



KROMAN
ÇELİK SANAYİİ A.Ş.

KROMAN ÇELİK SANAYİİ A.Ş. KROMAN PORT FACILITY DANGEROUS CARGO HANDLING GUIDE



PREPARATION DATE:01.04.2016
(Refer to the Revised Page)

NAME SURNAME YUCEL ODABASI

SIGNATURE
SEAL

REVISION PAGE

Ser. Nu	Revision Nu	Revision Contents	Revision Date	Revision Author	
				Name Surname	Signature
1	1	*10.1 Validity of the Hazardous Compliance Certificate Page N.: 10-1	01.09.2020	İlyas DEĞERLİ	
2	2	*New Legislation amendment dated 20.04.2022	20.07.2022	Fadime GÜNDEMİR	
3	3	*Updating the validity period of the Dangerous Goods Conformity Certificate *Dangerous Goods Conformity Certificate Activity Area Update *Removing Procedure for Safe Handling Operation of Packed Dangerous Cargoes	24.10.2022	Fadime GÜNDEMİR	
4	4	* Hot Work Procedure Update Page No: 10-13	26.05.2023	Fadime GÜNDEMİR	
5	5	*Name and surname of the facility's Hazardous Materials Safety Advisor, contact details (phone, fax, email)	08.01.2024	Gizem EREN	
6	6	* Adding contact information in Article 7 of the Facility Information Form *Update of dates in Section 7.6. *Chapter 10.7 Hot Work Procedure update	04.03.2024	Gizem EREN	
7	7	*Name and surname of the facility's Hazardous Materials Safety Advisor, contact details (phone, fax, email)	30.04.2026	Furkan BOZKURT	
8	8	Updating the 3-month periods specified in Section 2.5.4.21, Section 7.5.1	03.09.2026	Furkan BOZKURT	

CONTENTS

1	ENTRY	1-1
1.1	General information of the port facility	1-2
1.2	Loading/unloading, handling and storage procedures for dangerous cargoes handled and temporarily stored at the port facility.....	1-5
1.3	Operational procedure of safe handling of bulk solid dangerous cargoes: 1-5	
1.4	Procedure for safe handling of scrap metal cargo.....	1-10
2	RESPONSIBILITIES.....	2-1
2.1	Responsibilities of the relevant person of the cargoes	2-1
2.2	Responsibilities of the carrier	2-1
2.3	Responsibilities of the port facility operator	2-1
2.4	Responsibilities of the ship's owner.....	2-3
2.5	Responsibilities of the Dangerous Cargoes Safety Consultant.....	2-3
2.6	Responsibilities of 3rd party, cargo / ship broker etc. operating in the port facility.....	2-5
3	APPLIED RULES AND MEASURES TO BE FOLLOWED BY PORT FACILITY 3-1	
3.1	Berthing	3-1
3.2	Supervision.....	3-1
3.3	Identification and certification	3-1
3.4	Safe handling and segregation.....	3-1
3.5	Emergency procedures	3-1
3.6	Emergency information	3-2
3.7	Fire precautions.....	3-2
3.8	Fire fighting	3-3
3.9	Environmental precautions.....	3-3
3.10	Pollution combating.....	3-3
3.11	Reporting of incidents	3-3
3.12	Inspections.....	3-4
3.13	Hot work and other repair or maintenance work.....	3-4
3.14	Entry into confined or enclosed spaces.....	3-5
3.15	Contaminated wastes.....	3-5
3.16	Alcohol and drug abuse.....	3-5
3.17	Weather conditions	3-5
3.18	Lighting	3-5
3.19	Handling equipment.....	3-5
3.20	Protective equipment	3-6
3.21	Communications.....	3-6
3.22	Areas	3-6
3.23	Training	3-7
4	CLASSIFICATION OF DANGEROUS CARGOES, HANDLING, LOADING / UNLOADING, HANDLING, SEPARATION, STACKING AND STORING	4-1
4.1	Classification of Dangerous Cargoes	4-1
4.2	Dangerous Cargoes Packing and Packages	4-1
4.3	Dangerous cargoes Marking, Labels, Placards.	4-1
4.4	Packaging and Approval Marking.	4-1
4.5	Segregation and Separation	4-1
4.6	Separation distances and separation terms for hazardous materials applicable storage at storage area	4-1

