BORUSAN LOGISTICS PORT

Dangerous Goods Handling Guide

PREPARED ON: 28.12.2015
REVISED ON: 09.01.2024

NAME SURNAME
(FACILITY OFFICIAL)
SIGNATURE SEAL

Contents

Revision Page

Item No	Revision No	Content of the Revision	Revision Date	Revised By	
				Name Surname	Signature
1	01	Introduction, 1.1 General information about the facility, the Facility Information Form have been amended and submitted to the Ministry of Transport, General Directorate of Dangerous Goods and Combined Transport Regulation.	11.04.2017	Hasan OKTAY	
2	02	Introduction, 1.1 General information about the facility, the Facility Information Form have been amended.	19.04.2018	Hasan OKTAY	
3	03	Introduction, 1.1 General information about the facility, the Facility Information Form have been amended. (Facility Responsible - Capacity - Equipment Information - IMDG labels	25.04.2019	Sahra UNAL	
4	04	DWT, Site Responsible, Tugboat and Waste Reception Facility and Capacities have been updated.	01.06.2020	Hasan OKTAY	
5	05	2. Section Responsibilities and 3.1 Coastal Facility Operator Responsibilities have been updated according to the Regulation on Maritime Transport of Dangerous Goods and Loading Safety. TMGD Information and dangerous cargo classes have been added to the facility information form. The sections on dangerous cargo handling and/or temporary storage have been updated. Definitions have been updated according to the new Regulation.	18.05.2022	Serkan EKİCİ	
6	06	OHSAS 18001 has been replaced as ISO 45001standard.	28.10.2022	Burkay ŞAHAN	
7	07	The facility information form section has been updated.	09.01.2024	Burkay ŞAHAN	
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Table1: Revision Table

FIGURES AND TABLES

ABBREVIATIONS

IMDG: International Maritime Dangerous Goods

SOLAS: Safety of Life at Sea Convention

IMO: International Maritime Organization

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

IMSB Code: International Maritime Solid Bulk Cargoes Code

ISPS Code: International Ship and Port Facility Security Code

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

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

CTU: Code of Practice for Packing Cargo Transport Units

HSE: Health Safety Environment

DWT: The weight of a ship in salty water when it's fully loaded with cargo, passenger, staff, provision, fuel and fresh water

DGL: Dangerous Goods List

DGHG: Dangerous Goods Handling Guide

PPE: Personal Protective Equipment

MSDS: Material safety data sheet

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

DEFINITIONS

a) Package: Transport container defined in IMDG Code Section 6 and in which dangerous cargo is placed,

b) Ministry: Ministry of Transport and Infrastructure,

c) BLU Code: Code of Practice for Safe Loading and Unloading of Bulk Carriers,

ç) Bulk cargo: Substances in solid, liquid and gaseous state that are the structural part of the ship or are in a tank or hold permanently fixed on or on the ship, intended to be transported directly without containment,

d) Fumigation: The operation of applying solid, liquid or gas chemicals having an impact on a closed cargo transportation unit or hold with the purpose of destroying pests,

e) Ship: Ships covered by legislation or international agreements to which we are a party,

f) Ship attendant: The owner, operator, tenant, captain or agents and natural or legal persons authorized to represent the owner,

g) IBC Code: The International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk,

ğ) IGC Code: The International Code of the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk,

h) IMDG Code: International Maritime Dangerous Goods Code,

ı) IMO: International Maritime Organization,

i) IMSBC Code: International Maritime Solid Bulk Cargoes Code,

j) ISPS Code: International Ship and Port Facility Security Code,

k) Administration: Maritime General Directorate,

l) Coastal facility: A port, quay, pier, berth, fuel oil, liquefied gas or chemical pipeline buoy or platform, including storage areas, where ships or marine vessels can safely take their cargo or take shelter,

m) Container: Cargo transportation equipment with document complying with applicable standards within the scope of International Convention on Safe Containers (CSC Convention),

n) MARPOL: International Convention for the Prevention of Pollution of Seas from Ships,

o) Moisture content (MC): The amount of water, ice or other liquids expressed as a percentage of the total liquid mass of the solid bulk sample,

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

p) Transportable moisture limit (TML): The maximum amount of moisture that a liquefiable solid bulk cargo carried on ships that do not have the features specified in IMSBC Code Section 7.3.2, so as not to interfere with its safe transportation,

r) Carrier: Actual carrier, broker, ship owner, transportation organizer, transportation commissioner, ship agency receiving, making and accepting offers regarding transportation on behalf of itself or third parties for any type of dangerous cargo, and real and legal people performing transport operation with or without contract via highways or railways for dangerous cargoes within the scope of combined transportation,

s) Dangerous cargo (dangerous goods):

Petroleum and petroleum products within the scope of International Convention for the Prevention of Pollution from Ships (MARPOL) 73/78 Annex-I,

2) Packaged goods and objects given in IMDG Code Chapter 3,

3) Among the cargoes given in IMSBC Code Attachment 1, the bulk cargoes with "B" and "A and B" inscriptions 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,

ş) TMGD: Dangerous goods safety consultants authorized by the Ministry,

t) TYUB: Coastal Facility Dangerous Goods Conformity Certificate, which is issued by the Administration and must be obtained by the coastal facilities that handle dangerous goods in packaged or bulk form,

u) Loading safety: Safe tying and stacking of the cargo transport unit or cargo loaded in the ship's hold or on the ship's deck, and the safe binding and stacking of the loads to be loaded in the cargo transport unit,

ü) Loader: The real or legal person specified as the "shipper" in the bill of lading, maritime transport document or multi-modal transport document, and the real or legal person on whose behalf or on behalf of the carriage contract has been concluded with a maritime transport company,

v) Load attendant: Sender, receiver, representative, and transportation commissioner of dangerous cargo,

y) Cargo transportation unit (CTU): Highway trailer, semi-trailer and tanker, portable tank and multi element gas container, railway carriage and tank carriage, container and tank container; designed and produced for transporting packaged or bulk dangerous cargoes

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PRESENTATION

1. INTRODUCTION

- The services provided by Borusan Port for dangerous goods are the storage of dangerous goods coming to the coastal facility by ship or by land in the stowage area (G7), handling services in the IMDG area, and temporary storage of the cargo in the import warehouse. While providing these services, the balance and safety of human, environment and ecosystem are taken into consideration.

- The safety of all parties is ensured during the transportation, handling and temporary storage of dangerous goods in packages and in portable tank/tank containers, and in the process of non-hazardous cargo transport units becoming dangerous goods (for example, fumigation).

- The recommendations in the Dangerous Goods Handling Guide are limited to the dangerous goods in the coastal facility.

- The important requirements for the safe loading/unloading, stowage and handling of dangerous goods coming by road or ship are the correct identification of the loads and their storage in accordance with the segregation stacking provisions. Accordingly, necessary documentation has been prepared in order to meet the loading/discharging, stowage and handling requirements of the provisions specified in both ADR and IMDG legislation.

1.1 General information on facility

FACILITY INFORMATION FORM

1	Name/title of facility operator	BORUSAN LOJİSTİK DAĞ.DEP.TAŞ.TİC.A.Ş.		
2	Contact information of facility operator (address, phone, fax, e-mail and web page)	Address: Ata Mahallesi 125 Nolu Sok. No:3 16601 Gemlik - Bursa Tel:+90 224 270 13 00 Fax:+90 224 519 01 53 http://www.borusanlimani.com/		
3	Name of facility	Borusan Port		
4	City of facility	Bursa		
5	Contact information of the facility (address, phone, fax, e-mail, web page)	Address: Ata Mahallesi 125 Nolu Sok. IMo:3 16601 Gemlik - Bursa Tel:+90 224 270 13 00 Fax:+90 224 519 01 53 http://www.borusanlimani.com/		
6	Geographic region of the facility	Marmara		
7	Registered Port Authority of facility and contact details	Gemlik Port Authority Gemlik Tel: 0 (224) 513 11 33 E-Mail: gemlik.liman@uab.gov.tr		
8	Registered Municipality of facility and contact details	Gemlik Municipality Gemlik Belediyesi Tel: 444 16 05 E-Mail: admin@gemlik.bel.tr		
9	Name of Free Zone or Organized Industrial Zone of the facility	-		
10	Validity date of Coastal Facility Operating License/Provisional Operating Permit Document	05.2024		
11	Activity status of the facility (X)	Own load and additional 3rd Party (X)	Own load	3. Party
12	Name and surname of the facility manager contact details (phone, fax, e-mail)	Name Surname: Hasan Oktay Telephone: 0224 270 13 73 Fax: 0224 519 01 53 E-mail: hoktay@borusan.com		
13	Name and surname, contact details of Dangerous goods operations manager of the facility (phone, fax, e-mail)	Name Surname: Burkay ŞAHAN Telephone: 0539 597 97 41 E-mail: burkay.sahan@borusan.com		
14	Name and surname, contact details of Dangerous Goods Safety Consultant of the facility (phone, fax, e-mail)	Name Surname: SERKAN EKİCİ Telephone: 0507 477 70 90 E-mail: serkanekici@tehlikeler.com		
15	Sea coordinates of the facility	40° 25’12" N-29° 05'18" E		
16	Types of dangerous goods handled in the facility (The loads within the scope of MARPOL Annex-I, IMDG Code, IBC Code, IGC Code, IMSBC Code, Grain Code, TDC Code and asphalt/bitumen and scrap loads)	IMO CLASS (2,1-2,2-2,3-3-4,1-4,2-4,3-5,1-5,2-6,1-8-9)		
17	Dangerous goods handled at the facility (loads other than the IMDG Code, among the cargo types in the 16th article, will be written separately. (Additional cargo request will be submitted to the port authority with Annex-1 form. It will be added to DGHG when appropriate.)			
18	Classes for cargo handled, subject to IMDG Code	Class 3, Class 2, Class 4.1, Class 9, Class 6.1, Class 4.2, Class 5.1, Class 8 Class 1, Class 7, Class 6.2 are not handled.		
19	Groups in characteristic table for handled cargo subject to IMSBC Code			

