicals or fuel-oil type substances with eyes, immediately wash your eyes with plenty of water under running water for at least 15 minutes with plenty of water.
- Use gloves, protective google type closed-sided goggles, face shield, protective clothing.
- Remove contaminated work clothes. Take care to work with clean clothes.
- To prevent the formation of electrostatic charge, ensure that all grounding precautions are taken completely.
- Follow the directives of the personnel responsible for the handling of dangerous goods during the operation.

Telephone Numbers of Personnel Responsible for Handling of Dangerous Goods

Name-Surname	Job Duty	Phone Number
Mehmet PUSAT	Terminal Chief	0533 285 51 27
A.Cemil BURHANLIOĞLU	Jetty Chief	0532 510 15 36
Ahmet MAZMAN	Bulk Terminal Chief	0533 121 25 79
Furkan Tuluk	Jetty Engineer	0531 089 94 03
A.Turan DEVECİ	Terminal Shift Manager	0532 718 29 84
Eser CAN	Terminal Shift Manager	0538 287 28 73
Halil EVER	Terminal Shift Manager	0543 592 84 77
Mustafa MERT	Terminal Shift Manager	0507 298 63 45



ANNEX-11: Leakage Areas and Equipment for CTU and Packages, Entry/Exit Drawings

Products of the specified type are not handled in our coastal facility.

ANNEX-12 Inventory of Port Service Ships

Ro-Ro

General Cargo Ship

Bulk Freighter

Oil/Product Tanker

Chemical Tanker

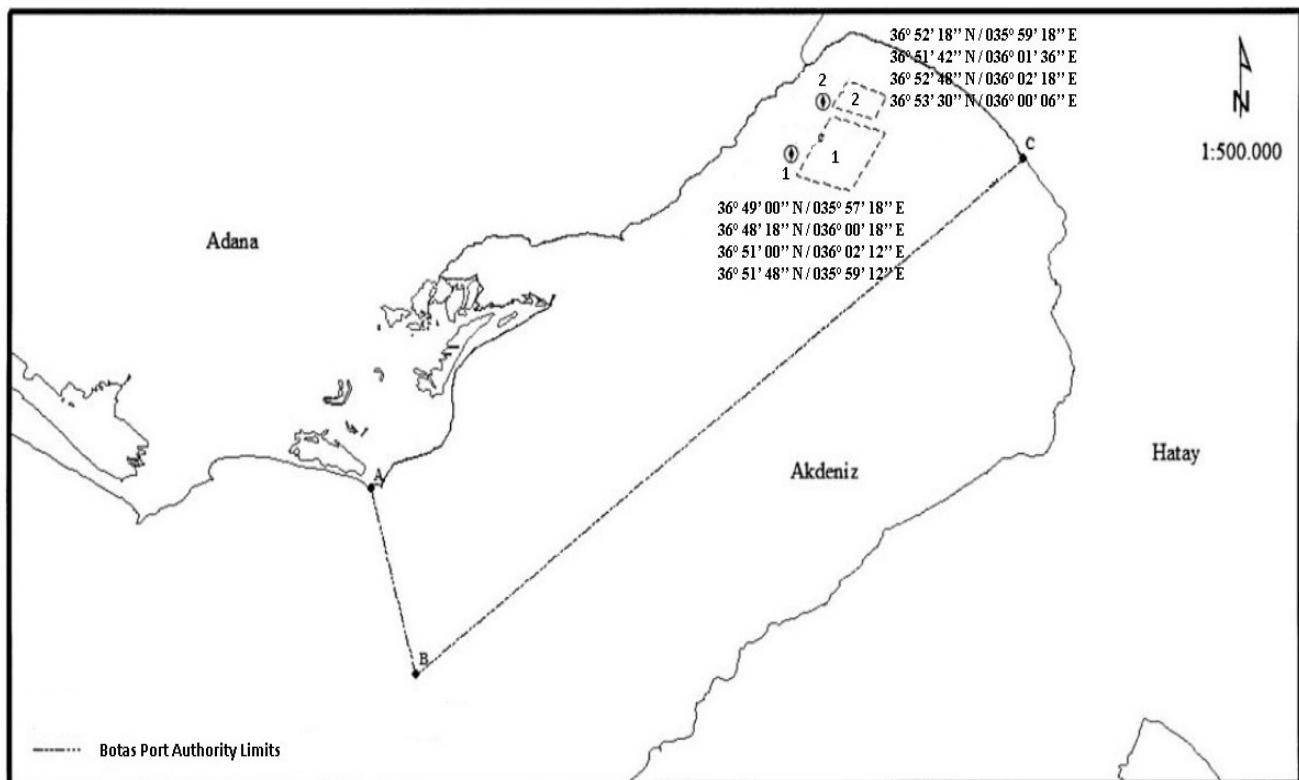
Liquefied Gas Tanker



ANNEX-13: Port Authority executive borders, and sea coordinates of anchoring areas and maritime pilot landing/boarding areas

Ceyhan Regional Port Authority Boundaries

APPENDIX 1 - TOROS TARIM PORT LOCATION



Botas Port Authority Limits

A - 36° 34' 03" N / 035° 33' 24" E
B - 36° 25' 15" N / 035° 35' 57" E
C - 36° 49' 48" N / 036° 10' 00" E

Anchorage Areas

1 - Ships carrying dangerous goods
2 - Ships carrying non-dangerous goods

Pilot station 1: 36° 50' 00" N / 035° 57' 00" E
Pilot station 2: 36° 52' 30" N / 035° 58' 48" E



Anchorage areas

Ships entering the terminal must anchor in the area for which the coordinates are given below.

1-) Dangerous Goods Vessels	36° 49' 06" N	035° 57' 00" E
	36° 47' 00" N	036° 58' 48" E
	36° 47' 00" N	036° 01' 12" E
	36° 51' 12" N	036° 01' 12" E
	36° 51' 48" N	035° 59' 12" E

Pilot Station: 36° 52' 30" N / 035° 58' 48" E

2-) Non-Dangerous Goods Vessels	36° 49' 30" N	035° 54' 42" E
	36° 49' 30" N	035° 55' 17" E
	36° 48' 30" N	035° 54' 24" E
	36° 48' 30" N	035° 53' 50" E

Pilot Station: 36° 51' 21" N / 035° 57' 18" E

3-) Non-Dangerous Goods Vessels	36° 52' 18" N	035° 59' 18" E
	36° 51' 42" N	036° 01' 36" E
	36° 52' 48" N	036° 02' 18" E
	36° 53' 30" N	036° 00' 06" E

Pilot Station: 36° 50' 18" N / 036° 56' 24" E



4-) Non-Dangerous Goods Vessels	36° 46' 00" N	035° 52' 00" E
	36° 46' 00" N	035° 53' 12" E
	36° 47' 36" N	035° 54' 30" E
	36° 47' 36" N	035° 53' 24" E

Pilot Station: 36° 47' 00" N / 035° 56' 00" E

Geographical Position of The Pier

Toros (Ceyhan) Pier is under the authority of Botaş Port Authority. The coordinates is given below.

West Pier (Berth No 1-2-3-9-10)	Land Side	36 55' 00" N	035 58' 54" E
	Sea Side	36 54' 24" N	035 59' 06" E
East Pier (Berth No 4-5-6-7-8)	Land Side	36 55' 12" N	035 59' 18" E
	Sea Side	36 54' 30" N	035 59' 34" E



ANNEX-14: Emergency response equipments against marine pollution in port facility

Current Equipment		
Barrier (foam padding)	428 m	Fribord: 30 cm Draft : 70cm Buoyancy: 4:1 Tension Strength:23.000 N ASTM-Z type connection: N/A
Sorbent boom	97 units	d: 30 cm L: 3 m
Roll sorbent pad	12 units	50 cm x 50 m
Gas meter	1 unit	DRAGER X-AM 300
Mobile gas meter	1 unit	Can measure %LEL, %O ₂ , H ₂ S ppm, CO ppm
Clean air tube and breathing set	6 units	
Fire outfit set	6 units	Helmet, suit, boots, gloves; full set
Gas mask	25 units	Full face, ammonia and acid purposed
Work shoes	60 pairs	Antistatic, skidproof sole, oil resistant
Gloves	40 pairs	Resistant to oil products
Fire truck	1 unit	To response to fires, a fire truck with monitor on it. It has 5.000lt water capacity and 500 lt foam tanks.



ANNEX-15: Personal Protective Equipment (PPE) Usage Map

TOROS TARIM		<DOC_ADI>													DOKEMAN NO	<DOC_KODE>		
															TATBİKTARİH	DOC_HAZ_TARİH		
NO	ÜNİTE ADI	KİİŞİSEL KORUYUCU DONANIM																
		1-Bant, 2-İly Elbisesi, 3-İşbu Dayanıklı İly Elbisesi, 4-Kırmızı Tabanlı Kompozit Bantlı Antistatik Ayakkabı, 5-Elektrikçi Ayakkabısı, 6-Gözlik, 7-Kulaklık, 8-Montaj Eldiveni, 9-Petrol Ürünlerine Dayanıklı Eldiven, 10-Toz Maskesi, 11-Asit Eldiveni, 12-Tam Yüz Maskesi(amoniyak), 13-Tam Yüz maskesi(asit), 14-Asit Çiğnesi, 15-Kıynak Gözlikü,																
1	NPK ÜNİTESİ	X	X			X			X	X	X			X	X	X	X	
2	DAP ÜNİTESİ	X	X			X			X	X	X			X	X	X	X	
3	AMONYAK ÜNİTESİ	X	X			X			X		X					X		
4	ASİT ÜNİTESİ	X	X			X			X		X			X		X	X	
5	TORBALAMA ÜNİTESİ	X	X			X					X			X			X	
6	MEKANİK ATÖLYE	X	X			X			X		X						X	X
7	ELEKTRİK ENS. ATÖLYESİ	X	X					X	X		X						X	
7	MALZEME AMBARI	X	X			X					X							
8	TERMINAL ÜNİTESİ	X			X	X			X				X					
9	ISKELE1-2-3-9-10	X			X	X			X		X	X		X	X	X	X	
10	ISKELE4-5-6-7-8	X		X	X			X	X	X	X	X			X	X		
11	ISKELE9-10	X		X	X			X		X	X			X		X	X	
12	REVİR						X											
13	GÖBRE DEPOLARI	X	X			X			X		X			X				
14	TAHİL DEPOLARI	X	X			X			X		X							
15	KAZAN DAİRESİ	X	X			X			X	X	X							
16	TEKNİK EMNİYET	X			X	X							X					
17	MÖTEAHHİT ATÖLYE	X	X			X			X	X	X							
18	BANT POLYESTER ATÖLYESİ	X	X			X			X		X			X				
19	ARAÇ İŞLETME ÜNİTESİ	X	X			X												
20	İNŞAAT ATÖLYESİ	X	X			X												
21	LABORATUAR	X	X			X			X	X								
22	KUMLAMA BOYAMA SAHASI	X	X			X			X	X	X		X					
AÇIKLAMALAR																		
X : GEREKİĞİNDE KULLANILACAK KKD																		
X: KULLANILMASI ZORUNLU KKD																		
Sayfa 1																		



ANNEX-16: The Notification Form For Dangerous Goods Incidents

		28.12.2015
THE NOTIFICATION FORM FOR DANGEROUS GOODS INCIDENTS		Revision Date : 0
		Revision No : 0
		Page No :
Port Facility Name		
Facility SuperIntendent		
1.The nature of the Incident and Time of Occurance		
2.The Scene of the Incident /Exact Location		
3.The information regarding the cargo types, amount and status that are affected by the Incident		
4.Certain Existing Hazards/Marine Pollutants		
5.The details of Dangerous Cargo Labels and Marks		
6.If the cargo classified by IMDG Code, proper shipment name, Class (if assigned, for Class 1 sections and compatibility groups of the products),UN No and Packaging Group		
7.The Manufacturer of Dangerous Cargo		
8.Damage/Pollution Rate		
9.The Sequence of Events Lead To the Incident		
10.The numbers and types of Injury /Death		
11.Emergency Response		
12.Other issues required to be specified		
13.Requests and Needs		
14.Person giving information Position/Name Surname/Signature/Contact Details		

Note: Being able to respond quickly and effectively, treatment of injured personnel, making brief and clear definitions to the emergency response units, to the Port Authority in the shortest time is extremely important. If present, the definition should include the above mentioned details.