5	HANDBOOK OF DANGEROUS CARGOES	5-1
6	PROCEDURES FOR THE OPERATION	6-1
6.1	Procedure of ships carrying dangerous goods safely Berthing, loading / unloading, shelter or anchorage during the day and at night	6-1
6.2	Procedure of according to the seasonal conditions additional measures that Loading/Unloading, limbo operation of dangerous cargoes should be taken by port facilities	6-1
6.3	Procedures on keeping any inflammable, combustible and explosive materials away from operations which cause or are likely to cause sparking and abstaining from operating any tools, apparatus or device which cause or are likely to cause sparking in areas here hazardous materials are handled, stowed and stored.	6-1
7	Documentation, Control and Record.....	7-1
7.1	Procedures regarding to all necessary documents, information and certification relating to dangerous substances and their procurement and control by the relevant persons.	7-1
7.2	Procedures of keeping a regular and accurate current list of all hazardous substances in the port facility area and other relevant information.	7-1
7.3	Procedures regarding to appropriate identification of hazardous substances delivered to the facility, correct use of shipping names of dangerous cargo, certification, packaging, labeling and declaration, inspection on loading and transport of dangerous goods in the certified and proper package, container or cargo unit in a safety way and reporting of inspection results.	7-2
7.4	Procedures related to procurement of the Hazardous materials safety information sheets (SDS).....	7-3
7.5	Procedures for records and statistics of dangerous cargoes.	7-3
7.6	Information on the Quality Management system	7-4
8	EMERGENCY SITUATION, EMERGENCY PREPAREDNESS AND RESPONSE	
	8-1	
8.1	Response procedures for hazardous substances that are dangerous for life, property and/or environment and hazardous situations involving hazardous materials.....	8-1
8.2	Information on resource, capability and capacity of the coastal facilities regarding to respond to emergencies.	8-2
8.3	Regulations related to the first aid for accidents involving dangerous substances (first aid procedures, first aid resources and capabilities and so on.)	8-3
8.4	On-site and offsite Notifications required to be made in case of emergency.....	8-3
8.5	The procedures for reporting accidents.	8-4
8.6	Coordination, support and cooperation method with authorities.....	8-4
8.7	Emergency evacuation plan for the evacuation of the ship and vessels from the coastal facility in case of emergency	8-5
8.8	Procedures for handling and disposal of the damaged hazardous goods and wastes contaminated with hazardous goods.	8-7
8.9	Emergency drills and their records.....	8-7
8.10	Information on fire protection systems.....	8-8
8.11	Procedures for approval, inspection, testing, maintenance and availability of the fire protection system.....	8-8
8.12	The measures to be taken in case of failure on fire protection systems. .	8-10

8.13	Other risk control equipment.....	8-10
9	SAFETY AND HEALTH AT WORK MEASURES.....	9-1
9.1	Occupational health and safety measures.....	9-1
9.2	Information about the personal protective clothes and procedures to use them. 9-4	
9.3	Enclosed space entry permit measures and procedures	9-5
10	OTHER POINT	10-1
10.1	Validity of the Hazardous Substances Compliance Certificate.	10-1
10.2	Responsibilities of the Dangerous Goods Safety Consultant	10-1
10.3	Matters for carriers of the hazardous substances arriving/leaving coastal facility by land (matters on required documents that must be available in the road vehicle at the entrance/exit of port or coastal facility area, equipment and tools required for this vehicle, speed limits in the port area etc.).	10-1
10.4	Matters for carriers of the hazardous substances arriving/leaving coastal facility by sea (matters on day/night signals to be shown by ships carrying hazardous goods and vessels, cold and hot work procedures in ships and so on.)	10-2
10.5	Additional points will be added by the port facility.	10-2
10.6	Accident Prevention Policy.....	10-3
10.7	Hot Work Procedure	10-4
10.8	Responsibilities of Personnel in Operation.....	10-7
10.9	Safe Handling of Dangerous Goods Operation Procedure Checklist .	10-10
10.10	EmS (Emergency Procedures for Vessels carrying Dangerous Goods) and MFAG (Medical First Aid Guide)	10-12

 KROMAN GELİK SANAYİ A.Ş.	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	1-1
	 DANGEROUS CARGO HANDLING GUIDE 				

1 ENTRY

1.1. The entry and presence of dangerous cargoes in port areas and any consequential handling should be controlled to ensure the general safety and security of the area, the containment of the cargoes, the safety of all persons in or near the port area, and the protection of the environment.

1.2. The safety of life at sea and the safety and security of a ship, its cargo and its crew in a port area are directly related to the care which is taken with dangerous cargoes prior to loading or unloading, and during their handling.