20	Type of ships to approach facility	Container Ship, General Cargo Ship, RoRo Ships, and Bulk load ship	
21	Distance of facility to main road (kilometre)	4.4 kilometres	
22	Distance of facility to railway (kilometre) or railway connection (Yes/No)	No railway connection	
23	Name of the closest airport and its distance to the facility (kilometre)	Bursa Yenişehir Airport – 43.16 Km	
24	Load handling capacity of the facility (Ton/Year; TEU/Year; Vehicle/Year	5,000,000 tons / year 400,000 Teu/ year 355,000 Unit / year	
25	Whether crap handling is performed in the facility	Crap handling is not performed.	
26	Is there any border crossing? (Yes/No)	No	
27	Is there any air side? (Yes/No)	Yes	
28	Load handling equipment and their capacities	3 SSGs, 8 RTG cranes, 6 Stackers, 3 MHCs, 1 Light Forklift, 7 Heavy Forklifts, 10 Overhead Cranes, 23 Terminal Tractors, Contracted supplier additional crane / forklift / tractor support	
29	Storage tank capacity (m3)	N.A.	
30	Open storage area (m2)	230.582.64 m^2	
31	Semi covered storage area (m2)	N.A.	
32	Covered storage area (m2)	14.884.38 m^2	
33	Specified fumigation and/or de-fumigation area (m2)	Specified by taking necessary measures by number of containers of fumigation and de-fumigation.	
34	Name/title contact details of guidance and towage services provider	Gemlik Klavuzluk ve Römorkör Hizmetleri A.Ş Gemport Liman Depolama İşletmeleri A.Ş.	
35	Has a Safety Plan been created? (Yes/No)	Yes / ISPS Code Safety Plan	
36	Waste Receiving Facility capacity (This section will be organized separately by wastes received by the facility.	Waste Type	Capacity (m3)
		Sludge Tank 1-2-3 (Marpol 73/78 Annex-I)	55 m^3 x 3 = 165 m^3
		Bilgewater Tank 1 (Marpol 73/78 Annex-I)	30 m^3 30 m^3
		Bilgewater Tank - 2 (Marpol 73/78 Annex-I)	15 m^3
		Waste Oil Tank (Marpol 73/78 Annex-I) Waste Oil Tank (Marpol 73/78 Annex-I) Waste Oil Tank (Marpol 73/78 Annex-I)	65 m^3 30 m^3

		Dewatered Bilgewater Tank	65 m^3
		Waste Water Tank (Waste water treated in chemical treatment)	40 m^3
		Package Chemical Treatment Unit	48 m^3/day
		Pumps	1x50 m^3/hour 1X30 m^3/hour
37	Features of Dock/Pier etc. areas		

Dock/Pier No	Length (meter)	Width (meter)	ximum water depth (meter)	Minimum water depth (meter)	Tonnage and length of biggest ship to approach (DWT or GRT - meter)
Pier no. 1	200	27	11	14	65,000 DWT
Pier no. 1	54	27	11	14	40,000 DWT
Pier no. 2	150	27	12	14	65,000 DWT
Pier no. 2	54	27	12	14	40,000 DWT
Pier no. 3	165	15	9	11	30,000 DWT
Pier no. 4	165	15	7	9	20,000 DWT
Pier no. 5	560	32	14.5	15	66,300 DWT
Pier no. 6	210	32	10	12	66,300 DWT

Name of pipeline (If any, in facility)	Number (pcs)	Length (meter)	Diameter (inch)
N.A.		-	

Table 2: Facility Information Table

1.2 Procedures for loading/unloading, handling and storage regarding dangerous cargoes handled and temporarily stored in the Coastal Facility

- Class 1 explosives, class 6.2 infectious (infectious) substances and class 7 radioactive dangerous goods are not handled, stored or stacked in our port. These loads are called unacceptable dangerous goods.
- Class 2 gas cargoes are decided to be processed sousplan by providing MSDS forms, making cargo analysis or taking to the field provided that they are notified in advance.
- Also loading and unloading of bulk petroleum and petroleum products outside the scope of coastal facility permit aren't allowed in Port docks. Oil-fuel refill and waste collection (solid-liquid) can be provided for ships with the permission of Port Authority.

2) RESPONSIBILITIES

2.1. General responsibilities

- They are obliged to take all necessary measures to make the transportation safe, secure and harmless to the environment, to prevent accidents and to minimize the damage when an accident occurs.

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

- They benefit from the Medical First Aid Guide (MFAG) in the annex of the IMDG Code in order to provide the necessary medical first aid for the people affected by the damages of the dangerous goods and the health problems caused by the accidents involving these cargoes.

2.2 Responsibilities of load attendant

- Prepares or gets prepared all the compulsory documents, information and papers regarding the dangerous goods and ensures that these documents are kept together with the load during the transport activity.

- Ensures that the dangerous goods are classified, defined, packaged, marked, labelled and plated in compliance with their class.

- Ensures that the dangerous goods are loaded, stowed, transported, insured and unloaded securely in the approved packages, containers and load carrying unit in compliance with the rules.

2.3 Responsibilities of carrier

- Requests compulsory documents, information and papers regarding the dangerous goods from the load attendant and ensures that these documents are kept together with the load during the transport activity.

- Checks the compliance of the dangerous goods classified, packaged, marked, labelled and plated by the load attendant with the legislation.

- Checks that the dangerous goods are packaged in accordance with the rules by using approved packaging and load transport units, they are safely loaded and securely fastened to the cargo transport unit.

2.4 Responsibilities of the coastal facility operator

- Do not berth the ships carrying dangerous goods without the permission of the port authority.

- Provides written information within the scope of facility rules, cargo handling rules and relevant legislation to the ship that will dock at its facility.
- It does not handle dangerous goods for which it has not received a handling permit from the Administration, and it does not aggrieve the ships that will dock by making a plan within this scope.

- Requests the compulsory documents, information and papers regarding the dangerous goods from the load attendant and ensures that they are present with the load. If the relevant documents, information and papers cannot be provided by the load attendant, it is not obliged to accept or handle the dangerous goods at its facility.

- 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 load with the ship attendant. Does not make any changes in the operation without the knowledge of the ship attendant.

- Determines the working limits by taking into account the safe working capacity of the facility and the weather forecasts, and takes the necessary measures for the ship to be safely moored at the pier and for handling.

- Controls the transport documents containing information that the dangerous goods arriving at the facility are classified, packaged, marked, labelled, plated and loaded safely to the cargo transport unit.

- Ensures that the personnel involved in the handling of dangerous goods and the planning of this handling are certified by receiving the necessary trainings and does not assign the personnel who do not have documents in these operations.

- Ensures that the equipment is in working condition and that the relevant personnel are trained and certified on the use of these equipments.

- By taking occupational safety measures at the coastal facility, ensures that the personnel use personal protective equipment suitable for the physical and chemical characteristics of the dangerous goods.

- Carries out activities related to dangerous goods at docks, piers and warehouses established in accordance with these works.

- Equips the quays and piers reserved for ships that will load or unload dangerous liquid bulk goods with appropriate installations and equipment for this work.

- Keeps an up-to-date list of all dangerous goods on the ships berthed at its facility and in closed and open areas of its facility, and gives this information to the relevant persons upon request.

- 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.

- Notifies the port authority of the accidents related to dangerous goods, including the accidents at the entrance to closed areas.

- Provides the necessary support and cooperation in the controls and inspections carried out by the Administration and the port authority.

- Ensures that Class 1 (except Class 1 Compliance Group 1.4 S), Class 6.2 and Class 7 dangerous goods, for which the temporary storage is not permitted, are transported out of the coastal

facility as soon as possible without waiting, and in cases where it is necessary to hold them, applies to the Administration for a permit.

- 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 goods in the storage area. Keeps fire extinguishing systems and first aid units ready for use at any time in the areas where dangerous goods are handled and performs the necessary controls periodically.

- Obtains permit from the port authority before the hot work and operations to be carried out in the areas where dangerous goods are handled and temporarily stored.

- 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.

- Ensures the internal loading of cargo transport units in accordance with the loading safety rules in its facility.

2.5 Responsibilities of the ship attendant

- Ensures that the cargo to be carried by the ship is documented as suitable for transportation and that the cargo warehouses, cargo tanks and cargo handling equipment are suitable for cargo transportation.

- Requests all compulsory documents, information and papers regarding the dangerous goods from the load attendant and ensures that these documents are kept together with the load during the transport activity.

- Ensures that the documents, information and papers required to be present on board for the dangerous goods within the scope of legislation and international conventions are appropriate and up-to-date.

- Checks the transport documents containing information that the cargo transport units loaded on the ship are appropriately marked, plated and loaded safely.

- Informs the relevant ship crew about the risks of dangerous goods, safety procedures, safety and emergency measures, intervention methods, etc.

- Keeps up-to-date lists of all dangerous goods on board and declares them to the relevant parties upon request.

- Ensures that the loading program, if any on board, is approved and documented and kept in operation.

- Notifies the port authority and the coastal facility of the instant risk posed by the dangerous goods on the ship berthing to the coastal facility and the measures taken for it.

- In case of leakage in the dangerous goods or if there is such a possibility, does not accept to carry the dangerous goods.

- Notifies the port authority of the dangerous goods accidents that occur on board while navigating or at the coastal facility.

- Provides the necessary support and cooperation in the controls and inspections carried out by the Administration and the port authority.

- Does not accept to carry dangerous goods that are not included in the ship certificates issued by the relevant institutions and organizations.

- Ensures that the crew of the ship involved in the handling of dangerous goods use personal protective equipment appropriate for the physical and chemical properties of the goods.

- Provides the requirements for the loading safety of the goods loaded on the ships.

2.6 Responsibilities of Dangerous Goods safety consultant

To monitor compliance of dangerous goods with the requirements of their transportation. To suggest proposals to the coastal facility on transportation of dangerous goods.
To prepare annual report to coastal facility on coastal facility operator's activities for transportation of dangerous goods. (Annual reports are kept for 5 years and submitted to administration upon request.)

To check the application and methods indicated below;

- Procedures for controlling that the dangerous goods arriving at the facility are properly defined, the correct shipping names of the dangerous goods are used, certified, packaged/packed, labelled and declared, loaded and transported safely to the approved and legal packaging, container or cargo transport unit, and reporting the control results.
- Loading/unloading procedure for handled and temporarily stored dangerous goods, whether or not the coastal facility takes into account the special requirements regarding the dangerous goods transported while purchasing the transport vehicles for the handled dangerous goods,
- Controlling methods for equipment used at transportation, loading and unloading of dangerous goods,
- Whether the coastal facility employees have received appropriate training, including the changes made in the legislation, and whether these training records are kept,
- The suitability of emergency methods to be applied in case of an accident or an event that will affect safety during the transportation, loading or unloading of dangerous goods,
- Compliance of reports prepared on serious accidents, incidents, or serious violations that occur during the transportation, loading or unloading of dangerous goods,
- Determining the necessary measures against the reoccurrence of accidents, incidents or serious violations and evaluating the implementation,
- To what extent rules related to selection of subcontractors or 3rd parties and transportation of dangerous goods are considered,
- Identifying whether people serving at transportation, handling, storage and loading/unloading of dangerous goods have detailed information on operational procedures and instructions
- Suitability of the measures taken to be ready for risks during transportation, handling, storage and loading/unloading of dangerous goods. Procedures regarding what all compulsory document, information and papers related to dangerous goods are.
- Procedures for safe approach, mooring, loading/unloading, harbouring or anchoring of dangerous goods carrying ships to coastal facility day and night.
- Procedures regarding additional measures required to be taken per seasonal conditions for loading, unloading and transshipment operations of dangerous goods.
- Procedures for fumigation, gas measurement, and degassing actions and operations. Procedures for keeping records and statistics of dangerous goods,

- Verification of the issues regarding potential, capability and capacity of coastal facility to respond emergencies,
- Suitability of the regulations for first responses to accidents including dangerous goods,
- Procedures for handling and disposal of damaged dangerous goods and wastes contaminated by dangerous goods,
- Information on personal protective equipment and procedures for their use.