ANNEX-17:



T.C MINISTRY OF TRANSPORT, MARITIME AFFARS AND COMMUNICATIONS
Dangerous Goods and Combined Transport Regulation Head Office

INSPECTION RESULTS FOR CARGO TRANSPORT UNITS (CTUs) CARRYING DANGEROUS GOODS (Form Front Page)

Year/Term/.....			
Concerned Port Authority				
Coastal Facility Name				
INSPECTION SUBJECTS	Inspected (Unit)	Defective (Unit)	Inspected (%)	Defective (%)
CTU Plate and Placard Compliance				
Non conforming / Damaged Packages				
Package Labels and Brands				
Documentation (Dangerous Cargo Declaration)				
Inappropriate or Damaged Portable Tank or Road Tankers				
CTU/Vehicle/ Container Inner Stacking and Binding				
Cargo Segregation (Conforms to Cargo Segregation Rules)				
Containers Safety Convention (CSC) Approval Plate				
Road Tanker Mooring Apparatus and Plug-Ins				
/.....			
Prepared by the Port Management / Port Authority				

This form; according to IMO MSC.1 / Circ.1442 with circular dated and Dangerous Goods and Combined Transport Regulation Head Office date of 04/03/2013 80,063,613 / and Post No. 115.01.1099; will be reported by the port facilities where the dangerous cargo are handled after making the necessary inspections for compliance of Cargo Transport Units (CTUs) subject to IMDG Code to the Port Authority to where the coastal facility affiliated. Port Authority where the notification is made will report the inspection results to the Dangerous Goods and Combined Transport Regulation Head Office.



(Back Page)



ANNEX-18-1: MARPOL ANNEX-1, IBC CODE and ASPHALT – Operation Procedure for Safe Handling of Liquid Bulk Dangerous Goods

AIM

The purpose of this procedure is Toros Tarım Sanayi ve Tic. A.Ş. in the Ceyhan Port Facility, to ensure the safe handling of the dangerous goods in question.

SCOPE

It covers the liquid bulk dangerous goods handled at the berths 1,2,6,7,9 and 10 in our port facility.

RESPONSIBILITY

Terminal Manager, Terminal Supervisor, Pier Supervisor, Liquid Terminal Engineer, Solid Terminal Engineer, Pier Engineer, Terminal Watch Supervisors, Terminal and Pier Chief Controls, Terminal and Pier Site Controls and Contractor Company Employees Involved in Operations

RELATED DOCUMENTS

TRM-FR-007 Pre-Cargo Conference Report

TRM-FR-011 Ship-Shore Safety Checklist (Appendix A)

TRM-LI-001 Checklist

TRM-PR-002 Ammonia Filling Arm Connecting and Disconnecting Operation Procedure

International Code on the Construction and Equipment of Ships Carrying Dangerous Chemicals

International Convention for the Prevention of Pollution of the Seas by Ships

NECESSITY

- In cargo operations and emergency situations, according to their responsibilities, the ship's captain and the coastal facility operator should have the proper transport name and UN number of the dangerous cargo in relation to the dangerous liquid bulk cargoes that are loaded/discharged or transported. In this context, the list of dangerous goods handled in our port is in Annex-1.
- Dangerous Liquid Bulk Cargoes are handled at berths 1, 2, 6, 7, 9 and 10 at our port facility. After the ship is safely moored to the pier with the help of the pilot and mooring, a safety inspection is carried out on the ship. If there is an unsafe situation, the situation is communicated to the ship's person and precaution are taken. Discharge equipment and hose selection suitable for the load will be made by the operation manager. ISGOTT Ship/Shore



Safety Checklist is mutually signed. A communication network is established between the ship and the port facility.

- For the purpose of detecting gas leaks that may occur in the port facility, gas detectors will be calibrated and ready for use.
- During the loading/discharging operation at the port facility, all kinds of vehicles coming to the filling/discharging platform in the facility will be completely free of static electricity, flame arrester apparatuses will be installed on their exhausts and grounded. Flame arresters will be provided by the port operator. Vehicles without flame arresters will not be admitted to the port facility.
- Necessary warnings and warning signs will be placed around the handling area. In dangerous places and situations, the relevant personnel will wear personal protective clothing and equipment in accordance with occupational safety and worker health criteria.
- Personnel who do not have personal protective clothing and equipment suitable for their job descriptions and working areas will not be employed in these areas.
- Periodic maintenance, repair and calibration of the devices used will be carried out, and the certificate, journal or registry documenting this situation will be kept up-to-date.
- In case of emergencies or accidents, first aid materials to be used for intervention will be kept in easily accessible places by the personnel.
- Flexible pipes used for loading/discharging liquid bulk cargoes; type-approved and a certificate showing the pipe type, the maximum working pressure of the pipe, the month and year of manufacture will be checked. The tests, maintenance and repairs of the pipes in question will be carried out in accordance with the criteria specified in ISGOTT, and the relevant test reports and maintenance and repair records will be kept. Hoses that will be used in loading / evacuation operations but not in service will be kept in accordance with the criteria specified in ISGOTT.
- A sufficient number of electrical insulation flanges will be available for flexible hoses and loading arms used in the loading/unloading of liquid bulk cargoes.
- Dangerous liquid bulk cargoes will be transported in a way that eliminates the possibility of interaction with other cargoes.
- The operators of coastal facilities where dangerous liquid bulk cargoes are handled will carry out the issues regarding the additional safety and security precaution to be taken at the coastal facilities under a common denominator with the liquid cargo foreman, supervisor, supervisor and Seç unit.



- Liquid cargo foreman, supervisor and chief in our port facility are responsible for handling dangerous liquid bulk cargoes and their duties are defined in the quality management system and will act within the framework of these responsibilities.
- Employees involved in the handling of dangerous goods at the facility will receive the necessary training in accordance with their job descriptions and in a manner that fulfills their responsibilities regarding dangerous goods. Personnel who do not receive these trainings will not be involved in the handling of dangerous goods.
- In cargo operations and emergency situations, the ship's captain and liquid cargo foreman, according to their areas of responsibility, will provide the following information regarding the dangerous liquid bulk cargoes that are loaded/discharged or transported to the port authority and other relevant persons, if necessary.

By the ship's captain;

- Proper shipping name, UN number (if any) and description of its physical and chemical properties (including reactivity) of the dangerous cargo.
- Load transfer, slop transfer, degassing, inerting, ballasting, ballast unloading and tank cleaning procedures.

By Liquid Cargo Foreman, Supervisor, Chief;

- Information on the special equipment required for the safe handling and loading/unloading of certain loads, and emergency response procedures, including the following:
- What to do in case of spillage or leakage specified in the Emergency Plans,
- Precaution to be taken to prevent accidental contact of persons with dangerous goods in the Emergency Plan and within the scope of Occupational Health and Safety,
- Fire fighting procedures specified in the Emergency Plan and appropriate communication systems to be used in case of fire.
- Before starting the handling and loading/unloading operations of dangerous liquid bulk cargoes and during the Operation.



HANDLING OPERATIONS

Flexible Hoses

Ship Captain and Operations Officer within their respective areas of responsibility:

- With regard to the temperature and suitability of such loads, he shall ensure that a flexible hose is not used at any other operating pressure than for which it is suitable or at any operating pressure for which it is unsuitable.
- It will be checked that each type of flexible hose with end fittings has been tested and has a certificate showing burst pressure.
- Prior to being placed into service, documentation shall be checked that each flexible hose has been hydrostatically tested in accordance with management requirements.
- Flexible hoses will be visually inspected before they are put into use.
- Flexible hoses will be inspected frequently during operation.
- Documents showing the flexible hose, the hose type, the specified maximum working pressure, and the month and year of manufacture will be kept at the facility.

Use of Hoses for Hazardous Bulk Liquid Cargoes

- Considering the temperature and suitability of these types of loads, hoses will not be used other than those for which they are suitable.
- If it is prone to damage by impact, it will be adequately guarded.
- It will be ensured that the hoses are electrically continuous, except that they contain an insulating flange or a non-conductive reel piece during load handling.
- The pipeline on the sea side of the insulation section will be electrically continuous to the ship and the land side will be electrically continuous to the grounding system.
- The hoses used will be tested in accordance with section 17 of the International Safety Manual for Fuel Tankers and Terminals (ISGOTT).



Initial Precautions

- Within their respective areas of responsibility, the Ship's Master and Operations Officer will test and ensure that the load handling equipment, equipment and equipment, measuring systems, emergency shutdown and alarm systems are sufficient before starting the load transfer operation.
- Before starting the dangerous liquid bulk cargo operation, a written agreement should be made between the Ship's Captain and the Operations Officer, taking into account the following issues. This agreement should include the following items;
 - Capacity and maximum allowable pressure of ship load lines and flexible hose
 - Maximum loading/unloading capacities (in mton and cbm)
 - Steam ventilation system layout
 - Possible pressure increases due to emergency shutdown procedures
 - Possible electrostatic charge build-up and
 - Who are the responsible persons during launch operations between the ship and the shore facility.
- Appropriate security checklist showing the main security precaution to be taken before and during such transfer operations will be completed and signed between the parties.
- In case of an emergency that may occur during handling operations, the steps to be taken and the signs to be used will be accepted in writing.
- Appropriate safety precautions and clothing will be used.
- The operations manager shall ensure that the start controls on the bulk liquid transfer pumps are locked in the "off" position or located in a location accessible only to authorized personnel.
- The operation supervisor will ensure that all discharge holes and pipes and all kinds of drains on the quay/pier where dangerous liquid spills may leak in the event of an accident are closed before starting the operation and will be kept closed during the operation. In addition, if any load spillage occurs, these spilled loads will be transferred to the collection pool located on the pier platform.



- The operations officer should inform the ship's captain about taking the necessary precautions to prevent similar equipment on the ship, such as stoves or cooking utensils used in the galley, from becoming a source of ignition.
- The operations officer will check that the loading/unloading connections of the flexible hose are not in use or are blinded safely and sealed when in standby service.
- The "Ship/Shore Safety Checklist" in the International Safety Manual for Tankers and Terminals (ISGOTT) will be filled and signed in accordance with the "Guideline for Completion of the Ship/Shore Safety Checklist" in ISGOTT.