1.3. These Recommendations are confined to dangerous cargoes which are in a port area as part of the transport chain. These Recommendations do not apply to dangerous substances which are used in a port area or are for general storage in the port area, but Governments may wish to control such use and storage by national legal requirements. Should a substance covered by either of these exclusions subsequently be shipped, these Recommendations should then be applied, even though the substance is already in the port area.

1.4. An essential pre-requisite for the safe transport and handling of dangerous cargoes is their proper identification, containment, packaging, packing, securing, marking, labelling, placarding and documentation. This applies whether the operation takes place in a port area or at premises away from a port area.

1.5. Whilst the total transport chain includes inland, port and marine elements, it is essential that every care is taken by those responsible for the matters in 1.4 and that all relevant information is passed to those involved in the transport chain and to the final consignee. Attention should be paid to the possible differing requirements for different modes of transport.

1.6. The safe transport and handling of dangerous cargoes is based on correct and accurate application of regulations for transport and handling of such cargoes and depends on appreciation by all persons concerned of the risks involved and on the full and detailed understanding of the regulations. This can only be achieved by properly planned and carried out training and retraining of persons concerned.

1.7. The codes and guides are under continuous review and are regularly revised. It is essential that only the most up-to-date editions are used. The contents of these codes and guides have been repeated in these Recommendations only to the extent necessary.

1.8. In preparing this guide IMDG CODE, ERG 2012 and IMO 1216 CR. documents have been applied to and the informations are used.

 KROMAN ÇELİK SANAYİİ A.Ş.	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	1-2
	DANGEROUS CARGO HANDLING GUIDE				

1.1 General information of the port facility

1	Port Name	KROMAN ÇELİK SANAYİİ A.Ş.		
2	Port Communication Details	Address: D-100 Karayolu Mevkii Tavşancıl Neighborhood Dilovası- KOCAELİ Tel: 0262 753 0462 Fax: 0262 753 0514 e-mail: liman@kromancelik.com.tr web: www.kromancelik.com.tr		
3	Port Name	KROMAN ÇELİK SAN. A.Ş. PORT FACILITY		
4	Location	KOCAELİ		
5	Port Communication Details	Address: D-100 Karayolu Mevkii Tavşancıl Neighborhood Dilovası- KOCAELİ Tel: 0262 753 0462 Fax: 0262 753 0514 e-mail: liman@kromancelik.com.tr web: www.kromancelik.com.tr		
6	Location	MARMARA		
7	Harbor Master	KOCAELİ REGIONAL PORT AUTHORITY Adres: Atalar neighborhood coastal road Street No:26 Yarımca-Körfez/KOCAELİ Tel: 0 262 528 37 54 Fax: 0 262 528 47 90 e-mail: kocaeli.liman@uab.gov.tr		
8	Municipality	DİLOVASI MUNICIPALITY Adres: Cumhuriyet Neighborhood Hürriyet street No: 6 Dilovası/Kocaeli Tel: 0262 754 88 88 e-mail: dilovasibelediyesi@hs01.kep.tr		
9	Free Zone	-----		
10	Port Permission	01.10.2026		
11	Operating status of the facility (X)	Own load and additional 3 rd party (X)	Own load (...)	3 rd party (....)
12	Port Authority	Ali ÇAKAR Tel: 0262 753 0462 Fax:0262 753 0514 e-posta: ali.cakar@kromancelik.com.tr		
13	Port IMDG Authorized Person	Uğur BAŞKAN Tel: 0262 753 0462		