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

3.1 Directive on Transport of Dangerous Goods by Sea Responsibilities of the coastal facility operator

Do not berth the ships carrying dangerous goods without the permission of the port authority.

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

It does not handle dangerous goods for which it has not received a handling permit from the Administration, and it does not aggrieve the ships that will dock by making a plan within this scope.

Requests the compulsory documents, information and papers regarding the dangerous goods from the load attendant and ensures that they are present with the load. If the relevant documents, information and papers cannot be provided by the load attendant, it is not obliged to accept or handle the dangerous goods at its facility.

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 load with the ship attendant. Does not make any changes in the operation without the knowledge of the ship attendant.

Determines the working limits by taking into account the safe working capacity of the facility and the weather forecasts, and takes the necessary measures for the ship to be safely moored at the pier and for handling.

Controls the transport documents containing information that the dangerous goods arriving at the facility are classified, packaged, marked, labelled, plated and loaded safely to the cargo transport unit.

Ensures that the personnel involved in the handling of dangerous goods and the planning of this handling are certified by receiving the necessary trainings and does not assign the personnel who do not have documents in these operations.

Ensures that the equipment is in working condition and that the relevant personnel are trained and certified on the use of these equipments.

By taking occupational safety measures at the coastal facility, ensures that the personnel use personal protective equipment suitable for the physical and chemical characteristics of the dangerous goods.

Carries out activities related to dangerous goods at docks, piers and warehouses established in accordance with these works.

Equips the quays and piers reserved for ships that will load or unload dangerous liquid bulk goods with appropriate installations and equipment for this work.

Keeps an up-to-date list of all dangerous goods on the ships berthed at its facility and in closed and open areas of its facility, and gives this information to the relevant persons upon request.

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.

Notifies the port authority of the accidents related to dangerous goods, including the accidents at the entrance to closed areas.

Provides the necessary support and cooperation in the controls and inspections carried out by the Administration and the port authority.

Ensures that Class 1 (except Class 1 Compliance Group 1.4 S), Class 6.2 and Class 7 dangerous goods, for which the temporary storage is not permitted, are transported out of the coastal facility as soon as possible without waiting, and in cases where it is necessary to hold them, applies to the Administration for a permit.

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 goods in the storage area. Keeps fire extinguishing systems and first aid units ready for use at any time in the areas where dangerous goods are handled and performs the necessary controls periodically.

Obtains permit from the port authority before the hot work and operations to be carried out in the areas where dangerous goods are handled and temporarily stored.

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.

Ensures the internal loading of cargo transport units in accordance with the loading safety rules in its facility.

3.2. Appropriately packaged dangerous goods, presence of information describing the dangerous goods and information regarding risk and safety measures on package

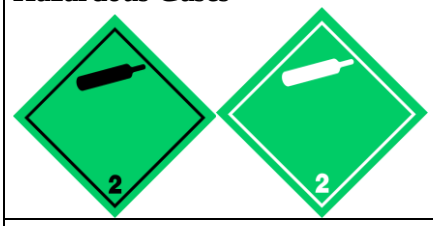
All classification, stacking-separation, plate attachment, labelling, packaging issues at port area, transportation units, cargo transportation units and packages are under the responsibility of sender, shipper and carrier. Sender has to send dangerous goods in regular and approved packages. Describing information, risks and information regarding safety precautions of packages are under the responsibility of sender.

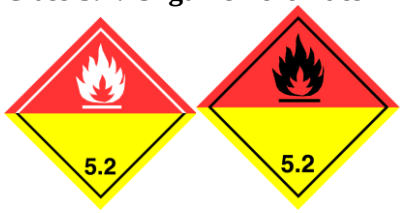
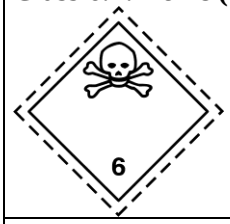
4. CLASSES, TRANSPORTATION, LOADING/UNLOADING, HANDLING, SEPARATION, STACKING and STORING DANGEROUS GOODS

4.1 Classes of Dangerous Goods

Classification of dangerous goods handled at port facility must be in compliance with IMDG Code directive. Classification principles and criteria for dangerous goods are explained in detail in IMDG Code Part 2. Dangerous goods not classified as necessary can't be processed. All expenses for dangerous goods not properly reported, incorrectly or deficiently reported to port facility shall be recoursed to the load attendant.

Class 1:Explosives	
Class 1.1: Mass and Quick Explosives 	Includes the explosives to cause massive explosion. Affects almost all loads in the event of an explosion.
Class 1.2: With Flying Objects But Not Exploding Massively 	Includes the explosives having the risk of flying objects but not to cause a massive explosion.
Class 1.3: Flame Explosives 	Includes the explosives having the risk of starting a fire, with mild explosive intensity and with leastwise danger of flying objects, but not to cause massive explosion.
Class 1.4: Low Damage Explosives 	Includes the explosives having the risk of mild explosion, whose impact won't surpass its container and cause an explosion or fire outside.
Class 1.5: Hard to Explode But Mass Explosives 	Includes the explosives which can explode massively but is very hard to explode and with very low sensitivity.
Class 1.6: Hard to Explode and Without the Danger of Mass Explosion 	Includes the explosives both which are very hard to explode, with very low sensitivity and without the danger of mass explosion.

Class 2 :Gases	
Class 2.1: Combustible Gases 	Substances that are 454 kg (1001 lbs) and gaseous below 20°C (68°F). Pressure of these substances is 101,3 kPa (14,7 psi) and their boiling points under this pressure are at or below 20°C (68°F). They are inflammable with pressure of 101,3 kPa (14,7 psi) and air mixture below 13%. Or they are combustible at minimum 12 % air mixture and 101,3 kPa (14,7 psi) pressure without lower limit
Class 2.2: Combustible and Non-Hazardous Gases 	Compressed gases, liquefied gases, compressed cryogenic gases, compressed gases in a solution and oxidizing gases are included into this class. Combustible and non-hazardous gases are those with 280 kPa (40.6 psia) pressure content at 20°C (68°F) temperature and not included in classes 2.1 and 2.3.
Class 2.3: Poisonous Gases 	Known to be hazardous on human health and creating health hazard during transportation Poisonous gases are substances having 101,3 kPa pressure with temperature at or below 20°C (with boiling points at or below 20°C under this pressure), even though their hazard on human health isn't proven exactly, having LC50 value over 5000 ml/m3 during the tests made on animals.
Class 3: Combustible Liquids	
Class 3: Combustible Liquids 	Combustible liquids are substances having flashing degree not more than 60,5°C (141°F) or being in liquid form and kept heated for transportation and with a flashing degree at or above 37,8°C (100°F).
Class 4: Combustible Solids	
Class 4.1: Combustible Solids 	Solids which are combustible as they are. This substances can catch fire via friction and their combustion velocity is higher than 2,2 mm (0,087 inch) per second. Metal powders which are flammable and entirely reacting within 10 minutes or less time are included in this class. Thermally unstable, having strong exothermic reaction without air participation and self-flammable materials are also in this category. The explosives included in Class 1 but without activity or the substances particularly included in this class by manufacturer.

Class 4.2: Self-Flammable Solids 	Self flammable substances are pyrophoric substances. These are substances that catch fire in the fifth minute of contact with air or get hot without any additional energy source in the event of contact with air.
Class 4.3: Those Posing Danger In Contact With Water 	These substances are the ones that release combustible or hazardous substances in the event of contact with water. Danger criteria is releasing more than 1 Litres per hour for 1 kg of substance.
Class 5: Oxidizing Substances and Organic Peroxides	
Class 5.1: Oxidizing Agents 	Such substances are the one that enable or quicken other substances to burn by releasing oxygen.
Class 5.2: Organic Peroxides 	Organic peroxides (Class 5.2) are substances that feature oxygen in the form of O-O. These might be considered as a derivative of hydrogen peroxide and are generated through replacement of one or more hydrogen atoms in the water by organic radicals.
Class 6: Toxic and Infectious Substances	
Class 6.1: Toxic (Poisonous) Substances 	Substances known to be potentially hazardous for people during transportation are classified as toxic substances. Also, substances identified to be poisonous during the tests on animals are considered hazardous also for people and included in this category.
Class 6.2: Infectious Substances 	Substances with infectious disease content are the ones known or suspected to have pathogen. Pathogens are micro organisms (bacteria, viruses, fungi etc.) or other factors leading to disease at animals or people.
Class 7: Radioactive Substances	

Class 7: Radioactive Substances 	Substances bearing yellow RADIOACTIVE III (LSA-III) label. Certain radioactive substances don't have this label but must have banner showing the radioactivity.
Class 8: Abrasive (Corrosive) Substances	
Class 8: Abrasive (Corrosive) Substances  	Substances having abrasive, thinner effect on human skin in the event of contact for a certain period of time. Substances having corrosive effect on steel and aluminium are also included into this class.
Class 9: Other Dangerous Substances	
Class 9: Other Dangerous Substances  	Substances posing danger during transportation but not fitting in any of the defined classes are included into this class. This class includes the following substances: • Anaesthetic or other type of hazardous substances. These are the substances which can create such a discomfort that would prevent flight crew or ship crew from performing their duties.

Table 3: Hazard Class Table

4.2 Packs and packages of dangerous goods

Packs and packages of dangerous goods handled in our port facility must be in compliance with provisions of IMDG Code and relevant legislation. Requirements for packs and packages of dangerous goods are explained in detail in IMDG Code Parts 4 and 6. Dangerous goods not packed as necessary can't be processed. All costs related to improper and unapproved packages are recoursed to load attendant.

There are type approval code markings on the dangerous goods packages. The code at the beginning of the letters of UN indicates that the package or packaging has undergone certain tests and is suitable for carrying dangerous goods. Information about the marking and labelling of the packages in question is detailed in the section dangerous goods signs and packaging groups.

Packages					
Packaging Kind/Type	***Description***	***Visual***	***Packaging Kind/Type***	***Description***	***Visual***
1	Drum		5	Bag	
3	Barrel		6	Composite	
4	Box		0	Thin Metal	

Table 4: Packing Table

Packaging types consist of the combination of the packaging type, the kind of material from which the packaging is produced, and the category.

For example; “1A1” packaging means a fixed (non-removable) capped steel drum.