Controls During Load Transfer

Ship Captain and Operations Officer within their respective areas of responsibility:

- Checks are made at agreed periods to ensure that the accepted back pressures and loading or unloading speeds are not exceeded;
- All relevant piping, flexible hoses, attached equipment on board and on shore are given due care to prevent leakage, and adequate inspection is carried out during the transfer of dangerous bulk liquid cargoes;
- Maintaining effective communication between the ship and shore equipment during transfer operations.
- A safety checklist is available for inspection during handling operations;
- During the handling of dangerous liquid bulk cargoes, regular measurements are made on the ship or on the shore tank to ensure that the tanker or shore tank is not overfilled;
- Responsible persons are present during operations on board and on shore;
- If degassing and tank cleaning are to be carried out at the same time on ships handling dangerous liquid bulk cargo, the written permission of the Port Authority must be obtained and all applicable precaution have been taken to prevent damage to flexible pipes and related equipment;
- On ships handling dangerous liquid bulk cargoes, simultaneous degassing and tank cleaning will only be carried out when authorized by the Port Authority and when all practicable precaution are taken to prevent damage to the coupling, loading arms, flexible pipes and related equipment;
- They will make sure that appropriate safety equipment and clothing are used.



Controls After Load Transfer

Ship Captain and Operations Officer within their respective areas of responsibility:

- After the handling operations, the valves of the emptied and filled tanks should be open, if there is no operational situation, these valves should be closed;
- After the transfer of dangerous bulk liquid cargoes is completed, there are no pressure residues in the unloading valves and flexible hoses;
- Before removing the flexible hose from the ship, the fluids are drained and the pressure is relieved;
- The ship will ensure that all safety precautions are taken, including sealing the manifold connections and flexible hoses with a blind flange.
- According to their responsibilities, the ship's master and the shore facility operator should take the necessary precaution to prevent excessive pressure in the tanks containing liquefied gas under a certain pressure on the ship or in the coastal facility. Where necessary, the surroundings of the tank should be cooled by available methods, including water spraying.

Handling of Cargoes Transported by Combined (OBO) Ships

The following points should be fulfilled in handling operations:

- Combination ships carrying crude oil or petroleum products with a flash point not exceeding 60° C c.c., where it can be demonstrated that no residual liquid, solid or gas remains in any of their tanks, holds, empty spaces, cargo or ballast lines, pump or pump rooms must meet the following conditions.
- If the combined ship berthed at the shore facility is not degassed;

The area within the area 25 meters from the ship should be considered as a dangerous area and all necessary precautions should be taken against the possibility of fire.

Ship's tanks must be inerted

The "Ship/Shore Safety Checklist" in ISGOTT should be applied in its entirety.



Cargo Transfer Procedure from Shore Tanks to Ship

Before the ship loading, the following procedures should be done as a preparatory stage;

- Terminal Field Controller, Liquid Terminal Engineer/Terminal Shift Supervisor and Inspector take off the relevant tank with non-sparking measuring instruments (one person waits on the top platform of the stair)
- The controller carefully opens the measuring cover, with the wind behind it.
- Immerse the thermometer in the middle of the liquid level with slow movements. Waits 5 minutes.
- The plumb line makes the measurement with slow movements.
- It takes samples from the liquid in the tank.
- It puts an aluminum strainer under the measuring cover and keeps the cover half open.
- Checks whether there is any airtight cover on the vacuum breaker. If there is an object preventing air intake, it will take it.
- Controls the outlet valves of other tanks.
- It opens the outlet valve of the tank.
- If more than one tank is to be transferred, the above procedures are applied and the outlet valves of the tanks with the same capacities and levels are opened at the same time.
- Transfer pumps suction collector valves are opened.
- By removing the air from the pumps, it is ensured that the collector is filled with liquid.

In order to make the ship ready for loading, the terminal field controller, under the supervision of the liquid terminal engineer or the terminal shift supervisor, together with the inspectors, measures the product level, water level and product temperature of the shore tanks (if there is product in them), and determines the product amount. The calculations made are verified by comparing the calculations of the liquid terminal supervisor or the terminal shift supervisor with the calculations of the inspectors, and they are recorded by mutual signature.

Before starting the pumping to the ship, the liquid terminal engineer or the terminal shift officer takes the sample of the product to be discharged from the inspector and visually checks it. In order to start the pumping, it is necessary to get information from the ship that the ship is ready, to learn the amount of goods to be loaded on the ship and from the inspector responsible for the completion of the ship's measurement.



After the aforementioned information is received by the port supervisor or the terminal shift supervisor, the liquid terminal chief controller is contacted and informed. After the liquid terminal chief controller informs the pier chief controller that it is ready, the port valve and the ship's inlet valve are opened. After the valves are opened, the pier chief controller communicates with the liquid terminal chief controller and informs him to start pumping. The liquid terminal chief controller communicates with the pier chief controller and notifies the pumping start time.

If the loading pumps stop during loading, loading should not be started without consulting the pier. Since there is an emergency stop button on the ship or on the pier, it is first checked whether these mentioned buttons are used. If the emergency stop buttons are not used, the reason for the interruption is learned and reloading is started by contacting the scaffold.

When the ship's loading operations are completed, the liquid terminal chief controller informs the liquid terminal engineer, stops the pumping in consultation with the pier chief controllers, and the pier chief controller closes the pier valve.

After the ship is loaded, the terminal field controller, under the supervision of the liquid terminal engineer or the terminal shift supervisor, measures the product level, water level and product temperature of the shore tanks and determines the product amount. The calculations made are compared with the calculations of the terminal engineer or the terminal shift supervisor and the inspectors, and the amount of product loaded on the ship is verified and recorded by mutual signing. The amount of product loaded on the ship from the shore tanks is determined.

Cargo Transfer Procedure from Ship to Shore Tanks

Before the ship evacuation, the following should be done as a preparatory stage;

- Liquid Terminal Field Controller, Liquid Terminal Officer/Terminal Shift Officer and Inspector take off the relevant tank with non-sparking measuring instruments (one person waits on the top platform of the stairs).
- The controller carefully opens the measuring cap with the wind behind it.
- Immerse the thermometer (if there is product in the tank) at the midpoint of the liquid level with slow movements. Waits 5 minutes.
- It measures the product level and the water level in the tank by releasing the plumb meter with slow movements.
- It takes samples from the liquid in the tank.
- It puts an aluminum strainer under the measuring cover and keeps the cover half open.



- Checks whether there is any airtight cover on the vacuum breaker. If there is an object blocking the air outlet, it will take it.
- Controls the inlet-outlet valves of other tanks.
- Lines, connections and valves used to receive products are checked. The line is prepared for unloading by placing a blank plate where deemed necessary.
- It opens the inlet valve of the tank.

In order to make the ship ready for unloading in liquid discharges, the terminal field controller, under the supervision of the Liquid Terminal Engineer or the Terminal Shift Supervisor, together with the inspectors, measures the product level, water level and product temperature of the shore tanks (if there is product in them), and determines the product amount. The calculations are verified by comparing the calculations of the liquid terminal engineer or the terminal shift supervisor with the calculations of the inspectors, and they are recorded by mutual signature.

If the tanks are empty and if a product different from the product to be discharged is stored, the "Tank Cleaning Certificate" document that the tank is clean is obtained from the relevant inspector by the liquid terminal engineer or terminal shift supervisor.

Before the ship starts pumping, shore tank measurements must be completed.

Before the ship starts pumping, the terminal officer or the terminal shift officer takes a sample of the product to be discharged from the inspector and visually inspects it.

In order to start the pumping, it is necessary to get information from the ship that the ship is ready, to learn from the inspector responsible for the amount of goods to be unloaded on the ship, and that the ship measurement has been completed.

After the aforementioned information is received by the port supervisor or the terminal shift supervisor, the liquid terminal chief controller is contacted and informed. After the liquid terminal chief controller informs the pier chief controller that it is ready, the port valve and the ship's inlet valve are opened. After the valves are opened, the pier chief controller communicates with the liquid terminal chief controller again and reports the start of pumping and the start time.

The lines between the tank and the pier are checked every 2 hours. Tank level measurement is checked every two hours. Tank levels are checked according to the amount of product to be discharged from the ship.

Two-hour tonnage and total tonnages are recorded on the pump transfer chart. Transportation to the transfer capacity is provided. During the increase in the liquid level in the tank, it checks whether air comes out of the vacuum breaker and the measuring cover, and when the pumping starts, it is followed that the product enters the tank from the ladder top platform and the tank inlet line.



At the end of the operation, the port inlet valve is closed. Then the tank suction valve is closed. The amount loaded/unloaded is determined by measuring in the tanks and on the ship. After unloading from the ship to the tanks, the shore tank report is prepared by the supervisor and the gross and net amounts are filled. Report; It is signed by the Superintendent and Liquid Terminal Supervisor/Terminal Shift Supervisor.

Slop Transfer

In order to receive slop from the ship to the tanks, the ship must obtain the necessary permits according to the relevant laws and its application to our terminal must be accepted. After these processes are completed;

- It is checked whether the 10" slop line between the Pier Terminal office is empty.
- Water connection is made to the 10" slop line at the pier.
- Slop line front office valves are adjusted to the appropriate slop tank with the circulation line.
- At the pier, the slop line is connected to the ship with a hose.
- In the pump pit in front of the office, the slop line circulation line connection valve is opened and adjusted to the inlet line of the relevant tank.
- The line outlet valve of the tank from which the slop will be taken is opened, allowing the product pressed from the ship to enter the tank.
- Level control is done by taking a measurement every hour. Slop can be taken up to the operating fill level.
- When the sloping process is completed, a sample is taken from the tank. The oil level is measured.



ANNEX-18-2: IGC CODE – Operation Procedure for Safe Handling of Bulk Dangerous Goods in Liquefied Gaseous State

AIM

The purpose of this procedure is to conduct liquefied gas (Ammonia UN 1005) operations, Toros Tarım Sanayi ve Tic. A.Ş. in the Ceyhan Port Facility, to ensure the safe handling of the dangerous goods in question.

SCOPE

It covers liquid bulk dangerous goods handled at berths 1 and 2 in our port facility.

RESPONSIBILITY

Terminal Manager, Terminal Supervisor, Pier Supervisor, Liquid Terminal Engineer, Solid Terminal Engineer, Pier Engineer, Terminal Watch Supervisors, Terminal and Pier Chief Controls, Terminal and Pier Site Controls and Contractor Company Employees Involved in Operations

RELATED DOCUMENTS

IGC Code

TRM-FR-007 Pre-Cargo Conference Report

TRM-FR-011 Ship-Shore Safety Checklist (Appendix A)

TRM-LI-001 Checklist

TRM-PR-002 Ammonia Filling Arm Connecting and Disconnecting Operation Procedure

NECESSITY

- In cargo operations and emergency situations, according to their responsibilities, the ship's captain and the coastal facility operator should have the proper transport name and UN number of the dangerous cargo in relation to the dangerous liquid bulk cargoes that are loaded/discharged or transported. In this context, the list of dangerous goods handled in our port is in Annex-1.
- Dangerous Liquefied Gas Cargoes are handled at berths 1 and 2 at our port facility. After the ship is safely moored to the pier with the help of the pilot and mooring, a safety inspection is carried out on the ship. If there is an unsafe situation, the situation is communicated to the ship's person and precaution are taken. Discharge equipment and hose selection suitable for the load will be made by the operation manager. ISGOTT Ship/Shore Safety Checklist is



mutually signed. A communication network is established between the ship and the port facility.