 KROMAN ÇELİK SANAYİ A.Ş.	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	1-3
	DANGEROUS CARGO HANDLING GUIDE				

		Fax:0262 753 0514 e-posta: ugur.baskan@kromancelik.com.tr
14	IMDG Consultant Company	ADRES TMGDK –Furkan BOZKURT Tel: 0553-506-18-40 e-posta: furkan@adrestmgdk.com.tr
15	Port positions	40°46’35” N - 29°35’45” E
16	Types of dangerous goods handled at the facility (Loads within the scope of MARPOL Annex-I, IMDG Code, IBC Code, IGC Code, IMSBC Code, Grain Code, TDC Code, asphalt/bitumen and scrap loads)	Scrap Cargoes IMSBC Code
17	Dangerous goods handled at the facility (loads other than IMDG Code, among the cargo types in 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	----
19	Groups in characteristic table for handled cargo subject to IMSBC Code	Coal Group B (and A)
20	Vessel type	Max 60.000DWT
21	Distance to main road	0,1Km
22	Railway connection	0,1Km
23	Nearest airport	Cengiz Topel Airport 35 Km
24	Annual Handling Capacity	3.000.000 Mt /Year
25	Scrap handling	Yes
26	Border gate? (yes/no)	No
27	Custom bonded area? (yes/no)	Yes
28	Machinery and equipment	Mobile Cranes: 3 units – 40-ton capacity Forklifts: 4 units – 16-ton capacity, 1 unit – 25-ton capacity, 1 unit – 20-ton capacity, 1 unit – 3-ton capacity Crawler Excavators: 4 units – 22-ton operating weight Crawler Material Handlers: 4 units – 7, 15, 18 and 50-ton capacity Wheeled Material Handler: 1 unit – 7-ton capacity Wheeled Loaders: 2 units – 2–6-ton capacity Mini Loader: 1 unit
29	Tank storage (m ³)	-----
30	Open storage area (m ²)	22.000 m ²
31	Semi-closed storage area (m ²)	-----

 KROMAN GELİK SANAYİ A.Ş.	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	1-4
	DANGEROUS CARGO HANDLING GUIDE				

32	Fully-closed storage area (m ²)	-----			
33	Fumigation area	-----			
34	Pilotage and tugs	Guidance Service Provider: HAS Kılavuz Hizmetleri A.Ş. Atatürk Mh. Gülnihal Sk. No:16 34642 Ataşehir/İstanbul Tel: 0 (216) 514 77 00 info@haskilavuzluk.com.tr Towage Service Provider: Sanmar Römorkaj Aydıntepe neighborhood Güzin street No: 31 34947 İçmeler / Tuzla İstanbul Tel: 0216 458 59 00			
35	ISPS (yes/no)	Yes, ISPS Code			
36	Waste Facility	Waste Type		Capacity (m ³)	
		-----		-----	
37	Piers				
Pier No	Length (mtr)	Width (mtr)	Max. Depth (mtr)	Min. Depth (mtr)	Max. Vessel (DWT or mtr)
1	422	40	13	9	60.000 DWT/210 mtr
Pipeline			Number (pieces)	Length (mtr)	Diameter (inch)
			-----	-----	-----

 KROMAN GELİK SANAYİ A.Ş.	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	1-5
	DANGEROUS CARGO HANDLING GUIDE				

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

1.2.1 General

1.2.1.1 Within the scope of the IMSBC Code, all kinds of bulk cargo, minerals, coal, cement, clinker, ammonium nitrate-containing fertilizers and such solid bulk cargoes and project cargoes are handled at the port facility.

1.2.1.2 Fulfillment of the conditions specified below will be ensured as regards handling the dangerous cargoes coming to the port facility for safety of the port facility, employees and ships at the port facility.

1.2.1.2.1 A coordination meeting will be held at least 1 day prior to the acceptance of dangerous cargoes to the port facility and the representatives of operation, Field planning, HSE unit, TMGD and other related persons shall participate to the meeting. (The resolution to hold such meeting will be taken through the operation or HSE/TMGD departments regarding the dangerous cargoes handled routinely which are accepted to the port)

1.2.1.2.2 Following issues will be discussed during the coordination meeting with regard to the dangerous cargo (es) to be accepted to the port:

1. Risk arising from dangerous cargo
2. Interaction with dangerous cargoes existing at the port facility,
3. Interaction with cargoes planned to be accepted to the port facility in the near future,
4. Requirement of materials and equipment with respect to emergency response
5. Sufficiency of emergency response equipments
6. Interaction with the neighboring area (s)

The issues mentioned herein above will be discussed within the scope of current IMSBC CODE documents and a management decision for accepting/rejecting will be taken.

1.2.1.2.3 If a decision is taken at the meeting in favor of accepting the dangerous cargo, management, operation, storage, safety and emergency response departments shall be notified and the necessary preparations and acceptance process will be commenced.

1.2.1.2.4 If it is required to notify the Port authority, the situation shall be notified to the Port authority in writing by specifying the reasons.

1.3 Operational procedure of safe handling of bulk solid dangerous cargoes:

Loading or unloading of solid dangerous cargoes will be made direct delivery plan at the berths within our port facility.