In this context, numbers are used for packaging types and capital letters are used for material types. In our facility, it is checked whether the packaging type and the packaging definition match according to the table below.

Type	Material	Category	Code
1.Drum	A Steel	Fixed (non-removable) cap	1A1
		Circle (removable) cap	1A2
	B Aluminium	Fixed (non-removable) cap	1B1
		Circle (removable) cap	1B2
	D Plywood		1D
	G Fibre		1G
	H Plastic	Fixed (non-removable) cap	1H1
		Circle (removable) cap	1H2
	N Metal, except steel or aluminium	Fixed (non-removable) cap	1N1
		Circle (removable) cap	1N2
3.Barrel	A Steel	Fixed (non-removable) cap	3A1
		Circle (removable) cap	3A2
	B Aluminium	Fixed (non-removable) cap	3B1
		Circle (removable) cap	3B2

	H Plastic	Fixed (non-removable) cap	3H1
		Circle (removable) cap	3H2
4.Boxes	A Steel		4A
	B Aluminium		4B
	C. Natural wood	Normal	4C1
		Dust-proof walled	4C2
	D Plywood		4D
	F. Reconfigured wood		4F
	G Cardboard		4G
	H Plastic	Expansion	4H1
		Solid	4H2
	N Metal, except steel or aluminium		4N
5.Bags	H. Woven plastic	Without inner lining or coating	5H1
		Dust-proof	5H2
		Water-proof	5H3
	H. Plastic film		5H4
	L. Fabric	Without inner lining or coating	5L1
		Dust-proof	5L2
		Water-proof	5L3
	M. Paper	Multilayer	5M1
		Multilayer, water-proof	5M2
6.Composite Packages	H. Plastic containers	With steel drum outside	6HA1
		With steel case or box outside	6HA2
		With aluminium drum outside	6HB1
		With aluminium case or box outside	6HB2
		With wooden box outside	6HC
	P. Glass, porcelain or ceramic container	With steel drum outside	6PA1
		With steel case or box outside	6PA2
		With aluminium drum outside	6PB1
		With aluminium case or box outside	6PB2
		With wooden box outside	6PC
		With plywood drum outside	6PD1
		With plywood box outside	6PD2
		With fibre drum outside	6PG1
		With cardboard box outside	6PG2
		With plastic drum outside	6PH1
		With rigid plastic box outside	6PH2
0.Thin Metal Packages	A Steel	Fixed (non-removable) cap	0A1
		Circle (removable) cap	0A2

Table 5: Packing Type Table

The packaging marks specified in the table above must be legible and easily visible on each package. Handling personnel should pay attention to this description on the package. On each packaging

United Nations Packaging Symbol must be available.

Examples of packaging markings are shown below;

Conventional packaging

1A1/Y 1.4/200/02/GB/8888

United Nations Packaging Symbol (circle enclosing the letters 'u' and 'n')

The first number indicates the type of packaging (1>Barrel, 4>Box, etc.)

This number is followed by the letter denoting the packaging material. (A>Steel, B>Aluminium, etc.)

An additional category follows the letter to identify the subcategory of the packaging type. (1, 2, etc.)

Letter indicating the packaging group for

which the packaging is tested. X=Tested for

packing group (PG) I, II, III.

Y=Tested for packing group (PG) II, III. Z= Tested for packing group (PG) III

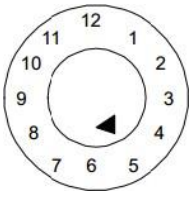
Number indicating the relative density for liquids, maximum gross mass for which the

package is tested for solids (1.4> ton/m³) Letter 'S' indicating the package into which a

solid substance is transported or the barrel or other package into which the liquid

substances are transported, a number indicating the hydraulic test pressure in kPa (

I.E.; 200)



The last two digits of the year the packaging was produced (i.e. 02), furthermore, for plastic drums and cans, a mark showing the month of manufacture must be displayed. (Preferably formed in the form of 1 hour and the hour numbers 1 to 12 are indicated by an arrow)

*A sequence of 1,2 or 3 letters at the beginning of the second line of the code, indicating the international abbreviation of the authorized country designating the UN mark. (Based on a system used to recognize vehicles circulating in other countries. GB > Great Britain F > France)

*Identification of the manufacturer by name or by a series of numbers or test certificate numbers to identify it.

Codes for IBC types are in the table below. Numbers are used for IBC types and capital letters are used for material types.

The notation code information for IBCs is as follows;

Type	For solids, filled or emptied		For liquids
	By gravity	From 10 kPa (0.1 bar) under high pressure	
Rigid	11	21	31
Flexible	13	-	-

Table 6: IBC Code Information Table

Type and codes of IBC are in the table below.

Material	**Category**	**Code**
Metal		
A Steel	For solids, filled or emptied by gravity	11A/
	For solids, filled or emptied under pressure	21A
	For liquids	31A/
B Aluminium	For solids, filled or emptied by gravity	11B/
	For solids, filled or emptied under pressure	21B
	For liquids	31B/
N Metal, except steel or aluminium	For solids, filled or emptied by gravity	11N/
	For solids, filled or emptied under pressure	21N
	For liquids	31N/

Flexible		
H. Plastic	Woven plastic w/o coating or lining	13H1
	Woven plastic, w/coating	13H2
	Woven plastic w/lining	13H3
	Woven plastic, w/coating and lining	13H4
	Plastic film	13H5
L. Fabric	W/o coating or lining	13L1
	W/coating	13L2
	W/lining	13L3
	W/coating and lining	13L4
M. Paper	Multilayer	13M1
	Multilayer, water-proof	13M2
H. Rigid plastic	For solids, filled or emptied by gravity, equipped with structural equipment	11H1
	For solids, filled or emptied by gravity, W/o support	11H2
	For solids, filled or emptied under pressure, equipped with structural equipment	21H1
	For solids, filled or emptied under pressure, W/o support	22H2
	For liquids, equipped with structural equipment	31H1
	For liquids, w/o support	31H2
HZ. W/plastic inner container, composite	For solids, filled or emptied by gravity, with rigid plastic inner container	11HZ1
	For solids, filled or emptied by gravity, with flexible plastic inner container	11HZ2
	For solids, filled or emptied under pressure, with rigid plastic inner container	21HZ1

	For solids, filled or emptied under pressure, with flexible plastic inner container	21HZ2
	For liquids, with rigid plastic inner container	31HZ1
	For liquids, with flexible plastic inner container	31HZ2
G. Cardboard	For solids, filled or emptied by gravity	11G
Wood		
C. Natural wood	For solids, filled or emptied by gravity, with inner lining	11C
D. Plywood	For solids, filled or emptied by gravity, with inner lining	11D
F. Reconfigured wood	For solids, filled or emptied by gravity, with inner lining	11F

Table 7: IBC Types Table

4.3 Placards/plates, marks and labels regarding dangerous goods

Labelling and marking of dangerous goods packages and IBCs are specified in IMDG Code section 5.2. The minimum dimensions of the full shipping names and danger labels of the dangerous goods on the package are 10 cm x 10 cm. The quality of the labels should not deteriorate and should remain unchanged at sea for three months. In case a dangerous good poses more than one risk, the danger label of the secondary hazard should also be marked on the package.

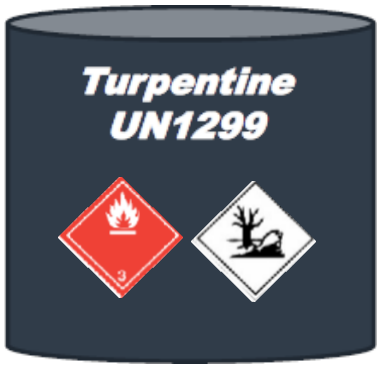


Figure 1: Packaging Labelling

Placarding of cargo transport units to be used in the transport of dangerous goods is specified in IMDG Code section 5.3. Dangerous goods placards are the same as the danger labels and their dimensions are 25 cm x 25 cm. Cargo transport units carrying dangerous goods more than 4000 kg must be marked with UN Number. Placards showing the hazard class of the substance should be attached to all four sides of the cargo transport units carrying dangerous goods.
An example of placarding for tank-container and bulk containers is as follows;

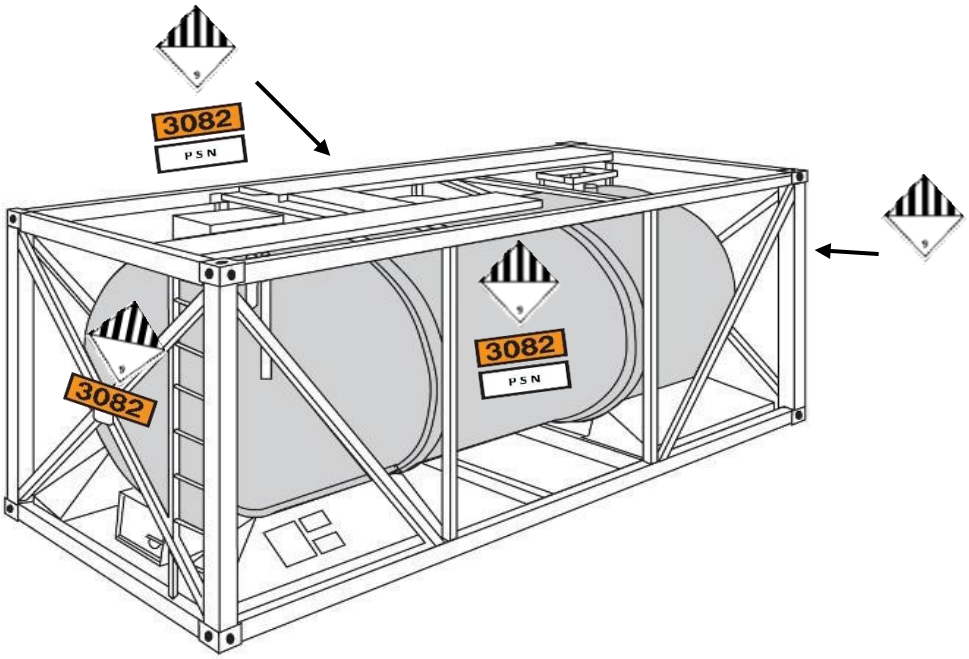


Figure 2: Cargo Transport Unit Placarding

An example of placarding for a container is as follows;