- For the purpose of detecting gas leaks that may occur in the port facility, gas detectors will be calibrated and ready for use.
- During the loading/discharging operation at the port facility, all kinds of vehicles coming to the filling/discharging platform in the facility will be completely free of static electricity, flame arrester apparatuses will be installed on their exhausts and grounded. Flame arresters will be provided by the port operator. Vehicles without flame arresters will not be admitted to the port facility.
- Necessary warnings and warning signs will be placed around the handling area. In dangerous places and situations, the relevant personnel will wear personal protective clothing and equipment in accordance with occupational safety and worker health criteria.
- Personnel who do not have personal protective clothing and equipment suitable for their job descriptions and working areas will not be employed in these areas.
- Periodic maintenance, repair and calibration of the devices used will be carried out, and the certificate, journal or registry documenting this situation will be kept up-to-date.
- In case of emergencies or accidents, first aid materials to be used for intervention will be kept in easily accessible places by the personnel.
- A sufficient number of electrical insulation flanges will be available for the flexible hoses and loading arms used in the loading/unloading of the load.
- The operators of the coastal facilities where the cargo is handled will carry out the issues regarding the additional safety and security precaution to be taken at the coastal facilities under a common denominator with the liquid cargo foreman, supervisor, supervisor and the Select unit.
- Liquid cargo foreman, supervisor and chief in our port facility are responsible for handling dangerous liquid bulk cargoes and their duties are defined in the quality management system and will act within the framework of these responsibilities.
- Employees involved in the handling of dangerous goods at the facility will receive the necessary training in accordance with their job descriptions and in a manner that fulfills their responsibilities regarding dangerous goods. Personnel who do not receive these trainings will not be involved in the handling of dangerous goods.
- In cargo operations and emergency situations, the ship's captain and liquid cargo foreman, according to their areas of responsibility, will provide the following information regarding the



dangerous liquid bulk cargoes that are loaded/discharged or transported to the port authority and other relevant persons, if necessary.

By the ship's captain;

- Proper shipping name, UN number (if any) and description of its physical and chemical properties (including reactivity) of the dangerous cargo.
- Load transfer, slop transfer, degassing, inerting, ballasting, ballast unloading and tank cleaning procedures.

By Liquid Cargo Foreman, Supervisor, Chief;

- Information on the special equipment required for the safe handling and loading/unloading of certain loads, and emergency response procedures, including the following:
 - What to do in case of spillage or leakage specified in the Emergency Plans,
 - Precaution to be taken to prevent accidental contact of persons with dangerous goods in the Emergency Plan and within the scope of Occupational Health and Safety,
 - Fire fighting procedures specified in the Emergency Plan and appropriate communication systems to be used in case of fire.
 - Before starting the handling and loading/discharging operations of dangerous liquefied gas cargoes, and during the operation, it will be checked that the necessary warning notices/signs, in written and pictograms (pictograms), are placed at all entrances where the said operation will take place and at the approach points of the quay.
 - During the handling and loading/unloading of dangerous liquefied gas cargoes, continuous communication will be provided from the Sea Band Channel 13 and the working channel specified in the protocol, and the effectiveness of communication will be ensured during the cargo operations.

HANDLING OPERATIONS

Flexible Hoses

Ship Captain and Operations Officer within their respective areas of responsibility:

- With regard to the temperature and suitability of such loads, he shall ensure that a flexible hose is not used at any other operating pressure than for which it is suitable or at any operating pressure for which it is unsuitable.
- It will be checked that each type of flexible hose with end fitting / loading arm has been tested and has a certificate showing burst pressure.



- Prior to being placed into service, each flexible hose / fill arm will be checked from documentation to be hydrostatically tested in accordance with management requirements.
- Flexible hoses will be visually inspected before they are put into use.
- Flexible hoses will be inspected frequently during operation.
- Documents showing the flexible hose, the hose type, the specified maximum working pressure, and the month and year of manufacture will be kept at the facility.

Use of Hoses for Hazardous Bulk Liquid Cargoes

- Considering the temperature and suitability of these types of loads, hoses will not be used other than those for which they are suitable.
- If it is prone to damage by impact, it will be adequately guarded.
- It will be ensured that the hoses are electrically continuous, except that they contain an insulating flange or a non-conductive reel piece during load handling.
- The pipeline on the sea side of the insulation section will be electrically continuous to the ship and the land side will be electrically continuous to the grounding system.
- The hoses used will be tested in accordance with section 17 of the International Safety Manual for Fuel Tankers and Terminals (ISGOTT).

Initial Precautions

- Within their respective areas of responsibility, the Ship's Master and Operations Officer will test and ensure that the load handling equipment, equipment and equipment, measuring systems, emergency shutdown and alarm systems are sufficient before starting the load transfer operation.
- Before starting the operation of dangerous liquefied gas cargoes, a written agreement should be made between the Ship's Master and the Operations Officer, taking into account the following issues. This agreement should include the following items;
 - o Capacity and maximum allowable pressure of ship load lines and flexible hose
 - o Maximum loading/unloading capacities (in mton and cbm)
 - o Steam ventilation system layout
 - o Possible pressure increases due to emergency shutdown procedures



- o Possible electrostatic charge build-up and
- o Who are the responsible persons during launch operations between the ship and the shore facility.
- Appropriate security checklist showing the main security precaution to be taken before and during such transfer operations will be completed and signed between the parties
- In case of an emergency that may occur during handling operations, the steps to be taken and the signs to be used will be accepted in writing.
- Appropriate safety precautions and clothing will be used.
- The operations officer will check that the loading/unloading connections of the flexible hose are not in use or are blinded safely and sealed when in standby service.
- The "Ship/Shore Safety Checklist" in the International Safety Manual for Tankers and Terminals (ISGOTT) will be filled and signed in accordance with the "Guideline for Completion of the Ship/Shore Safety Checklist" in ISGOTT.

Controls During Load Transfer

Ship Captain and Operations Officer within their respective areas of responsibility:

- Checks are made at agreed periods to ensure that the accepted back pressures and loading or unloading speeds are not exceeded;
- All relevant piping, flexible hoses, attached equipment on board and on shore are given due care to prevent leakage, and adequate inspection is carried out during the transfer of dangerous bulk liquid cargoes;
- Effective communication between the ship and shore equipment is maintained during transfer operations;
- A safety checklist is available for inspection during handling operations;
- During the handling of cargo, regular measurements are made on the ship or on the shore tank to ensure that the tanker or shore tank is not overfilled;
- Responsible persons are present during operations on board and on shore;
- If degassing and tank cleaning are to be carried out at the same time on ships handling dangerous liquefied gas, the written permission of the Port Authority must be obtained absolutely and all applicable precaution have been taken to prevent damage to equipment related to flexible pipes;



- On ships handling hazardous liquefied gas, simultaneous degassing and tank cleaning will only be carried out when authorized by the Port Authority and when all practicable precaution are taken to prevent damage to the coupling, loading arms, flexible pipes and related equipment;
- They will make sure that appropriate safety equipment and clothing are used.

Controls After Load Transfer

Ship Captain and Operations Officer within their respective areas of responsibility:

- After the handling operations, the valves of the emptied and filled tanks should be open, if there is no operational situation, these valves should be closed;
- No residual pressure in the unloading valves and flexible hoses after the load transfer is complete;
- The ship will ensure that all safety precautions are taken, including sealing the manifold connections and flexible hoses with a blind flange.
- According to their responsibilities, the ship's master and the shore facility operator should take the necessary precaution to prevent excessive pressure in the tanks containing liquefied gas under a certain pressure on the ship or in the coastal facility. Where necessary, the surroundings of the tank should be cooled by available methods, including water spraying.

Handling of Low Temperature Liquefied Gases

Ship's Captain and Operations Officer within their respective areas of responsibility:

- All associated tanks, pipelines, loading arms and other ship's pipelines on board and at the shore facility are gradually and evenly cooled to avoid thermal stresses;
- Gas detectors and other related equipment are in working order;
- It will ensure that sufficient number of personal protective clothing and equipment are available for use.



Disharge Procedure of Ammonia Tanker

1. For the ammonia tankers that are planned to arrive at our facilities, the agency sends the ship specifications to us and obtains eligibility for our port.
2. Production Management, Auxiliary Facilities Chief is informed about the Current ETA of the upcoming tankers.
3. When we receive the e-mail containing the details and ETA of the ammonia tanker that will arrive at our facilities, the necessary studies on the relevant ship begin. The ETA of the relevant ship is sent to us regularly by the agency.
4. Ammonia tankers dock at Pier 2. A preliminary planning is made regarding when the relevant ship will berth to the pier according to the current pier program. Ship and cargo information is recorded in the 'Scaffolding Program'.
5. The line is cooled by auxiliary facilities 2 days before the arrival time of the tanker.
6. Before the ammonia tankers arrive at our facilities, the equipment to be used in the operation is checked according to the ammonia tankers pre-arrival control form numbered TR-C-FR-032.
7. When the tanker arrives at the port border, it gives the Letter of Preparation (NOR) and is considered to have arrived at our facility. The ship is berthed to the pier by making a written notification to the relevant pilotage company, according to the declaration/payment and the pier status of the ship.
8. During berthing, the pilot is in contact with the pier head controller and/or TVS. In agreement with the pilot, the tanker is berthed to the pier.
9. During berthing, the pilot is in contact with the pier head controller and/or TVS. In agreement with the pilot, the tanker is berthed to the pier.
10. If the Agency and customs work is not completed after the ship has berthed, the agency and customs work is expected to be completed. The TVS/pier engineer goes on board and fills the SSCL and PRECC with the 2nd Captain. (Sample documents are attached.)
11. After the above-mentioned paperwork is completed and the declaration is received, the Pier Chief / İsk.Eng. to start the ship. and/or instructed to start the head controller by TVS. The chief controller starts the evacuation by contacting the auxiliary facilities and agreeing with the ship.
12. During the evacuation, taking into account the PRECC, the chief controller keeps in touch with the unloading auxiliary facilities and the ship, so that the operation continues in an



appropriate manner. In an unfavorable situation, the ship and/or the TVS, the ship's engineer or the pier chief are informed.

13. In the event of a storm during unloading, if the blow is between 11.3 m/s-13.8 m/s knots, the operation is stopped and the arm is removed in agreement with the ship. The arm is dismantled according to the ammonia filling arm tying and separating procedure no. 004 and if more artifacts are agreed with the ship, the ship leaves the pier.

14. After the unloading of the ship is completed, the end time of the evacuation is agreed with the ship and noted and notified to the berth supervisor, pier engineer and/or TVS. The ammonia arm is disassembled according to the TR-C-PR-004 no. TR-C-PR-004 ammonia filling arm connection and disconnection procedure.

15. Draft survey, agency, customs, police and terminal paperwork is completed.

16. While the ship is leaving the pier, the maritime operation channel radio is received, the pilot is contacted, the ship departure maneuver is followed.

ANNEX-18-3:IMDG CODE - Safe Handling Operation Procedure of Packaged Dangerous Goods

AIM

The purpose of this procedure is Toros Tarım Sanayi ve Tic. A.Ş. in the Ceyhan Port Facility, to ensure the safe handling of the dangerous goods in question.

SCOPE

It covers the packaged dangerous goods handled at the quays 4,5 and 7 in our port facility.

RESPONSIBILITY

Terminal Manager, Terminal Supervisor, Pier Supervisor, Liquid Terminal Engineer, Solid Terminal Engineer, Pier Engineer, Terminal Watch Supervisors, Terminal and Pier Chief Controls, Terminal and Pier Site Controls and Contractor Company Employees Involved in Operations.