1.3.1 Solid bulk dangerous cargoes

1.3.1.1 The loading or unloading program will be prepared 1 day before at the operation meeting. Number of equipment and cranes, teams and shifts as well as the port to be used shall be specified at this meeting. The personnel who will work in the operation will be provided with information as regards the risks of the cargo and they will be equipped with the necessary protective outfit. Environmental safety is ensured in line with HSE procedure. Personnel will be assigned neither to the hold of the ship nor to the work area before the gas are measurements conducted.

1.3.1.2 Necessary warnings will be made in order that the trucks do not to make loading exceeding loading limit and people in charge will pay necessary attention with respect to this issue.

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	1-6
	 DANGEROUS CARGO HANDLING GUIDE 				

1.3.1.3 The drivers will wait at a specified location away from the vehicle during the loading and unloading of vehicles. It will be controlled if the driver has the necessary protective equipment or not.

1.3.1.4 The shift superintendent will be responsible from controlling the work security, control of equipment, entry and exit of outsiders, safe handling of the cargo, environmental cleaning and duly performance of these works.

1.3.1.5 Loading and unloading in accordance with the cargo plan is within the liability of berth operators.

1.3.1.6 If the evacuation of ship is partially completed, gas measurements will be conducted prior to assignment for the evacuation of cargo in the hold of the ship.

1.3.1.7 Canvas is laid between the ship and the port, and a responsible person is assigned for cleaning the cargo scattered around.

1.3.2 Requirements

1.3.2.1 Issues as regards additional safety precautions to be taken at the port facility and these precautions will be provided by the operations department.

1.3.2.2 The shift superintendent or the berth operator will be assigned to be responsible from handling of solid bulk dangerous and their duties are defined within quality management system.

1.3.2.3 Electrical equipment, devices and tools to be used at the areas where dangerous materials are handled should have adequate standards for being used at flammable, sparkling and explosive environments. Electrical lamps other than arc lamps shall be used in loading operations of solid bulk dangerous cargoes and these lamps should be gastight.

1.3.2.4 Adequate number of personal protective clothing, equipment and outfit shall be provided in line with the specifications of solid bulk dangerous cargoes which are handled and the risks they can impose.

1.3.2.5 Water balls should be place in vicinity of areas where dangerous materials like coal, which have spontaneous combustion but not affected by water, are stored and watering works should be carried out in a way to avoid combustion. It will be considered if there is a drainage system for collecting the polluted water in the environment when the temporary storage area is announced.

1.3.2.6 Canvas to be used for avoiding the solid bulk dangerous cargoes from falling to the sea during evacuation or while loading to the ship, will be kept between the ship and the port during the operations.

1.3.2.7 The master who will load/unload the solid bulk dangerous cargoes will receive the detailed loading or unloading plan which includes details as to the position and quantity of the cargo in the ship from the berth operator prior to the beginning to loading or unloading process. An agreement shall be reached between the master and the berth operator as to the said loading or unloading plan.

1.3.2.8 The master and the berth operator will ensure, within their respective areas of responsibility, that operations regarding transport, handling or loading or unloading of solid bulk dangerous cargoes are done in accordance with “International Maritime Solid Bulk Cargo Code (IMSBC Code)”, “the Code of Practice for the Safe Loading and Unloading of Bulk Carriers (BLU Code)”, “Legislation on Safe Loading and Unloading of Bulk Carriers” promulgated in Official Gazette dated 31.12.2005 number 26040 and “Manual on Loading and Unloading of Solid Bulk Cargoes for Terminal Representatives (IMO MSC/Circ.1160, MSC/Circ.1230 and MSC.1/Circ.1356)”.

 KROMAN GELİK SANAYİ A.Ş.	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	1-7
	 DANGEROUS CARGO HANDLING GUIDE 				

1.3.3 Documentation

1.3.3.1 Passenger ships and cargo ships of 500 gross tonnage or over constructed on or after 1 September 1984 and carrying dangerous goods, shall comply with the requirements of regulation II-2/19 of SOLAS 1974. In this connection, such ships are required to carry on board a Document of Compliance in accordance with SOLAS 1974, regulation II-2/19.4 as evidence that the ship complies with the special requirements for ships carrying dangerous goods stipulated in SOLAS regulation II-2/19. Cargo ships of less than 500 gross tonnage constructed on or after 1 February 1992 shall comply with the requirements of regulation II-2/19 of SOLAS 1974, unless Administrations have reduced the requirements, and this has been recorded in the Document of Compliance.