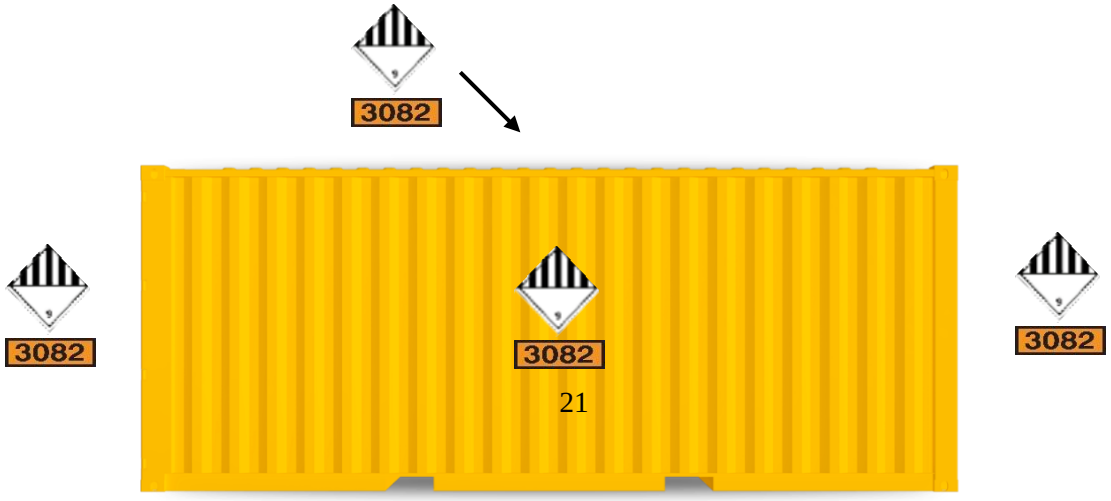


Figure 3: Container Placarding

Within the scope of the ADR Agreement, the plating and placarding of the road transport vehicles and the vehicles that will enter and exit the facility are as follows;

Road transport vehicle performing container transport:

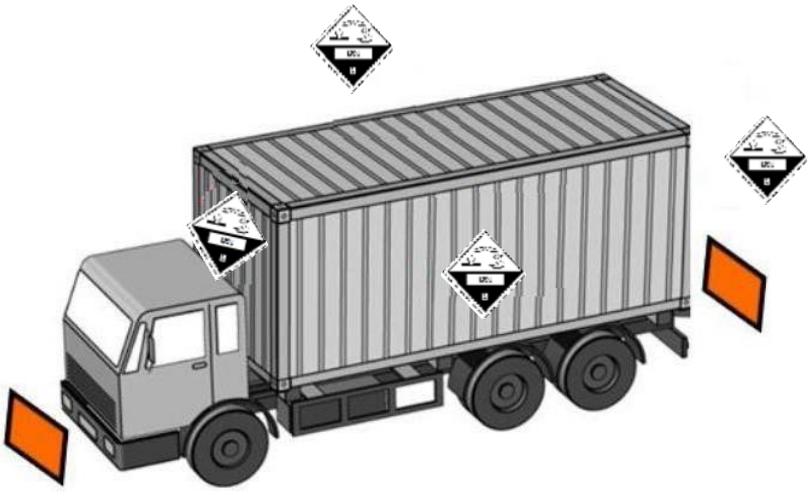


Figure 4: Container Transport Unit

Road transport vehicle performing tank-container transport:

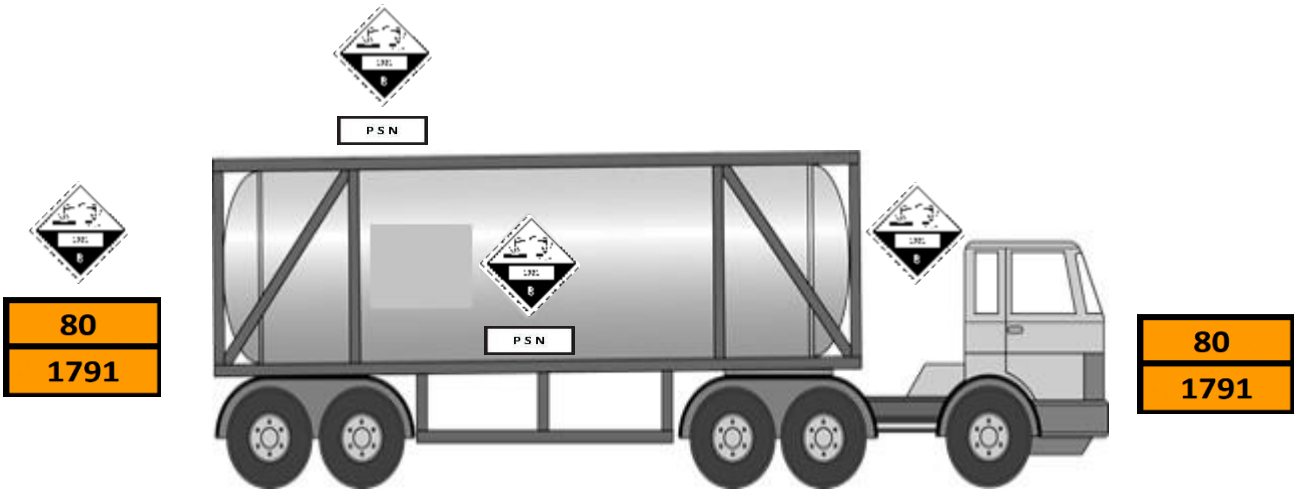


Figure 5: Tank Container Transport Unit

UN numbers, with the exception of Class 1 substances, shall be placed on the following shipments as required in this section:

1- Solids, liquids and gases transported in tank cargo transport units, including each compartment of a multi-compartment tank cargo transport unit;
2- Packaged dangerous goods with a gross mass of more than 4000 kg, which are assigned a single UN number and are the only dangerous goods in the cargo transport unit,
3- Class 7 LSA-I or SCO-I material as unpackaged in or on a vehicle or freight container or tank;
4- Unique-use packaged radioactive material in or on a vehicle or in a freight container with a unique UN number assigned;
5- Solid dangerous goods in bulk containers

UN numbers of substances shall be indicated by black numbers not shorter than 65 mm and shall comply with one of the following situations:

1- It shall be placed on a white background, on the area below the pictorial symbol and on the class number and letter of compatibility group, in a way that does not obscure or distract other necessary label elements; or
2- On an orange rectangular panel not less than 120 mm high and 300 mm wide and with a 10 mm black border line, next to each plaque or marine pollutant sign. If the placard or marine pollutant mark is not required, the UN number shall be placed next to the Proper Shipping Name.

The upper side of the sign shown in the picture above shows the hazard identification number and the lower side shows the UN number.

Bullet with high temperature;

This mark is an elevated temperature bullet and must be used on both sides and rear side on tank-vehicles, tank-containers, portable tanks, special vehicles or containers, or specially equipped vehicles, and must be on both sides and at both ends for containers, tank-containers, and portable tanks.

Environmental Pollutants/Marine Pollutants;

Figure 7: Environmental Pollutant Label

Containers that cause environmental pollution/carrying marine pollutants are marked with this label.

4.4 Dangerous Goods Signs and Packing Groups

Packing Group: These are the groups to which dangerous goods are assigned according to their level of hazard for packaging purposes.
Dangerous goods packages are defined in 3 groups in the IMDG Code. These are;

PG I: High-levelled risk

PG II: Moderate-levelled risk

PG III: Low-levelled risk.

Group	PGI	PG II	PG III
Hazard	MAJOR	MODERATE	MINOR
Fall Test	1.8 m	1.2 m	0.8 m
Class 3 Flash point boiling point	FP<61°C BP<35°C	FP<23°C BP>35°C	FP 23-61 °C BP>35 °C
Class 6 Poisoning risk	Very high	Serious	Relatively low
Class 8 Time passed for a visible skin damage	<3	>3 - <60'	>60' - <4 s

Table 8: Packing Group Table

4.5 Tables for separation on board and at port by class of dangerous goods

Various types of transporting dangerous goods by sea and provisions for separation are explained below.

Separation of packages, separation of cargo transport units in container ships, separation of cargo transport units in Ro-ro ships, separation of dummy barges in the water within the ship and dummy barges carried on board
It is made as a distinction between bulk materials with chemical hazards and packaged hazards. While making this distinction, the UN numbers of the dangerous goods to be loaded should be obtained, and details such as the packing group and flash point of the load should be learned. The compatibility of the dangerous goods should be controlled, if the loads have second loads, the restrictions should be considered in the same way.

Since the properties of materials or objects under the same class can be quite different, the dangerous goods list is always referred to for separation.

The general separation table of dangerous goods is given below; the definition of colours in the table is

as follows;
Blue = Far
Green = Reserved
Yellow = separated by a partition or staple
Red = Separated longitudinally by an intervening partition or staple

X White separation, if any, is indicated in the dangerous goods list

THE GENERAL SEPARATION TABLE IS AS FOLLOWS;

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	4	2	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
Flammable and non-toxic gases	2.2	2	2	1	X	X	X	1	X	1	X	X	1	X	2	1	X	X
Toxic gases	2.3	2	2	1	X	X	X	2	X	2	X	X	2	X	2	1	X	X
Flammable liquids	3	4	4	2	2	1	2	X	X	2	1	2	2	X	3	2	X	X
Flammable solids	4.1	4	3	2	1	X	X	X	X	1	X	1	2	X	3	2	1	X
Self-flammable substances	4.2	4	3	2	2	1	2	2	1	X	1	2	2	1	3	2	1	X
Those posing danger in contact with water	4.3	4	4	2	X	X	X	1	X	1	X	2	2	X	2	2	1	X
Oxidizing substances	5.1	4	4	2	2	X	X	2	1	2	2	X	2	1	3	1	2	X
Organic peroxides	5.2	4	4	2	2	1	2	2	2	2	2	2	X	1	3	2	2	X
Toxic substances	6.1	2	2	X	X	X	X	X	X	1	X	1	1	X	1	X	X	X
Contagious substances	6.2	4	4	4	4	2	2	3	3	3	2	3	3	1	X	3	3	X
Radioactive substances	7	2	2	2	2	1	1	2	2	2	2	1	2	X	3	X	2	X
Abrasive (corrosive) substances	8	4	2	2	1	X	X	X	1	1	1	2	2	X	3	2	X	X
Other dangerous substances and materials	9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Table 9: General Separation Table

4.6 Separation distances and separation terms of dangerous goods in locker storages

Our port facility has specific limited open storage area for dangerous goods. How to stack and separate dangerous goods in stacking area by their classes is explained in this guide part 2.4.

IMDG SEPARATION TABLE. IT'S USE:

These separation conditions are sophisticated and effort must be made for strict compliance with the rules. IMDG Code helps stacking planner in two ways:

- General rules of separation between IMDG classes are explained in the table provided in Volume 1 Section 7.1, separation categories provided in the table are between 1 and 4, stacking separation degree is required for each class pair: '1' ='away from....', '2' = 'separate from....' etc.
- Individual (single) records in the column 16 of Dangerous Goods List (DGL) (Volume 2) indicates whether special separation conditions are applied, any condition stated therein supersedes the general rules added to the table.