RELATED DOCUMENTS

International Maritime Dangerous Goods Code (IMDG Code)

International Maritime Solid Bulk Cargoes Code (IMSBC Code)



NECESSITY

- The equipment, crane, crew, number of posts and berth to be used before the operation are determined. The personnel who will work in the operation are informed about the danger of the load and are equipped with the necessary protective equipment. Environmental safety is provided by HSE. No personnel will be assigned in the ship's hold and in the field before gas measurements are made.
- Necessary warnings are made so that the trucks do not load excessively, and the responsible pay attention to this issue.
- Drivers will be kept at the specified point away from the vehicle during loading and unloading. It will be checked that the driver has the necessary protection equipment.
- Occupational safety in the working area, control of equipment, entry and exit of external persons, safe handling of the load, environmental cleaning and control of the proper execution of these works are in charge of the shift.
- Depending on the capacity of the facility and its location; Electric and diesel-powered water pump for cooling with sufficient power and capacity, connected with water tanks of sufficient volume, fire hydrant connected with fire pipes in sufficient number / diameter to necessary places, fire cabinet, backup energy generation devices (generator) with sufficient power, sufficient number of foamed (for buildings and extinguishing works other than liquefied gas fires) and dry chemical/powder fixed/mobile fire extinguishers are available throughout the facility. Details of these equipment are included in the emergency equipment and technical specifications file.
- It will be ensured that the personnel involved in the loading/unloading of packaged dangerous goods at the port facility receive training on emergency situations (fire, explosion, leakage, etc.) and response, occupational health and safety, ISPS code security awareness in accordance with their job descriptions and work areas.
- A person responsible for these procedures should not be determined by the ship's master and the coastal facility operator in order to keep records of the positions of the loaded and/or discharged dangerous goods on the ship or in the coastal facility. This record kept regarding the positions of dangerous goods; In case of emergency, it should be of a quality that can be presented to the relevant people and support the emergency response to be made, and should be in a place where the relevant people can reach. Registration will be done by the person in charge of terminal data controller.
- The communication equipment used in the loading/unloading and handling operations of dangerous goods; It will be of a safe usable type and in number and sufficient to ensure uninterrupted communication, in working condition and in good condition.
- It will be checked that the necessary warnings, warning signs and fire alarm (alarm) buttons are visible and easily accessible. In dangerous places and situations, the relevant personnel



will be equipped with personal protective clothing and equipment in accordance with occupational safety and worker health criteria. Personnel who do not have personal protective clothing and equipment suitable for their job descriptions and working areas will not be employed.

- Employees involved in the handling of dangerous goods at the facility will receive the necessary training in accordance with their job descriptions and in a manner that fulfills their responsibilities regarding dangerous goods. Personnel who do not receive these trainings will not be involved in the handling of dangerous goods.

HANDLING OPERATIONS

Operational and Emergency Information

Operations responsible will have the following information regarding all dangerous goods transported or transported within their area of responsibility.

- Definition of dangerous goods in accordance with IMDG Code section 5.4;
- Details of the special equipment needed for the safe transportation of a particular dangerous cargo; will be presented to the ship captain, the port operator and the responsible persons.
- Emergency procedures including steps to be taken in the event of a spill or leak, counterprecaution against accidental contact, firefighting procedures and appropriate firefighting tools will be presented to the master, Port operator and responsible persons.
- When special equipment is needed for the transport of dangerous goods, information about this equipment and related test and inspection certificates will be immediately presented to the captain, the port operator and the responsible persons.
- Information on emergency procedures will be given to the ship and persons responsible for cargo handling. This information will be placed at the cargo office on board and at the interface where interested parties can access it immediately.

General Handling Precautions

- Everyone involved in the transport of dangerous goods will take due care to prevent damage to packages, unit loads and cargo transport units.
- Necessary precaution will be taken to prevent unauthorized persons from accessing the transport areas while dangerous goods are being transported.



- If there is a problem in the containment of dangerous goods, it will be ensured that the necessary steps are taken to minimize the existing risks for people and their negative effects on the environment.
- Packages and packages to be used in the activities of replacing or repairing cargo transport units or placing damaged packages in rescue packages will be produced and certified in accordance with the nature of the dangerous substance, within the scope of IMDG Code Chapter 6 provisions.
- In the port facility, freight transport units; The provisions of the "Packaging of Cargo Transport Units Code of Practice (CTU Code)" shall be taken into account for internal loading operations and/or loading to other transport mode vehicles. If container/vehicle loading is carried out in the areas where the cargo transport units of the facility are unloaded and/or in closed warehouses (CFS areas), a "Container/Vehicle Packing Certificate" will be issued. At the port entrance points, it will be checked that each cargo transport unit that comes to the coastal facility to be transported by sea has a "Container/Vehicle Loading Certificate", and cargo transport units that do not have the said certificate will not be allowed to be loaded on the ship.
- The handling and temporary storage operations to be carried out are explained in Table 1 (Port It will be done in accordance with the separation rules specified in the Separation Chart for Dangerous Goods in the Areas.

CARGOES ACCORDING TO IMSBC CODE THAT CAN BE HANDLED AT OUR FACILITY

1. Potassium Nitrate (UN 1486)

Dangers

- It is a product that oxidizes when wet. It is easily ignited by mixtures containing flammable substances and can burn violently.
- It is a hydroscopic product and caking when wet.

Stacking and Separation

- It will be stacked separately from food materials.

Weather Precautions

- This load should be kept as dry as possible. This load should not be handled during precipitation. During the transportation of this load, all the covers that are not working in the warehouses where this load is loaded or will be loaded should be closed.



Loading Operations Requirements

- Loading operations are carried out in accordance with the provisions of Chapters 4 and 5 of the IMDG code.

Precaution to be Taken

- All necessary precautions should be taken to prevent the contact of flammable materials with the product.
- In case of a possible fire, the fire should be intervened with water. It is important that the water to be used is in the form of a spray.

ANNEX-18-4 IMSBC CODE – Operation Procedure for Safe Handling of Solid Bulk Dangerous Goods

AIM

The purpose of this procedure is Toros Tarım Sanayi ve Tic. A.Ş. in the Ceyhan Port Facility, to ensure the safe handling of the dangerous goods in question.

SCOPE

It covers solid bulk dangerous goods handled at quays 4,5 and 7 in our port facility.

RESPONSIBILITY

Terminal Manager, Terminal Supervisor, Pier Supervisor, Liquid Terminal Engineer, Solid Terminal Engineer, Pier Engineer, Terminal Watch Supervisors, Terminal and Pier Chief Controls, Terminal and Pier Site Controls and Contractor Company Employees Involved in Operations.

RELATED DOCUMENTS

TRM-FR-005 Draft Survey Report

TRM-FR-010 Ship-Shore Safety Checklist For Dry Bulk Cargoes

International Maritime Solid Bulk Cargoes Code (IMSBC Code)

Blu Code-Code of Practice For The Safe Loading and Unloading of Bulk Carriers



NECESSITY

- While determining the areas to be handled according to the risks of dangerous goods; Administrative buildings, other facilities adjacent to the facility and the types of cargo handled in these facilities, the characteristics of other loads temporarily stored and handled at the facility, and the fastest and safest access possibilities for emergency response will be taken into account.
- Issues regarding additional safety and security precaution to be taken in coastal facilities and these precaution will be provided by the department that carries out the operation.
- Electrical equipment, equipment and hardware to be used in areas where hazardous materials are handled will be of standards suitable for use in flammable, explosive or explosive environments. During cargo operations for dangerous solid bulk cargoes, electric lamps other than arc lamps shall be used and these lamps shall be gas-tight
- Adequate number of suitable personal protective clothing, equipment and equipment will be provided against the characteristics of the handled dangerous solid bulk cargoes and the risks they may pose.
- Concentration of toxic or flammable gas and their possible spread will be regularly checked with gas measuring devices and the measurements will be recorded in the areas where dangerous solid bulk cargoes that release toxic or flammable gas are handled.
- Areas where dangerous substances such as coal, which burn by themselves but are not affected by water, are stored, should be equipped with water cannons and irrigation operations will be carried out in a way to prevent burning. While the temporary storage area is declared, the surrounding of the area should have a drainage system to collect dirty water.
- Tarpaulins that will prevent solid bulk dangerous goods from falling into the sea during discharging or loading onto the ship will be kept between the ship and the pier during the operation
- The master of the ship that will load/discharge the dangerous solid bulk cargo will receive the detailed loading/discharge plan, which includes the details of the location and quantities of the cargo in question, by the operation manager before starting the loading/unloading process. An agreement will be reached between the ship's master and the operation manager regarding the loading/discharge plan in question.
- Employees involved in the handling of dangerous goods at the facility will receive the necessary training in accordance with their job descriptions and in a manner that fulfills their responsibilities regarding dangerous goods. Personnel who do not receive these trainings will not be involved in the handling of dangerous goods.



- The ship's master and operations officer, within their own areas of responsibility, carry out operations for the transportation, handling or loading/unloading of dangerous solid bulk cargoes, the “International Maritime Solid Bulk Cargoes Code (IMSBC Code)”, “The Code of Practice for the Safe Loading and Discharge of Bulk Cargo Ships (BLU Code)”, “Regulation on Safe Loading and Unloading of Bulk Cargo Ships” published in the Official Gazette dated 31.12.2005 and numbered 26040, and “Loading and Unloading of Solid Bulk Cargoes Manual for Terminal Representatives (IMO MSC/Circ.1160” , MSC/Circ.1230 and MSC.1/Circ.1356”.

HANDLING OPERATIONS

- When dangerous solid bulk cargoes are transported, transported or stowed, the ship's captain or port facility must ensure that the Bulk Cargo (BC) Code is applicable for loading and unloading operations within their area of responsibility and that the Code of Practice for Safe Loading and Unloading of Bulk Cargo and Strict for Terminal Responsibles Ensure that it is carried out in accordance with the Manual on Loading and Unloading Bulk Cargoes
- Where the transport, handling or stacking of dangerous bulk dry cargoes may cause dust emissions, all practicable precaution will be taken to prevent or minimize such dust emissions and to protect people and the environment from these emissions.
- In addition to personal washing and hygiene and the washing of used clothing, these precaution will include appropriate protective clothing, respiratory protection and protective creams when needed.
- Where the transport, handling or stowage of dangerous bulk cargoes may result in toxic or flammable vapor emissions, all practicable precaution shall be taken to prevent or minimize the generation of such vapor emissions and to protect people and the environment from such emissions.
- Measurement of toxic or flammable vapor concentration shall be provided when dangerous solid bulk cargoes that may emit toxic or flammable vapors are transported, transported or stacked.
- When dangerous solid bulk cargoes that may cause flammable dust emissions due to ignition are transported or transported, the entire fire hose will be kept ready to prevent such flashing and to minimize the effects of flashing if it occurs. Precaution to be taken include avoiding sources of ignition and hosing rather than vacuuming to limit dust concentration in the atmosphere.
- Dangerous solid bulk cargoes, which may turn into flammable or toxic vapors or cause simultaneous explosion in case of contact with water, will be kept as dry as possible. Such loads will only be transported under dry weather conditions.



- Dangerous solid bulk cargoes, which are an oxidizing agent, will be transported, transported and stacked in a way that prevents contamination with flammable or carbon-containing materials. Oxidizing agents shall be kept away from any source of heat or ignition.