1.3.3.2 The Document of Compliance provides information on the classes of dangerous goods that may be carried on deck and in each compartment of the ship.

1.3.3.3 On board a ship carrying packaged dangerous cargoes, additionally a special list or manifest setting out the dangerous goods and their location or a detailed stowage plan is required.

1.3.4 Responsibility for compliance

1.3.4.1 When solid bulk dangerous cargoes are carried, handled or stowed, the master of a ship and berth operator within their respective areas of responsibility should ensure that the loading and unloading operations are carried out in accordance with the IMSBC Code and the Code of Practice for the Safe Loading and Unloading of Bulk Carriers, where applicable, and the Manual on Loading and Unloading of Solid Bulk Cargoes for Terminal Representatives.

1.3.5 Emission of harmful dusts

1.3.5.1 Where the transport, handling or stowage of solid bulk dangerous cargoes may give rise to the emission of dust, all necessary practicable precautions should be taken to prevent and minimize the emission of such dusts and to protect persons and the environment from them.

1.3.5.2 The precautions should include the use of appropriate protective clothing, respiratory protection, and barrier creams, when needed as well as personal washing and hygiene and laundering of clothing.

1.3.6 Emission of dangerous vapor/oxygen deficiency

1.3.6.1 Where the transport or handling of solid bulk dangerous cargoes may give rise to the emission of a toxic or flammable vapor, all necessary practicable precautions should be taken to prevent and minimize the emission of such vapors and to protect persons from toxic vapors.

1.3.6.2 Whenever solid bulk dangerous cargo which may emit a toxic or flammable vapor is stowed or carried, an appropriate instrument for measuring the concentration of the toxic or flammable vapor should be provided.

1.3.7 Emission of explosive dusts

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	1-8
	DANGEROUS CARGO HANDLING GUIDE				

1.3.7.1 Where the transport or handling of solid bulk dangerous cargoes may give rise to the emission of dust that is liable to explode on ignition, all necessary practicable precautions, such as availability of fire hose, should be taken to prevent such an explosion and to minimize the effects of an explosion if one should occur.

1.3.7.2 Precautions include ventilating an enclosed space to limit the concentration of dust in the atmosphere, avoiding sources of ignition, minimizing the heights of walls of materials, and hosing down rather than sweeping.

1.3.8 Spontaneously combustible substances and substances that react with water.

1.3.8.1 Solid bulk dangerous cargoes which, on contact with water, may evolve flammable or toxic vapors or become liable to spontaneous combustion, should be kept as dry as reasonably practicable. Such cargoes should be handled only during dry weather conditions.

1.3.9 Oxidizing substances

1.3.9.1 Solid bulk dangerous cargo that is an oxidizing substance should be transported, handled and stowed in a manner that prevents in so far as reasonably practicable, contamination with combustible or carbonaceous materials. Oxidizing substances should be kept away from any source of heat or ignition.

1.3.10 Incompatible materials

Solid bulk dangerous cargoes should be carried, handled and stowed in a manner that prevents any dangerous interaction with incompatible materials.

1.3.11 Cargo which can be handled at our facility in accordance with IMSBC CODE

1.3.11.1 Group B cargoes (which possess a chemical hazard)

Group B cargoes are classified in two ways within the IMSBC Code: 'Dangerous goods in solid form in bulk' (under the International Maritime Dangerous Goods (IMDG) Code; and 'Materials hazardous only in bulk' (MHB).

You will find this information in the "characteristics" section of the cargo's schedule. Cargoes classified as dangerous goods in solid form in bulk will also have a 'UN' number in the Bulk Cargoes Shipping Name.

Dangerous goods in solid form in bulk

In the Code these cargoes are classed as follows:

Class 4.1: Flammable solids

Class 4.2: Substances liable to spontaneous combustion

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

Class 5.1: Oxidizing substances

Class 6.1: Toxic substances

Class 8: Corrosive substances

Class 9: Miscellaneous dangerous substances and articles.

Materials hazardous only in bulk (MHB)

Materials hazardous only in bulk (MHB) MHB cargoes are materials which possess chemical hazards when transported in bulk that do not meet the criteria for inclusion in

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	1-9
	DANGEROUS CARGO HANDLING GUIDE				

the IMDG classes above. They present significant risks when carried in bulk and require special precautions. They are described as follows:

Combustible solids: materials which are readily combustible or easily ignitable.

Self-heating solids: materials that self-heat

Solids that evolve into flammable gas when wet: materials that emit flammable gases when in contact with water.