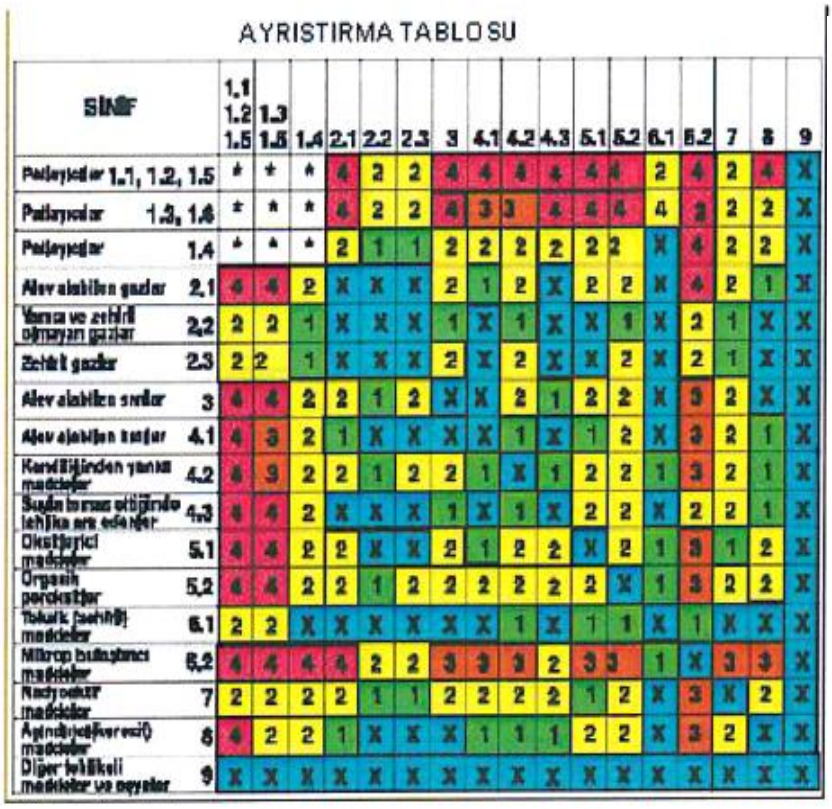
Thus stacking planner must first look at separation conditions in DGL for dangerous goods and later if general rules are to be followed, material must be checked from the separation table by class number for seeing which separation category is applied from separation in IMDG classes.
Borusan Logistics Port - Dangerous Goods Guide

For example, FORMIC ACID (a Class 8 abrasive liquid material, UN Number 17799) has no specific separation condition in its schedule and thus bears only the requirements of the class to which it belongs: 'away from' Classes 2.1, 4.1, 4.2 and 4.3, 'separated from' Classes 1.3, 1.4, 1.6, 5.1, 5.2 and 7, 'separated from.... one full section or warehouse and ' Class 6.2 and 'separated from.....one full section or warehouse lengthways'

Classes 1.1, 1.2 and 1.5. 'X' records in other columns individually represent the correlation between separation conditions (if any) and other classes as shown also in DGL schedule. On the other hand, BROMINE CHLORIDE (Class 2.3 toxic gas, UN Number 2901) bears also the risks of Class 5.1 and Class 8 and it's recommended that separation conditions are like Class 5.1 but kept separate from 'Class 7' in its own DGL schedule. Other substances might be provided with certain separation rules such as 'separated from chlorine' or 'separated from acids', all of the Class 1 explosive records are marked with (*); that means special compliance rules must be applied; compliance groups have been referred before (Step 2.4). Individual schedules assign letters for Class 1 substances (from A to L N and S) and substances sharing the same letter can be stacked together regardless of their classes and subsections.

Adding the classes of 'secondary danger' to a specific substance increases the complexity of separation table readings. Each of the secondary risks might require a different and stricter separation and thus schedule of the Code must be referred for both substance and every secondary risk. Stacking planners on board will find it useful to refer to other published tables where separation is shown class by class and additional risk classes are shown in separate lines.

We should remember that separation conditions detailed in the IMDG Code are specifically for stacking on board. Port planners can opt for using directives as basis for port storage separation of dangerous cargoes and Code actually recommends it.



1 = away from ...

2 = separated from ...

3 = separated from *... with a full compartment or staple*

4 = separated from ... with a full compartment or staple lengthwise

X= indicates item specific charts given in DGL

• = please refer to the special chart.

Table 11: Separation Table

Means interpretation of such statements like 'away from...', 'separate from...' and etc. in terms of separation at open and closed storage areas.

In any case, there is a more directly related guide of IMO titled 'Recommendations on Safe Transportation of Dangerous Goods and related activities in the Port Areas'.

This document includes a port storage separation table in accordance with IMDG Code stacking table. But, (this table) excludes Class 1 (explosives), Class 6.2 (infectious substances) and Class 7 (radioactive substances) substances; this is because these substances must be loaded via port storages routinely, not unloaded and special arrangements must be made for handling them.

In the table, only three separation categories are defined for port storage:

- '0' indicates dangerous good pairs not needed to be separated from each other (if individual schedules aren't required, always must be checked first);

- 'A' indicates the condition for separation of pair 'away' from the other class while 'S' requires the separation between pairs in the 'separate from...' category.

- **For example, according to Table, Class 2.2 substances** (non-toxic, non-combustible) must be separated from only Class 3, 4.2 and 5.2 substances and these separations are 'away from...', which means category 'A'. On the other hand, combustible liquid substances (Class 3) must be stored 'away from' substances in Classes 2.2 and 4.3 and 'separated from' cargoes in Classes 2.1, 2.3, 4.2, 5.1 and 5.2.

- **Clean and precise interpretations of 'away from....' and 'separated from...' statements** varies by package type and storage place; open (container area in the container terminal or open general cargo dock) or closed storage (for example warehouse of open cargo dock, storehouse or CFS)

SEPARATION TABLE FOR PORT AREAS

		2.1	2.2	2.3	3	4.1	4.2	4.3	5.1	5.2	6.1	8	9
Flammable gases	2.1	0	0	0	S	A	S	0	S	S	0	A	0
Non-flammable and non-toxic gases	2.2	0	0	0	A	0	A	0	0	A	0	0	0
Toxic gases	2.3	0	0	0	S	0	S	0	0	S	0	0	0
Flammable liquids	3	S	A	S	0	0	S	A	S	S	0	0	
Flammable solids	4.1	A	0	0	0	0	A	0	A	S	0	A	0
Self-flammable substances	4.2	S	A	S	S	A	0	A	S	S	A	A	0
Those posing danger in contact with water	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	6.1	0	0	0	0	0	A	0	A	A	0	0	0
Abrasive (corrosive) substances	8	A	0	0	0	A	A	A	S	S	0	0	0
Other dangerous substances and materials	9	0	0	0	0	0	0	0	0	0	0	0	0

0
No separation required

A
away from... (>3m or no separation)

S
away from... (explain >6m in warehouse >12m or >3m in the open >6m in the warehouse)

Table 12: Separation Table for Port Areas

- In the 'away from...' category for dangerous goods in individual packages without containers or in medium size freight containers or loaded in or on trailers, open road vehicles, train coaches and any type of open container, there must be a minimum of 3 meter distance between aforementioned two class substances regardless of their storage in a closed warehouse or an open storage area. ‘separated from...’ indicates a minimum distance of 6 meters between packages if in open area but 12 meters if in a warehouse or storage (unless there is an approved fire wall, which provides adequate separation by itself).
- While no separation is required for '0' and 'A' categories of dangerous goods loaded into portable tank or closed containers in closed road vehicles, a minimum distance of three meters in open storage area and a minimum distance of six meters in a warehouse or storehouse is required for 'separation from...' category (unless there is an approved fire wall, which provides adequate separation by itself).

Regardless of the package type, if substance has a secondary risk label or two or more substances are loaded into one transportation unit (for example container), strictest separation condition is applied, this decision might result from primary danger or secondary danger. Also, previously stated separation distances belong to horizontal distances; packages or containers of different IMDG classes 0. If the documents of the pier and ship are available, the agency is instructed to berth, if it is subject to piloting, instructed to Gemport Pilot, if not, instructed by VHF radio or telephone with the knowledge of the operation chiefs. Written information about berthing is given to the Shift Supervisors and the relevant chiefs. (Responsible: Port Traffic Plan. And Reporting Leader, Port Traffic Plan and Reporting Officer)

- Docking of ships with paperwork problems is temporarily suspended. It is ensured to solve the problem by making written or verbal meetings between the relevant departments and the customer. (Responsible: Port Operations Manager and Port Traffic Plan. And Reporting Leader, Port Traffic Plan. and Reporting Officer)

- The berthing of the ships according to the given instructions is controlled and the Port Operations Manager and the Port Traffic Plan and Reporting Leader is informed about the subject. (Responsible: Shift Supervisor of the relevant department)

- Berthing is determined in compliance with the Dock Planning Schedule after 17:30 on weekdays, and in consultation with the Superintendent on Duty on holidays and the berthing instruction is given. (Shift Supervisor of the relevant responsible department)

- The berthing of the ship is recorded in the Pier Shift Report numbered 4b-F48 as pier number, date and time. (Responsible: Port Shift Supervisor)

6.2 Procedures regarding additional measures required to be taken per seasonal conditions for loading, unloading operations of dangerous goods.

People who conduct loading, unloading or transshipment with ship attendants during loading, unloading or transshipping dangerous goods of ships and vessels shall take necessary safety precautions against heat and other hazards particularly in hot seasons. According to the provision of the article 22 of the Ports Regulation, "Unless permission is obtained from the port master, ships and marine vessels in the port areas are not allowed to do repair, blasting and painting, welding and other hot work, lifeboat and/or boat lowering, or other maintenance works. If the ships and marine vehicles that will carry out these works are in the coastal facility, they must coordinate with the coastal facility management.", the above-mentioned works in the ships in the port, including the 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 carried out on the ship.

Minimum Safety Requirements for Performing Hot Work on Board:

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 work must have obtained written permission from the port authority that the said hot work can be carried out.

In addition to the safety measures requested by the port authority, the company officer who will perform the hot work must take all necessary additional safety measures on the ship and / or the pier before starting the hot work. Informs the port officer about the measures taken. These measures include:

1) Inspection of the local area and adjacent areas, including testing by accredited testing organizations to verify that areas are free from flammable and/or explosive atmospheres and, where appropriate, not deficient in oxygen;

2) Removal of dangerous goods and other combustible materials and objects from work areas and adjacent areas.

3) Effective protection of combustible structural elements (e.g. beams, wooden partitions, floors, doors, wall and ceiling coverings) against accidental ignition

4) Ensuring the sealing of the 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

5) A plate with hot work authorization information and safety precautions should be placed 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.

While performing hot work, the following points should be taken into account by the ship's captain and crew:

Controls should be performed to verify that the conditions have not changed.