REQUIREMENTS FOR GROUP A (AND GROUP A and B) CARGO HANDLING ON THE COASTAL FACILITY AND CARRYING ON SHIP FOR IMSBC CODE

- a) The transportable maximum moisture (TML) certificate of the cargo and the moisture content (MC) certificate or declaration of the cargo, which are issued by the authorized institutions by the authorized administration of the port of loading, are delivered by the cargo person to the relevant ship. If the loading port is in Turkey, the TML test is performed by a laboratory accredited by the Turkish Accreditation Agency (TS EN ISO/IEC 17025: 2017). The TML certificate contains the TML test result or the test report containing this result. A copy of each of these documents is kept by the relevant port authority and the coastal facility operator and is submitted upon request during the inspections made by the Administration.
- b) To ensure that the MC value is less than TML while the cargo is on board, the procedures for sampling, testing and controlling the moisture content are prepared by the ship owner, taking into account the provisions of the IMSBC Code. The approval of these procedures and their implementation are controlled by the port authority. The document stating that the procedure has been approved is given to the ship owner.
- c) Group A cargoes can only be loaded on the ship if the actual MC value at the time of loading is lower than the TML value of that cargo. Group A cargoes with an MC value higher than the TML value can only be transported on ships with the characteristics specified in IMSBC Code Section 7.3.2.
- ç) TML test is carried out within six months before the loading date of Group A cargo. If there is a change in the load composition or characteristics for any reason, a new test is performed.
- d) Sampling and testing for the MC test of Group A cargo should be as close as possible to the date of loading of the cargo on board, and never more than seven days. If heavy rain or snow falls between the test and loading, the moisture content test is repeated to confirm that the MC value of the load does not exceed the TML value.

(5) Information on solid bulk cargoes within the scope of the IMSBC Code must be provided to the ship owners in accordance with SOLAS Chapter VI Part A Rule 2 by the cargo authorities.

(6) Appropriate emergency response instructions are kept on board to respond to accidents caused by dangerous solid bulk cargoes.



(7) The procedures regarding the transportation and notification of a solid bulk cargo not included in the IMSBC Code are determined by the Administration.

In accordance with SOLAS Chapter XII Rule 10, the density of solid bulk cargoes is declared by the cargo person in addition to SOLAS Chapter VI Part A Rule 2 before the cargo is loaded onto the ship. For ships within the scope of SOLAS Chapter XII Rule 6, all solid bulk cargoes with densities between 1,250 kg/m³ and 1,780 kg/m³ must have a density measurement taken by an authorized testing firm, unless they meet the requirements for solid bulk cargoes with a density of 1,780 kg/m³ and above. This load density test can be performed by a laboratory accredited by the Turkish Accreditation Agency (TS EN ISO/IEC 17025: 2017) if the loading port is in Turkey.

IMSBC CODE CARGOS THAT WE HANDLED AT OUR FACILITY1.

1. AMMONIUM NITRATE FERTILIZER (UN 2067)

Dangers

- It shows flammable feature. Fires that may occur on ships carrying this substance create a risk of explosion by being contaminated with the substance.
- When exposed to high temperatures, they decompose and release toxic and flammable gases on the deck and in the holds.
- In case of dusting, it is irritating to the skin.

Stacking and Separation

- There should be no ignition or heat source in the warehouses.
- Combustible materials (especially liquids), chlorates, bromates, chlorites, hypochlorites, permanganates, fibrous materials (cotton etc.) and metal powders should be completely stacked in separate sections.
- If the partition between the holds and the engine room is not insulated according to A-60 class standards, this load must be stowed "away" from the partition wall.
- It should not be stacked next to any tank or double-deck fuel tank heated to 50°C or more.

Weather Precautions

- This load should be kept as dry as possible. This load should not be handled during precipitation. During the transportation of this load, all the covers that are not working in the warehouses where this load is loaded or will be loaded should be closed.

Requirements Before Handling Operations



- Loading operations will be carried out in accordance with the provisions of Chapters 4 and 5 of the IMSBC code.
- Where the temperature of the load is above 40°C, loading is not acceptable for this load.
- Before loading, the ship's captain is given a certificate by the shipper that the requirements of the IMSBC code regarding the load are met.
- A pressure test should be applied to check that there is no leakage in the fuel tanks, pipe systems leading to the tanks and manholes under the warehouses where this load will be carried.
- In the warehouses where the load will be taken, it will be ensured that all electrical equipment that does not have a safety certificate is disconnected from the power supply. This requirement will apply when there are loads in the warehouses.
- It will provide maximum ventilation in case of fire and the possibility of opening the hatches of the ship in case of water application in case of emergency, and the risks that the fluidization of the cargo may pose on the stability of the ship will be taken into consideration.

Requirements During Handling Operations

- Fuel supply will not be allowed under any circumstances. Fuel pumping will not be permitted in the vicinity of the holds where this load is located, except in the engine room.
- As far as practicable, flammable, safety and protection materials should not be used. Although the use of wood material is necessary, care should be taken to use small amounts.

Precaution to be Taken

- This load will be accepted for loading if, based on testing, the competent authority considers this material to be suitable for explosion resistance.
- Before loading, the shipper must provide the ship's master with a certificate showing that the explosion resistance of this cargo complies with this requirement.
- Fire network pressure must be maintained for fire suppression and fire hoses must be ready for immediate use during loading and unloading of this cargo.
- Except for emergencies, any welding, burning, cutting or other operations that require the use of equipment that produces open flames, sparks or arcs shall be carried out away from the areas where this load is present.
- Smoking will not be permitted on the deck or in the holds. "NO SMOKING" should be written on the visible parts of the ship and the pier.



- Precaution will be taken to prevent this cargo from penetrating into other cargo areas and closed areas.
- The hatch covers will be ready to be opened in case of emergency as long as this cargo is on board.
- Necessary precaution will be taken to protect the living areas and engine room of the ship from the dust of the cargo.
- Necessary precaution will be taken to prevent cargo from entering the bilge tanks.
- Persons who may be exposed to the dust of the load should wear protective glasses or similar dust goggles and dust filter masks.
- In case of fires that may occur in an adjacent cargo hold; All doors open to allow ventilation. The heat transferred from the wall of the adjacent warehouse can cause the material to degrade and produce toxic fumes. In such a case, it is important to cool the compartments.

2. POTASSIUM NITRATE (UN 1486)

Dangers

- It is a product that oxidizes when wet. It is easily ignited by mixtures containing flammable substances and can burn violently.
- It is a hydroscopic product and caking when wet.

Stacking and Separation

- It will be stacked separately from food materials.

Weather Precautions

- This load should be kept as dry as possible. This load should not be handled during precipitation. During the transportation of this load, all the covers that are not working in the warehouses where this load is loaded or will be loaded should be closed.

Handling Operations Requirements

- Loading operations are carried out in accordance with the provisions of Chapters 4 and 5 of the IMSBC code.

Precaution to be Taken

- All necessary precautions should be taken to prevent the contact of flammable materials with the product.
- In case of a possible fire, the fire should be intervened with water. It is important that the water to be used is in the form of a spray.



3.LIGNITE

Dangers

- Coal can create flammable atmospheres, self-heat, cause oxygen depletion, metal structures can cause corrosion. Liquefaction may occur in coal loads if particles smaller than 5 mm are present in 75% or more.
- Coals can release methane, a flammable gas. Methane/air mixtures containing 5% to 16% methane are explosive, sparks or open flames such as electrical or frictional sparks, striking a match or lighting a cigarette may be sufficient to cause an explosion. Methane is lighter than air and therefore accumulates at high points in cargo volumes or other confined spaces. If cargo volumes are not tightly sealed, methane may leak into confined spaces adjacent to the cargo volume.
- Coals can oxidize, causing depletion of oxygen in the payload and increased concentrations of carbon dioxide or carbon monoxide. Carbon monoxide is an odorless gas slightly lighter than air, its mixtures with air in the range of 12-75% by volume are flammable. Toxic if inhaled, it binds to hemoglobin in the blood 200 times more than oxygen.
- Some coals can self-heat in the load volume and self-heating may cause self-combustion. Various flammable and toxic gases, including carbon monoxide, may be produced.
- Some coals may react with water to release acids that can cause corrosion. Various flammable and toxic gases, including hydrogen, may be produced. Hydrogen is an odorless gas, lighter than air, and mixtures of 4% to 75% by volume are flammable.
- Coal can create flammable environments, self-heat, consume oxygen concentration, and corrode metal structures. This cargo may liquefy if transported at a moisture content exceeding the transportable humidity limit (TML). This cargo may liquefy if transported at a moisture content that exceeds the transportable moisture limit (TML).

Stacking and Separation

- Unless expressly stated otherwise, the borders of the cargo spaces containing this cargo will be resistant to fire and liquids.
- It is forbidden to stack goods of class 5.1 in packaged form or solid bulk materials of class 5.1 above or below this cargo.
- The ship's captain will ensure that this cargo is not stacked close to hot areas.
- This cargo will be "separated longitudinally by a full intervening partition or hold" from class 1 goods other than division 1.4.



Weather Precautions

- Moisture content of the cargo will be kept less than TML during loading operations and travel.
- Unless otherwise specified by the provisions of the IMSBC Code, all inoperative warehouses of the cargo spaces where the cargo is loaded or will be loaded will be closed during the handling of the cargo.
- The cargo may be handled during precipitation under the conditions specified in the procedures required in 4.3.3 of this IMSBC Code.
- Cargo in the cargo hold can be unloaded during precipitation, provided that the total amount of cargo in the cargo area is unloaded at the port.

Handling Operations Requirements

- Cargo compartments will be closed immediately after loading in each cargo compartment is completed. The hatch covers can also be sealed with a suitable sealing tape. Only natural surface ventilation will be allowed and limited to the absolute minimum time required to remove any methane that may have accumulated.
- The temperature of this cargo will be monitored before loading. This cargo will only be accepted for loading when the temperature of the cargo is not higher than 55°C.
- When the carbon monoxide level rises steadily, a potential self-heating may be developing. In such a case the cargo space will be completely sealed and all ventilation will be stopped and the captain will seek expert advice immediately. The water will not be used to cool material or fight coal cargo fires at sea, but can be used to cool the cargo space boundaries.

Precaution to be Taken

In case of fire, the precaution specified in the Emergency and Response Plan are applied.

- All port personnel should be warned against the risks of METHANE and CARBON MONOXIDE gases that will occur in the warehouses, and the warehouses should be ventilated and entered into the warehouses upon arrival of the ship. In case of burning, a safe and suitable area should be determined outside the stock area where the goods can be taken from the warehouse and laid to be cooled.
- Onboard cooling system (pressurized water squeezing), breathing apparatus (excavators to work in the warehouse) should always be available at the port.
- Gas measurements are not only in the warehouses, if there will be work; It should also be done in closed areas adjacent to the warehouse, in closed areas such as roller shutters, warehouses, portholes on the deck. Port personnel should be reminded not to enter a closed



area where measurements have not been made for any reason. Evacuation officers should not enter the void spaces between the holds, for whatever reason.

- Since methane gas is lighter than air, it will accumulate at the top of the closed section. Therefore, as long as the evacuation continues, gas measurements should be continued in the excavators working in the warehouses.
- A construction machine operator and those working in the warehouse should never be left alone in the warehouse. Employees inside the warehouse are constantly observed by the helm from outside the warehouse.
- Evacuation workers should be warned not to enter the void spaces between the holds and the closed areas on the deck without measuring.
- If the combustion is close to the surface, the coal in this area can be extinguished by taking it to the beach. If the coal is on fire on the beach, it is appropriate to spray intense water, spray foam or throw sand on it.
- Water should not be sprayed into the warehouse. However, it can be applied to squeezing cold water out of the warehouse for cooling purposes.
- If the location of the heating is uncertain, it can be expected that foam will be sprayed on the warehouses, the lids will be closed, and the combustion will stop by consuming the oxygen.