Solids that evolve toxic gas when wet: materials that emit toxic gases when in contact with water.

Toxic solids: materials which are acutely toxic to humans if inhaled or brought into contact with skin.

Corrosive solids: materials which are corrosive to skin, eyes, metals or respiratory sensitizers.

The risks Group B cargoes present

The major risks associated with Group B cargoes are fire and explosion, release of toxic gas and corrosion.

FERROSILICON (UN 1408)

In contact with water, it can cause the release of hydrogen, a flammable gas that can form explosive mixtures with air, and under similar conditions it can release highly toxic substances phosphine and arsine. This cargo is non-combustible or has a low risk of fire.

Coal

Coal (bituminous and anthracite) is a flammable material containing natural, hard, amorphous carbon and hydrocarbons. It best fits to Group B in terms of its being flammable and the spontaneous heating feature thereof however it can also be classified as part of A group since it can get liquefied if refined (e.g. if %75 is composed of tiny particles smaller than 5 mm). In these cases, it is classified both as within A and B group.

Petroleum coke

Petroleum coke which is not calcined is sensitive to heat. It can get burned under high temperatures. There is no specific requirement for ventilation at the storage areas. There are no special requirements during transport, unloading and cleaning. It is required to wear gloves, work uniform, shoes and helmets as protective clothing. Spray nozzles should be kept available.

Direct reduced iron (DRI)

DRI may react with water and air to produce hydrogen and heat. The heat produced may cause ignition. Oxygen in enclosed spaces may also be depleted.

Metal sulfide concentrates

Some sulfide concentrates are prone to oxidation and may tend to self-heat, leading to oxygen depletion and emission of toxic fumes. Some metal sulfide concentrates may present corrosion problems.

Organic materials

Ammonium nitrate-based fertilizers Ammonium nitrate-based fertilizers support combustion. If heated, contaminated or closely confined, they can explode or decompose to release toxic fumes and gases.

Wood products transported in bulk.

Wood products transported in bulk are listed in a new schedule to the Code: Wood Products – General. They include logs, pulpwood, roundwood, saw logs and timber.

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	1-10
	DANGEROUS CARGO HANDLING GUIDE				

These cargoes may cause oxygen depletion and increase carbon dioxide in the cargo space and adjacent spaces.

These are wood products loaded and discharged by methods such as elevators and grabs. They are distinct from wood products listed in other schedules.

1.4 Procedure for safe handling of scrap metal cargo

Scrap metal cargo is handled within our port facility. Also, it is storage in the open area at the port facility.

1.4.1 Requirements

1.4.1.1 Entries to the quarantine area shall be provided in a controlled way, the entry door to the area will be kept closed when operations are not carried out, and warning signs shall be placed on them.

1.4.1.2 Two people will be assigned for handling the contaminated radioactive materials at the port facility. These people should take courses from Nuclear Regulatory Authority (NRA) and their duties will be defined in writing.

1.4.1.3 Radiation measurements of scrap cargo will be carried out by accredited supervision companies at the port facility within the responsibility of the cargo receiver. The supervision company which will conduct the radiation measurements should not have any partnership with or any interest from the cargo receiver or facility which are the customer of the receiver directly or indirectly.

1.4.2 Handling operation

1.4.2.1 Measurement of dust contaminated with the radiation accumulated in the pool at the port facility will be conducted and received by Nuclear Regulatory Authority (NRA).

1.4.2.2 Radiation well, where the materials detected in the scrap cargo contaminated with radioactive source and/or radiation are kept temporarily, will be isolated and bordered to avoid unauthorized access. Radiation wells will be constantly monitored during the time these materials are stored temporarily and a control point will be created at an appropriate distance.

1.4.2.3 It will be ensured that vehicles loaded with scrap will pass from radiation measurement devices placed in front of the weighbridge with a speed lower than 10 km. It will not be permitted for any vehicle loaded with scrap to leave the facility if the required measurements are not conducted. The berth operator will be responsible of going of the vehicles to control entry to weighbridge area and observing the measurement after the vehicles are loaded during the operations.

1.4.2.4 If level-3 radiation level is detected in a vehicle loaded with scrap in the measurements conducted, everyone in the vehicle including the driver will evacuate the vehicle and the vehicle will be taken to quarantine area and kept there until required emergency intervention is carried out. The said area and its immediate surroundings will be marked with warning signs and the people at the facility will be notified of this situation.