1) It should be kept ready in an easily accessible place with at least one fire extinguisher or other suitable fire extinguishing equipment for immediate use during hot work.

2) During hot work, after the completion of the hot work and when sufficient time has elapsed 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.

6.3 Procedures for keeping combustible, flammable and explosive materials away from operations that cause/may cause sparking, handling dangerous goods and for not operating tools, instruments or equipments that may generate spark in stowage and storage areas

It's prohibited to perform sparkling operations such as smoking, lighting a fire, welding at load deck and points of ships having berthed and carrying dangerous goods and at coastal storage places of dangerous goods.

Combustibles are kept away from sparkling operations and no sparkling vehicle or tool is operated in dangerous goods handling area.

Fumigation is not performed by Port Authority for cargo transportation units (CTU) and the load in it. Written permission shall be obtained from Port Authority for fumigation operation in the port area under the responsibility of the sender of the cargo.

Party performing fumigation accepts in advance to perform operation in compliance with 23.09.2013 dated and 2013/180 numbered IMDG Code Application Directive of the Ministry of Transportation and Infrastructure on fumigation, gas measurement, and degassing works and operations. Performs fumigation operations in accordance with this legislation.

Firms identified not to be acting in compliance with these rules aren't allowed to perform operation. All arising expenses are recoursed to whom concerned.

Area to perform fumigation is determined by port operator. The duty and responsibility of taking occupational health safety and environmental safety measures during fumigation operation belongs to the party performing the fumigation.

7. DOCUMENTATION, CONTROL AND RECORD

7.1 Procedures for determining all compulsory documents, information and papers relating to dangerous goods, their provision and control by the relevant authorities

For the Dangerous goods handled at our port, the Operation Department shall create all records on the dangerous goods;

- arriving at the port,
- sent from the port,
- stored in the terminal,
- temporarily stored in the port

in full and shall keep as to be accessible upon request. Dangerous good records are limited to personnel who need to know.

Dangerous goods inventories are kept up-to-date by the Operations department, with the records of dangerous goods handled at our port, including the following information.

- UN Number,
- PSN name (Proper Sender Name,
- Class, (with sub-hazards)
- Whether or not it is a Marine Pollutant,
- Buyer,
- Sender,
- Seal number,
- Additional Information (Ignition degree, viscosity, etc.)
- Where it is stored in the Port Area
- Duration of stay at the port

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.

7.2 Procedures for keeping the up-to-date list of all dangerous goods on the coastal facility site and other relevant information in a regular and complete manner

Containers containing dangerous goods handled at Borusan Port are stacked at the IMDG Site. In this area, firstly, separation zones have been determined according to the load amounts and hazard classes that have arrived in the past. The capacities of these zones are calculated according to the total amount distribution for each different class of dangerous goods handled. Its details are explained in 4b_D25_0 Borusan Port - Dangerous Goods Site Analysis and Result Report.

7.3 Procedures for controlling that the dangerous goods arriving at the facility are properly defined, the correct shipping names of the dangerous goods are used, certified, packaged/packed, labelled and declared and loaded and transported safely to the packaging, container or cargo transport unit in compliance with the rules, and reporting the control results

Only handling and storage is carried out for dangerous goods at the port. Labelling-packaging-packing is not performed. The cargo is stored at the IMDG site as it is, and then shipped.

7.4 Procedures for the provision and maintenance of the safety data sheet (SDS)

Safety Data Sheets (SDS) of all dangerous goods arriving at the port are provided and kept.

7.5 Procedures for keeping records and statistics of dangerous goods

Containers containing dangerous goods handled at Borusan Port are stacked at the IMDG Site. In this area, firstly, separation zones have been determined according to the load amounts and hazard classes that have arrived in the past. The capacities of these zones are calculated according to the total amount distribution for each different class of dangerous goods handled. Its details are explained in 4b_D25_0 Borusan Port - Dangerous Goods Site Analysis and Result Report.

7.6 Information on the Quality Management System

Borusan Logistics is a Borusan Holding company that provides services in two different Head Office structures, as Logistics Services and Port Services.

Borusan Logistics also offers services for Strategic Customers, Key Customers and SMEs customer segmentation, and provides organization, business processes, communication, development and supply management according to the requirements and expectations of each segmentation.

With the services offered throughout the company since 2002, Borusan Logistics has won many awards in management systems and practices, human resources, strategy and customer management.

- Selected as “Best Company of the Year” and “6 Sigma Company of the Year” in 2004, and as the "VOC Company of the Year" two years in a row in 2006 and 2007
- Within the Borusan Group with its management approach, practices and outcomes obtained, Borusan Logistics adopts sustainable excellence as the basic principle of its management approach.
- It won the Certificate of Competency in 5-Star Excellence in 2006 and the National Quality Achievement Award in 2008. In 2009, raised the bar of success in quality awards one step further and won the National Quality Grand Award.
- Won the Investor In People (IIP) award in 2009.
- Received the world-famous Hall of Fame award in 2009 in the field of strategic management competence and became the first logistics company in the world to receive this award.
- Won the International Safety Award organized by the British Safety Council (BSC) in 2019.
- Company awards are shared through the Sustainability report every year.
  Furthermore, there is a rooted history of Management Systems in Borusan Logistics.
- 9001 Quality, ISO 14001 Environment, OHSAS 18001 Occupational Health and Safety management systems as of 2003,
- 10002 Customer Satisfaction and Complaints Management (became the first company to receive the certificate in the logistics sector) as of 2007,

- ISO 50001 Energy Management system and 14064 Greenhouse Gas Verification (became the first logistics company in Turkey to perform both at the same time) as of 2012,
- ISO 27001 Information Security Management System as of 2018, and
- ISO 45001:2018 Occupational Health and Safety Management System as of 2019.

8. EMERGENCIES, EMERGENCY PREPAREDNESS and RESPONSE

The issues related to how any type of emergency that can or is likely to be experienced in relation with dangerous goods in port facility will be responded ashore and afloat are explained in Borusan Emergency Action Plan (ANNEX-7).

9. OCCUPATIONAL HEALTH and SAFETY

9.1 Occupational Health and Safety Measures

Before the initiation of the employment, the personnel start working by receiving basic occupational safety training for the work in the port facilities.
Apart from this training, Ergonomics training for the works carried out in our facility (by the Workplace Physician),
First aid training, fire training, emergency response training in order to respond to emergency situations,
Training on working with chemicals for the personnel working in the stuffing and unloading area on the site are provided,

Occupational health and safety specialists identify all risks in the facility and to which the employees may encounter with a team formed on the site and try to develop measures related to them and minimize these risks. As a result of this effort, identifies the lack of training, etc. and starts working to eliminate them.

Personnel working in our Port Facility and who will be newly employed are passed from;

- Optalmological examination
- Lung X-ray
- Blood analysis
- Audiometry test and they are not employed before the results reach us.

Have all lifting vehicles, grounding installations, pressure vessels, fire extinguishers, and lines on the site controlled at the times specified in the legal frameworks and keeps their records.

ISO 45001:2018 Occupational Health and Safety Management System is applied at our port.

Below stated trainings are provided to all personnel as per Occupational Health and Safety rules and practices;

- Port Occupational Health Safety General Subjects Training
- Port Occupational Health Safety Technical Subjects Training

- Port Occupational Health Safety Health Subjects Training Working with Dangerous Chemicals and Leakage response Training,
- IMDG Code General Awareness and Mission Related Training,
- Emergency Awareness Training,
- Environmental Consciousness and Waste Management Training,
- The directives applied in relation to Occupational Health Safety are provided under Title Annex-19.

You can see the list of Occupational Health and Safety documents below.

Document Code	Document Name	
11-K43	Port Facility HSE Practices and Essential	Guide
11-K49	Near Miss Notification and Management Guide	Guide
11-T07	HSE Performance Reporting Directive	Directive
11-T10	Port Portable Fire Extinguisher Directive	Directive
11-T11	Port Visitor HSE Directive	Directive
11-T23	Personal Protective Equipment Directive	Directive
11-T24	Fuel Filling and Discharging Directive	Directive
11-T30	Port Lashing Cage Control and Use Directive	Directive
11-T31	Waste Material Response Directive	Directive
11-T33	Dangerous Chemical Storage Directive	Directive
11-T36	Occupational Safety Order for Container Ships	Guide
11-T37	Eye Solution Use Directive	Directive
11-T38	Directive Regarding Qualities, Selection and Assignment of Employee Representative	Directive
11-T39	Project Loads Approach Directive	Directive
11-T81	First Aid Application Directive	Directive
11-T82	Emergency Patient Dispatch Procedure	Directive
11-T83	Health Unit Operating Directive	Directive
11-T84	HSE Video Watching Rules Directive	Directive
15-K15	Guide for First Aid and Things to Do During Accident	Guidance
15-T06	Directive on Checking and Tracking Fire Extinguishers	Directive
15-T08	Directive for Things to Do In Case of Occupational Accident at Port	Directive

15-T53	Rigger General Operational Safety Rules Directive	Directive
4b-03	Rules to be Followed by Company Officials Visiting for Survey, Customer, Agency and Customs Operations	Directive
4d-T01	MSDS and Material Storage Conditions Information Supply Directive	Directive
11-K75	Guide for HSE Management of Supplier, Contractor and Other Employees to Work at Borusan Logistics	Guidance

Table 13: Occupational Health and Safety document list

9.2 Information on personal protective clothes and procedures for their use

Rigging and Product Stacking;

a) Head protector
b) Work shoes
c) Gloves
d) Work Clothes

Circle Shear;

a) Head Protector
b) Work Shoes
c) Gloves
d) Work Clothes
e) Visor
f) Armband

Lashing;

a) Head Protector
b) Work Shoes
c) Gloves
d) Work Clothes

All Construction Equipments;

a) Work Shoes
b) Work Clothes

Working at Height;

a) Head Protector
b) Work Shoes
c) Work Clothes
d) Belt Lannyard

Maintenance and Repair Operations;

a) Head Protector

b) Work Shoes
c) Work Clothes
d) Goggles

Warehouse;

a) Work Shoes
b) Work Clothes

Product Handling;

a) Head Protector
b) Work Shoes
c) Gloves

Vehicle Loading/Unloading;

a) Head Protector
b) Work Shoes
c) Work Clothes

Cleaning;

a) Work Shoes
b) Gloves
c) Work Clothes

Ro Ro Loading-Unloading;

a) Work Shoes
b) Work Clothes

Chemical Spill-Leak;

a) Head Protector
b) Work Shoes
c) Gloves
d) Mask
e) Work Clothes
f) Goggles

Electrical Works;

a) Head Protector
b) Work Shoes
c) Gloves
d) Work Clothes
e) Goggles

Pumper (Fuel Personnel);

a) Head Protector
b) Work Clothes
c) Work Shoes
d) Gloves

Guest;

a) Head Protector
b) Work Shoes
c) Mask
d) Steel Toe
e) Vest

* Employees who do not have reflectors on their work clothes (t-shirt, sweatshirt, vest, coat), day-workers, contractor company's employees, suppliers must wear vests. It is not compulsory for those who have a reflector on their work clothes to wear a vest.