4. PETCOKE

Dangers

- Uncalcined petroleum coke is prone to self-heating and ignition when not loaded and transported in accordance with the provisions of the IMSBC Code.
- This cargo is not flammable or has a low risk of fire.

Stacking and Separation

- It will be stacked separately from food materials.
- Class 1 should be separated longitudinally from all goods of divisions 1.1 and 1.5 by a complete intervening partition or hatch.
- It must be separated from all other dangerous goods and dangerous goods (packaged goods and solid bulk materials) by a complete partition or warehouse.

Weather Precautions

- There are no requirements.



Handling Operations Requirements

- Loading operations are carried out in accordance with the provisions of Chapters 4 and 5 of the IMSBC code.
- When cargo is loaded into a cargo hold on a tank containing fuel or other material with a flash point below 93°C, cargo with a temperature of 55°C or higher will not be loaded into the cargo hold unless it is part of the cargo. Cargo with a temperature of 44°C or less is loaded into a layer of at least 0.6 m thick throughout the cargo area before loading cargo with a temperature of 55°C or higher.
- When the cargo with temperature of 55°C or higher is loaded in accordance with the above requirement and the thickness of the layer of cargo to be loaded is greater than 1.0 m, the cargo will be loaded in a thick layer first.
- After the installation process specified in the above paragraphs is completed, the installation process can be started.
- This cargo will not be loaded when the temperature of this cargo exceeds 107°C.

Precautions to be Taken

- Measures taken for lignite load should be taken.

5. SULFUR UN 1350

Dangers

- It carries the risk of flammability and dust explosion, especially during loading and unloading and after unloading & cleaning.
- This load can easily ignite.
- This load is not flammable or has a low risk of fire.

Stacking and Separation

- It will be stacked separately from food materials.

Weather Precautions

- There are no requirements.



Handling Operations Requirements

- Trimming is done according to the relevant provisions required in chapters 4 and 5 of the IMSBC Code.
- Appropriate measures will be taken to minimize impact, abrasion and crushing to prevent dust generation during handling.

Precautions to be Taken

- Appropriate security measures will be taken when entering cargo spaces, particularly in the area of sulfur substrates in ship holds, taking into account the recommendations developed by IMO.
- Persons involved in cargo handling will wear protective clothing, goggles and a dust filter.

6. MONOAMONIUM PHOSPHATE (M.A.P)

Dangers

- It has a pH of 4.5 and can be highly corrosive to eyes and skin in the presence of moisture.
- This load can easily ignite.
- This load is non-flammable and has a low risk of fire.

Stacking and Separation

- There are no special requirements.

Weather Precautions

- This load will be kept as dry as possible. It will not be handled during precipitation. During its handling, all inoperative holds of the cargo spaces where this cargo is loaded or will be loaded will be closed.

Handling Operations Requirements

- Trimming is done according to the relevant provisions required in chapters 4 and 5 of the IMSBC Code,
- Since it is a caking product, the pieces in the form of lumps during discharge should be dispersed and the ship should be evacuated.

Precautions to be Taken

- Persons involved in cargo handling will wear protective clothing, goggles and a dust filter.



6. MONOAMONIUM PHOSPHATE (M.A.P)

Dangers

- It has a pH of 4.5 and can be highly corrosive to eyes and skin in the presence of moisture.
- This load can easily ignite.
- This load is non-flammable and has a low risk of fire.

Stacking and Separation

- There are no special requirements.

Weather Precautions

- This load will be kept as dry as possible. It will not be handled during precipitation. During its handling, all inoperative holds of the cargo spaces where this cargo is loaded or will be loaded will be closed.

Handling Operations Requirements

- Trimming is done according to the relevant provisions required in chapters 4 and 5 of the IMSBC Code,
- Since it is a caking product, the pieces in the form of lumps during discharge should be dispersed and the ship should be evacuated.

Measures to be Taken

- Persons involved in cargo handling will wear protective clothing, goggles and a dust filter.

7. SEED MEALS AND OTHER RESIDUES OF VEGETABLES WITH PROCESSED OIL

According to the IMSBC Code, the cereal products listed below are grouped under this title.

CORN GLUTEN

COTTON SEED

FLAXSEE

SWEETCORN

PULP

RICE BRAN

SOYBEAN

SUNFLOWER SEED



PELLETS, GRAINS

SEED MEALS Seed Meals and other residues of processed oily vegetables)

Residues remaining after oil-containing seeds, grains, fruit or vegetables have been removed mechanically or have been extracted with solvents or other chemical treatments are included in this group.

These loads can be shipped in the form of pulp, flour, cake, pellets and expellers.

Dangers

- These loads can heat up on their own. They can oxidize and cause the oxygen in the charge cavity to decrease later, and they can also form carbon dioxide gas.
- They may pose a risk of dust explosion.

Stacking and Separation

- Unless otherwise specified by the competent authority, the separation provisions required for class 4.2 materials apply.

Weather Precautions

- This load will be kept as dry as possible. It will not be handled during precipitation. During handling, all inoperative holds of the cargo spaces where it is loaded or will be loaded will be closed.

Handling Operations Requirements

- The temperature of the cargo will be accepted for loading when the temperature is no higher than the ambient temperature plus 10°C or 55°C, whichever is lower.

Measures to be Taken

- Surface ventilation shall be done naturally or mechanically as necessary to remove any residual solvent vapor.
- Care must be taken when using mechanical ventilation to prevent the cargo from self-heating. Persons involved in cargo handling will wear protective clothing, goggles and a dust filter.
- All ignition sources will be considered and avoided to prevent possible dust explosions. Blower equipment must be grounded. Pipes will be electrically continuous or grounded.



EK-18/5 Operation Procedure for Safe Handling of Asphalt/Bitumen Cargoes

AIM

The purpose of this procedure is Toros Tarım Sanayi ve Tic. A.Ş. in the Ceyhan Port Facility, to ensure the safe handling of the dangerous goods in question.

SCOPE

It includes asphalt / whole handled at berths 1,2 and 7 in our port facility.

RESPONSIBILITY

Terminal Manager, Terminal Supervisor, Pier Supervisor, Liquid Terminal Engineer, Solid Terminal Engineer, Pier Engineer, Terminal Watch Supervisors, Terminal and Pier Chief Controls, Terminal and Pier Site Controls and Contractor Company Employees Involved in Operations

RELATED DOCUMENTS

TRM-FR-007 Pre-Cargo Conference Report

TRM-FR-011 Ship-Shore Safety Checklist (Appendix A)

TRM-LI-001 Checklist

International Code on the Construction and Equipment of Ships Carrying Dangerous Chemicals

International Convention for the Prevention of Pollution of the Seas by Ships

NECESSITY

- In cargo operations and emergency situations, according to their responsibilities, the ship's captain and the coastal facility operator should have the proper transport name and UN number of the dangerous cargo in relation to the dangerous liquid bulk cargoes that are loaded/discharged or transported. In this context, the list of dangerous goods handled in our port is in Annex-1.

- At our port facility, asphalt and bitumen cargoes are handled at berths 1, 2 and 7. After the ship is safely moored to the pier with the help of the pilot and mooring, a safety inspection is carried out on the ship. If there is an unsafe situation, the situation is communicated to the ship's person and measures are taken. Discharge equipment and hose selection suitable for the load will be made by the operation manager. ISGOTT Ship/Shore Safety Checklist is mutually signed. A communication network is established between the ship and the port facility.



- For the purpose of detecting gas leaks that may occur in the port facility, gas detectors will be calibrated and ready for use.
- During the loading/discharging operation at the port facility, all kinds of vehicles coming to the filling/discharging platform in the facility will be completely free of static electricity, flame arrester apparatuses will be installed on their exhausts and grounded. Flame arresters will be provided by the port operator. Vehicles without flame arresters will not be admitted to the port facility.
- Necessary warnings and warning signs will be placed around the handling area. In dangerous places and situations, the relevant personnel will wear personal protective clothing and equipment in accordance with occupational safety and worker health criteria.
- Personnel who do not have personal protective clothing and equipment suitable for their job descriptions and working areas will not be employed in these areas.
- Periodic maintenance, repair and calibration of the devices used will be carried out, and the certificate, journal or registry documenting this situation will be kept up-to-date.
- In case of emergencies or accidents, first aid materials to be used for intervention will be kept in easily accessible places by the personnel.
- Flexible pipes used for loading/unloading asphalt and bitumen loads; type-approved and a certificate showing the pipe type, the maximum working pressure of the pipe, the month and year of manufacture will be checked. The tests, maintenance and repairs of the pipes in question will be carried out in accordance with the criteria specified in ISGOTT, and the relevant test reports and maintenance and repair records will be kept. Hoses that will be used in loading / evacuation operations but not in service will be kept in accordance with the criteria specified in ISGOTT.
- A sufficient number of electrical insulation flanges will be available for the flexible hoses and loading arms used in the loading/unloading of asphalt and bitumen loads.
- Asphalt and bitumen loads will be transported in a way that eliminates the possibility of interaction with other loads.
- Operators of coastal facilities where asphalt and bitumen cargoes are handled will carry out the issues regarding additional safety and security measures to be taken at the coastal facilities under a common denominator with the liquid cargo foreman, supervisor, supervisor and Sec unit.
- Liquid cargo foreman, supervisor and chief in our port facility are responsible for handling dangerous liquid bulk cargoes and their duties are defined in the quality management system and will act within the framework of these responsibilities.



- Employees involved in the handling of dangerous goods at the facility will receive the necessary training in accordance with their job descriptions, in order to fulfill their responsibilities regarding dangerous goods. Personnel who do not receive these trainings will not be involved in the handling of dangerous goods.
- In cargo operations and emergency situations, the ship's captain and liquid cargo foreman, according to their areas of responsibility, will provide the following information regarding the dangerous liquid bulk cargoes that are loaded/discharged or transported to the port authority and other relevant persons, if necessary.

By the ship's captain;

- Proper shipping name, UN number (if any) and description of its physical and chemical properties (including reactivity) of the dangerous cargo.
- Load transfer, slop transfer, degassing, inerting, ballasting, ballast unloading and tank cleaning procedures.

By Liquid Cargo Foreman, Supervisor, Chief;

- Information on the special equipment required for the safe handling and loading/unloading of certain loads, and emergency response procedures, including the following:
 - What to do in case of spillage or leakage specified in the Emergency Plans,
 - Measures to be taken to prevent accidental contact of persons with dangerous goods in the Emergency Plan and within the scope of Occupational Health and Safety,
 - Fire fighting procedures specified in the Emergency Plan and appropriate communication systems to be used in case of fire.
 - Before starting the handling and loading/discharging operations of asphalt and bitumen loads, it will be checked that the necessary warning notices/signs in written and pictograms (pictograms) are placed at all entrances where the said operation will take place and at the approach points of the quay.
 - During the handling and loading/unloading of asphalt and bitumen cargoes, continuous communication will be ensured from the Sea Band Channel 13 and the working channel specified in the protocol, and the effectiveness of the communication will be ensured during the cargo operations.