** In the event of a person falling into the sea, life jackets, life buoys, gaff and devil's cross are used. It is compulsory to use a life jacket while using Zodiac boats.

*** In case of a pandemic, surgical masks are used within the framework of the specified rules.

**** It is compulsory to use a safety belt and a double legged lanyard with shock absorber in the forklift basket and lashing cage.

***** The use of seat belts is compulsory in all vehicles, personnel vehicles, and construction equipments.

- If there is a situation where the limit value is exceeded as a result of the ambient measurement, then optional headphones can be used in the relevant area. It is compulsory to use leather rigger gloves, except for container lock disassembly and assembly.
- It is compulsory to use face shields and arm cuffs while cutting, collecting, and pulling the circle.
- The rigger must wear arm cuffs and a visor if a hoop is used while lashing.
- Operators do not have to wear hard hats inside the construction equipment. They have to use a hard hat when they get off the machine.
- The operator is obliged to use gloves while changing the boom of the machine, etc. operations.
- If the work to be carried out is an operation that requires wearing gloves, then must wear gloves.
- If the work to be carried out is an operation that requires wearing gloves, then must wear gloves.
- Optional personal protective equipment should be used for container unloading, loading to a vehicle or unloading, full fixing works, and all product handling operations.
- Optional personal protective equipment should be used during the loading/unloading operations of chemical products.
- Workers must use personal protective equipment according to the product to be loaded in vehicle loading and unloading operations.

For details; please refer to Borusan Port PPE Usage Matrix.

9.3 Confined space entry permit measures and procedures

Entry to the confined space is not permitted unless the prescribed confined space entry procedures are followed and a work permit has been issued:

Ensuring safety of the area,

Testing the confined space atmosphere

Availability of adequate first aid supplies and life-saving equipment at the entrance of the confined space Required equipment may be, but not limited to, the following:

- SCBA (Self-contained Breathing Appliance) with a fully charged spare cylinder,
- Lifeline and rescue harness. The lifeline must be of sufficient length and strength and be detachable in case of entanglement,
- Torches,
- Fire extinguisher,
- Facilities (e.g. stretcher) to lift a disabled person, and
- Portable atmosphere test devices.

Having an experienced personnel at the entrance of the confined space
Control of personal equipment. Required protective equipment will differ according to the situation. This reason of this is the fact that it depends on the risk evaluation that is different for each confined space entry.

An “Entry Permit” record must be filled for each confined space entry.

The following precautions should be taken during confined space operation:

- During the work, warning cards/inscriptions stating that work is performed inside should be hung at the entrance of the place,
- It must be ensured that the area is properly illuminated,
- Correct personal protective equipment should be worn at all times, any personal protective equipment should never be removed while inside the confined space,
- The atmosphere should be tested periodically while the work is performed inside the confined space, and in case of deterioration in conditions or an alarm in the personal gas detector, the person or persons in the space should be instructed to leave the place,
- Communication should be established regularly as agreed in advance, and
- If a hazard arises or any personnel at the site feel adversely affected, work on the site should be stopped immediately and a new evaluation should be carried out, including the issuance of a new “Work Permit”.

10. OTHER ISSUES

10.1 Validity of dangerous goods conformity certificate

Borusan Port Facility coastal facility operating permit has been renewed until 06.2023 within the scope of Regulations on Procedures and Principles Regarding Provision of Operating Permit to Coastal Facilities, published in Official Gazette no. 26438 on 18/2/2007.

10.2 Duties identified for Dangerous Goods safety consultant

TMGD duties and responsibilities are indicated in the Article 23 of "Notice on Dangerous Goods Safety Consultancy", published by Ministry of Transportation, Maritime Affairs and Communication.

10.3 Issues for those carrying dangerous goods to arrive at/depart from coastal facility via highways (documents required to be provided by dangerous goods carrying road vehicles at entrance into-exit from port or coastal facility, equipment and appliances these vehicles are required to have; speed limits in the port area, etc. issues)

Maximum speed limit for road vehicles and construction equipment entering port area for exchanging cargoes is 20 Km/h. Administrative sanctions shall be applied by port facility and as per relevant regulations of customs administration to the vehicles that are identified to exceed speed limits for passenger vehicles.

Road vehicles that bring dangerous goods to the port or take dangerous goods from the port are controlled by the Customs Administration at the entrance and exit of the port. On the other hand, the port security personnel perform the necessary records and controls on the matters remaining in their field of duty.

Vehicle must be equipped with the following as per European Agreement Concerning the International Transportation of Dangerous Substances by Road (ADR) Directive on Transportation of Dangerous Substances by Road:

a- Dangerous Goods Transportation Driver Training Certificate (SRC5)/ADR Driver Training Certificate

b-Valid cargo transportation certificate of vehicle (Vehicle Conformity Certificate/ADR Conformity Certificate)

c-Copy of the transportation permit obtained from relevant/competent authorities for transportation of Class 1, Class 6 and Class 7 dangerous cargoes defined in ADR (changed to annual permit), Class 1 and Class 7 loading/unloading isn't performed at Port Facility.

d-Dangerous goods and Dangerous Waste Compulsory Financial Liability Insurance Policy

e-Orange plate without letters at front and rear side of the vehicle transporting dangerous goods

f-Dangerous goods transportation paper

g-Written directive provided to driver by relevant transporter about how vehicle personnel will act in case of danger or accident as per ADR regulations

h-Personal and protective equipment to use at emergencies specific to the goods transported in vehicle

i-Multi Mode Dangerous Goods Transportation Form in ADR Section 5.4.5 for dangerous goods transported in multi mode

10.5 Issues for those carrying dangerous goods to arrive at/depart from coastal facility by sea (day/night signs to be shown at port or coastal facility by dangerous cargo carrying ships and vessels, hot and cold work procedures on board, etc. issues)

Ships carrying explosive, flashing, combustible and similar dangerous substances raise B (Bravo) signal flag during day and display a red lantern visible at all directions (360 degrees) during night according to International Regulations for Preventing Collisions at Sea (COLREG).

According to the provision of the article 22 of the Ports Regulation, "Unless permission is obtained from the port master, ships and marine vessels in the port areas are not allowed to do repair, blasting and painting, welding and other hot work, lifeboat and/or boat lowering, or other maintenance works. If the ships and marine vehicles that will carry out these works are in the coastal facility, they must coordinate with the coastal facility management.", the above-mentioned works in the ships in the port, including the 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 carried out on the ship.

Minimum Safety Requirements for Performing Hot Work on Board:

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 work must have obtained written permission from the port authority that the said hot work can be carried out.

In addition to the safety measures requested by the port authority, the company officer who will perform the hot work must take all necessary additional safety measures on the ship and / or the pier before starting the hot work. Informs the port officer about the measures taken. These measures include:

1) Inspection of the local area and adjacent areas, including testing by accredited testing organizations to verify that areas are free from flammable and/or explosive atmospheres and, where appropriate, not deficient in oxygen;

2) Removal of dangerous goods and other combustible materials and objects from work areas and adjacent areas.

3) Effective protection of combustible structural elements (e.g. beams, wooden partitions, floors, doors, wall and ceiling coverings) against accidental ignition

4) Ensuring the sealing of the 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

5) A plate with hot work authorization information and safety precautions should be placed 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.

While performing hot work, the following points should be taken into account by the ship's captain and crew:

Controls should be performed to verify that the conditions have not changed.

1) It should be kept ready in an easily accessible place with at least one fire extinguisher or other suitable fire extinguishing equipment for immediate use during hot work.

2) During hot work, after the completion of the hot work and when sufficient time has elapsed 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.

10.7 Additional issues added by coastal facility

10.7.1 Security

Various port security possibilities and capabilities are available at port area where dangerous goods operations are performed. Port facility is a port facility within the scope of ISPS Code and operates with 1 Security Manager, 1 Security Supervisor, 25 security personnel and in 3 shifts 7/24 hours working order. Regular patrols are realized in the port area. Port security is provided in an efficient manner with 1 security vehicle at each port entry-exit check points, 109 cameras (CCTV) surrounding the port border, with wire fence with proper height and quality in accordance with ISPS, and monitoring the entire port area both indoor and outdoor. Number of vehicles and people entering into - exiting from port is recorded instantly in electronic environment and can be monitored instantly.

The provisions of this guide shall be carried out by Port Facility Operations and Planning Directorate. Contractor Company serving as subcontractor at port is also entitled and responsible to apply provisions of this guide.

This guide and its annexes are integral parts of each other.
Annexes of this guide have been prepared and presented electronically.

ANNEXES:

1	General layout plan of coastal facility
2	General view photos of coastal facility
3	Emergency Contact Points and Contact Information
4	General Layout Plan of the Areas Where Dangerous Goods are Handled
5	Fire Plan of the Areas Where Dangerous Goods are Handled
6	General Fire Plan of the Facility
7	Emergency Plan
8	Emergency Assembly Points Plan
9	Emergency Management Diagram
10	Dangerous Goods Guide
11	Leakage areas and equipment, entry/exit drawings for CTU and Packages
12	Port Service Ships Inventory
13	Port authority administrative borders, mooring places and harbour pilot landing/embarking
14	Emergency response equipment against marine pollution in port facility
15	Personal protective equipment (PPE) usage map
16	Dangerous goods events notification form
17	Inspection results notification form for dangerous cargo transportation units (CTUs)
18	Other required annexes
19	Dangerous Goods Handling Guide Additional Cargo Notification (When Deemed Necessary)

The cargo notification that is not specified in the Dangerous Goods Guide in force and is planned to be handled at the facility is submitted to the relevant Port Authority through the completion of the form below. The coastal facility is obliged to show that the equipments that should be available in the facility according to the code to which such cargo is subject and to the attached safety data sheet are available, that all necessary measures such as first aid, fire, safety, etc. have been taken, and that necessary updates have been made in the Dangerous Goods Handling Guide and other procedures.

Proper shipment name		
If any, the groups in the UN Number and Class ID/Characteristic table		
Load type and subjected code	Dangerous Liquid Bulk Goods (Petroleum and Petroleum Derivatives-MARPOL Annex-1)	
	Dangerous Liquid Bulk Goods (Chemical and Similar-IBC Code)	
	Dangerous Liquid Bulk Goods (Liquefied Gas-IGC Code)	
	Packaged Dangerous Goods (IMDG Code)	
	Dangerous Solid Bulk Goods (IMSBC Code)	

Additional Safety Data Sheet (SDS)

Dangerous Goods Safety Consultant

Name/Surname/Signature

Coastal Facility Officer

Name/Surname/Signature