HANDLING OPERATIONS

Flexible Hoses

Ship Captain and Operations Officer within their respective areas of responsibility:



- With regard to the temperature and suitability of such loads, he shall ensure that a flexible hose is not used at any other operating pressure than for which it is suitable or at any operating pressure for which it is unsuitable.
- It will be checked that each type of flexible hose with end fittings has been tested and has a certificate showing burst pressure.
- Prior to being placed into service, documentation shall be checked that each flexible hose has been hydrostatically tested in accordance with management requirements.
- Flexible hoses will be visually inspected before they are put into use.
- Flexible hoses will be inspected frequently during operation.
- Documents showing the flexible hose, the hose type, the specified maximum working pressure, and the month and year of manufacture will be kept at the facility.

Use of Hoses for asphalt and bitumen loads

- Considering the temperature and suitability of these types of loads, hoses will not be used other than those for which they are suitable.
- If it is prone to damage by impact, it will be adequately guarded.
- It will be ensured that the hoses are electrically continuous, except that they contain an insulating flange or a non-conductive reel piece during load handling.
- The pipeline on the sea side of the insulation section will be electrically continuous to the ship and the land side will be electrically continuous to the grounding system.
- The hoses used will be tested in accordance with section 17 of the International Safety Manual for Fuel Tankers and Terminals (ISGOTT).

Initial Precautions

- Within their respective areas of responsibility, the Ship's Master and Operations Officer will test and ensure that the load handling equipment, equipment and equipment, measuring systems, emergency shutdown and alarm systems are sufficient before starting the load transfer operation.
- Before starting the operation of asphalt and bitumen loads, a written agreement should be made between the Ship's Master and the Operations Officer, taking into account the following issues. This agreement should include the following items;
 - o Capacity and maximum allowable pressure of ship load lines and flexible hose
 - o Maximum loading/unloading capacities (in mton and cbm)
 - o Steam ventilation system layout



- o Possible pressure increases due to emergency shutdown procedures
- o Possible electrostatic charge build-up and
- o Who are the responsible persons during launch operations between the ship and the shore facility.
- Appropriate security checklist showing the main security measures to be taken before and during such transfer operations will be completed and signed between the parties.
- In case of an emergency that may occur during handling operations, the steps to be taken and the signs to be used will be accepted in writing.
- Appropriate safety precautions and clothing will be used.
- The operations manager shall ensure that the start controls on the bulk liquid transfer pumps are locked in the "off" position or located in a location accessible only to authorized personnel.
- The operation supervisor will ensure that all discharge holes and pipes and all kinds of drains on the quay/pier where dangerous liquid spills may leak in the event of an accident are closed before starting the operation and will be kept closed during the operation. In addition, if any load spillage occurs, these spilled loads will be transferred to the collection pool located on the pier platform.
- The operations officer should inform the ship's captain about taking the necessary precautions to prevent similar equipment on the ship, such as stoves or cooking utensils used in the galley, from becoming a source of ignition.
- The operations officer will check that the loading/unloading connections of the flexible hose are not in use or are blinded safely and sealed when in standby service.
- The "Ship/Shore Safety Checklist" in the International Safety Manual for Tankers and Terminals (ISGOTT) will be filled and signed in accordance with the "Guideline for Completion of the Ship/Shore Safety Checklist" in ISGOTT.

Controls During Load Transfer

Ship Captain and Operations Officer within their respective areas of responsibility:

- Checks are made at agreed periods to ensure that the accepted back pressures and loading or unloading speeds are not exceeded;
- All relevant piping, flexible hoses, attached equipment on board and on shore are given due care to prevent leakage, and adequate inspection is carried out during the transfer of dangerous bulk liquid cargoes;



- Effective communication between the ship and shore equipment is maintained during transfer operations;
- A safety checklist is available for inspection during handling operations;
- During the handling of asphalt and bitumen loads, regular measurements are made on the ship or on the shore tank to ensure that the tanker or shore tank is not overfilled;
- Responsible persons are present during operations on board and on shore;
- If degassing and tank cleaning are to be carried out at the same time on ships handling asphalt and bitumen cargoes, the written permission of the Port Authority must be obtained absolutely and all applicable measures have been taken to prevent damage to equipment related to flexible pipes;
- On ships handling asphalt and bitumen cargoes, simultaneous degassing and tank cleaning will only be carried out when authorized by the Port Authority and when all practicable measures are taken to prevent damage to the coupling, loading arms, flexible pipes and related equipment;
- They will make sure that appropriate safety equipment and clothing are used.

Controls to be Performed After Load Transfer

Ship Captain and Operations Officer within their respective areas of responsibility:

- After the handling operations, the valves of the emptied and filled tanks should be open, if there is no operational situation, these valves should be closed;
- After the transfer of asphalt and bitumen loads, there are no pressure residues in the unloading valves and flexible hoses;
- Before removing the flexible hose from the ship, the fluids are drained and the pressure is relieved;
- The ship will ensure that all safety precautions are taken, including sealing the manifold connections and flexible hoses with a blind flange.
- According to their responsibilities, the ship's master and the shore facility operator should take the necessary measures to prevent excessive pressure in the tanks containing liquefied gas under a certain pressure on the ship or in the coastal facility. Where necessary, the surroundings of the tank should be cooled by available methods, including water spraying.



Cargo Transfer Procedure from Shore Tanks to Ship

Before the ship loading, the following procedures should be done as a preparatory stage;

- Terminal Field Controller, Liquid Terminal Engineer/Terminal Shift Supervisor and Inspector take off the relevant tank with non-sparking measuring instruments (one person waits on the top platform of the stair)
- The controller carefully opens the measuring cover, with the wind behind it.
- Immerse the thermometer in the middle of the liquid level with slow movements. Waits 5 minutes.
- The plumb line makes the measurement with slow movements.
- It takes samples from the liquid in the tank.
- It puts an aluminum strainer under the measuring cover and keeps the cover half open.
- Checks whether there is any airtight cover on the vacuum breaker. If there is an object that prevents air intake, it will take it.
- Controls the outlet valves of other tanks.
- It opens the outlet valve of the tank.
- If more than one tank is to be transferred, the above procedures are applied and the outlet valves of the tanks with the same capacities and levels are opened at the same time.
- Transfer pumps suction collector valves are opened.
- By removing the air from the pumps, it is ensured that the collector is filled with liquid.

In order to make the ship ready for loading, the terminal field controller, under the supervision of the liquid terminal engineer or the terminal shift supervisor, together with the inspectors, measures the product level, water level and product temperature of the shore tanks (if there is product in them), and determines the product amount. The calculations made are verified by comparing the calculations of the liquid terminal supervisor or the terminal shift supervisor with the calculations of the inspectors, and they are recorded by mutual signature.

Before starting the pumping to the ship, the liquid terminal engineer or the terminal shift officer takes the sample of the product to be discharged from the inspector and visually checks it. In order to start the pumping, it is necessary to get information from the ship that the ship is ready, to learn the amount of goods to be loaded on the ship and from the inspector responsible for the completion of the ship's measurement.

After the aforementioned information is received by the port supervisor or the terminal shift supervisor, the liquid terminal chief controller is contacted and informed. After



the liquid terminal chief controller informs the pier chief controller that it is ready, the port valve and the ship's inlet valve are opened. After the valves are opened, the pier chief controller communicates with the liquid terminal chief controller and informs him to start pumping. The liquid terminal chief controller communicates with the pier chief controller and notifies the pumping start time.

If the loading pumps stop during loading, loading should not be started without consulting the pier. Since there is an emergency stop button on the ship or on the pier, it is first checked whether these mentioned buttons are used. If the emergency stop buttons are not used, the reason for the interruption is learned and reloading is started by contacting the scaffold.

When the ship's loading operations are completed, the liquid terminal chief controller informs the liquid terminal engineer, stops the pumping in consultation with the pier chief controllers, and the pier chief controller closes the pier valve.

After the ship is loaded, the terminal field controller, under the supervision of the liquid terminal engineer or the terminal shift supervisor, measures the product level, water level and product temperature of the shore tanks and determines the product amount. The calculations made are compared with the calculations of the terminal engineer or the terminal shift supervisor and the inspectors, and the amount of product loaded on the ship is verified and recorded by mutual signing. The amount of product loaded on the ship from the shore tanks is determined.

Cargo Transfer Procedure from Ship to Shore Tanks

Before the ship evacuation, the following should be done as a preparatory stage:

- Liquid Terminal Field Controller, Liquid Terminal Officer/Terminal Shift Officer and Inspector take off the relevant tank with non-sparking measuring instruments (one person waits on the top platform of the stairs).
 - The controller carefully opens the measuring cap with the wind behind it.
 - Immerse the thermometer (if there is product in the tank) at the midpoint of the liquid level with slow movements. Waits 5 minutes.
 - It measures the product level and the water level in the tank by releasing the plumb meter with slow movements.
 - It takes samples from the liquid in the tank.
 - It puts an aluminum strainer under the measuring cover and keeps the cover half open.
 - Checks whether there is any airtight cover on the vacuum breaker. If there is an object blocking the air outlet, it will take it.



- Controls the inlet-outlet valves of other tanks.
- Lines, connections and valves used to receive products are checked. The line is prepared for unloading by placing a blank plate where deemed necessary.
- It opens the inlet valve of the tank.

In order to make the ship ready for unloading in liquid discharges, the terminal field controller, under the supervision of the Liquid Terminal Engineer or the Terminal Shift Supervisor, together with the inspectors, measures the product level, water level and product temperature of the shore tanks (if there is product in them), and determines the product amount. The calculations are verified by comparing the calculations of the liquid terminal engineer or the terminal shift supervisor with the calculations of the inspectors, and they are recorded by mutual signature.

If the tanks are empty and if a product different from the product to be discharged is stored, the "Tank Cleaning Certificate" document that the tank is clean is obtained from the relevant inspector by the liquid terminal engineer or terminal shift supervisor.

Before the ship starts pumping, shore tank measurements must be completed.

Before the ship starts pumping, the terminal officer or the terminal shift officer takes a sample of the product to be discharged from the inspector and visually inspects it.

In order to start the pumping, it is necessary to get information from the ship that the ship is ready, to learn from the inspector responsible for the amount of goods to be unloaded on the ship, and that the ship measurement has been completed.

After the aforementioned information is received by the port supervisor or the terminal shift supervisor, the liquid terminal chief controller is contacted and informed. After the liquid terminal chief controller informs the pier chief controller that it is ready, the port valve and the ship's inlet valve are opened. After the valves are opened, the pier chief controller communicates with the liquid terminal chief controller again and reports the start of pumping and the start time.

The lines between the tank and the pier are checked every 2 hours. Tank level measurement is checked every two hours. Tank levels are checked according to the amount of product to be discharged from the ship.

Two-hour tonnage and total tonnages are recorded on the pump transfer chart. Transportation to the transfer capacity is provided. During the increase in the liquid level in the tank, it checks whether air comes out of the vacuum breaker and the measuring cover, and when the pumping starts, it is followed that the product enters the tank from the ladder top platform and the tank inlet line.

At the end of the operation, the port inlet valve is closed. Then the tank suction valve is closed. The amount loaded/unloaded is determined by measuring in the tanks and on the



ship. After unloading from the ship to the tanks, the shore tank report is prepared by the supervisor and the gross and net amounts are filled. Report; It is signed by the Superintendent and Liquid Terminal Supervisor/Terminal Shift Supervisor.

**THIS GUIDE WAS PREPARED BY TOROS TARIM SANAYİ VE TİCARET A.Ş.
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