1.4.2.5 If materials contaminated with radioactive sources and/or radiation are detected, such materials will be taken into the radiation well and the number, size and approximate weight of radioactive sources will be notified to Nuclear Regulatory Authority (NRA) within 24 hours at the latest.

 KROMAN ÇELİK SANAYİ A.Ş.	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	1-11
	DANGEROUS CARGO HANDLING GUIDE				

1.4.2.6 Operators, employees or third parties who have not received training for protection against radiation and without appropriate protective clothing, equipment, devices and outfits will not be allowed to enter t the quarantine area.

1.4.2.7 Radiation measurements of radiation determination and quarantine area, the radiation well, dusts accumulated in the collection pool, the water discharged from the collection pool and of vehicles loaded with scrap shall be conducted.

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	2-1
	DANGEROUS CARGO HANDLING GUIDE				

2 RESPONSIBILITIES

The general responsibilities of all parties involved in the transport of dangerous goods are as follows:

- a) They are obliged to take all necessary measures to transport safely, securely and environmentally friendly, to avoid accidents and to reduce the damage as little as possible, if an accident occurs.
- b) In emergencies such as fire, leakage, spillage that occur during the transportation of dangerous goods, they benefit from the EmS Guide, which includes Emergency Response Procedures for Ships Carrying Dangerous Goods Guide.
- c) They benefit from the Medical First Aid Guide (MFAG) in the IMDG Code annex 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 loads.

2.1 Responsibilities of the relevant person of the cargoes

2.1.1 To prepare necessary documents, information and certificates relating to dangerous goods and provide availability of these documents with the cargo during the transport activities.

2.1.2 Ensure the proper classification, identification, packing, marking and plating of the dangerous goods in accordance with the legislation.

2.1.3 Ensure that dangerous goods are loaded, stowaged and securely lashing to approved packaging and cargo transport units in accordance with the rules and safely.

2.2 Responsibilities of the carrier

2.2.1 To request mandatory information and documents related to dangerous goods from the relevant person of the goods and ensures that they are present with the cargo during the transportation activity.

2.2.2 To check the compliance of the dangerous goods classified, packaged, marked, labeled and plated by relevant person of the goods with the legislation.

2.2.3 To check the dangerous goods are loaded, stowaged and securely lashing to approved packaging and cargo transport units in accordance with the rules and safely.

2.3 Responsibilities of the port facility operator

2.3.1 Not allowed to berth the ships carrying dangerous cargoes without permission from the Harbor Master.

2.3.2 Provide written information to the ship that will berth at the facility, within the scope of facility rules, cargo handling rules and relevant legislation.

2.3.3 It does not handle dangerous cargoes that it has not received permission from the administration and does not victimize the ship that will berth by planning in this context.

2.3.4 To request mandatory information and documents related to dangerous goods from the relevant person of the goods and ensures that they are present with the cargo during the transportation activity. In the event that the relevant documents and information cannot be provided by the relevant person of the goods, it is not obliged to accept or handle the dangerous cargo to the facility.

2.3.5 Shares all the data that may be required according to the characteristics of the cargo with the ship owner and performs the loading or unloading operation according

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	2-2
	DANGEROUS CARGO HANDLING GUIDE				

to the agreement to be reached. The port facility does not make any changes in the operation without the knowledge of the ship owner.

2.3.6 Determines the operating limits by taking into account the safe working capacity of the facility and weather forecast, takes the necessary measures to keep the ship safely stay to berth at the pier and to keep operation.

2.3.7 It controls the transport documents containing information that the dangerous goods coming to the facility have been properly classified, packaged, marked, labeled, plated and safely loaded to the cargo transport unit.

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

2.3.9 Ensures that the dangerous cargoes handling equipment in its facility is in good working condition and that the relevant personnel are trained and certified in relation to the use of this equipment.

2.3.10 Ensures that the personnel use personal protective equipment appropriate to the physical and chemical characteristics of the dangerous cargo by taking occupational safety measures at the port facility.

2.3.11 Execute the activities related to hazardous substances in the docks, piers, warehouses which are established for this purpose.

2.3.12 Provide proper installation and equipping for the berths and piers separated for ships to carry out the loading or unloading of dangerous liquid bulk cargoes.

2.3.13 Keeps an up-to-date list of all dangerous cargoes on the ships berthed at its facility and in the indoor and outdoor areas at its facility and gives this information to the relevant parties upon request.

2.3.14 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 taken for this purpose.

2.3.15 Notifies the port authority of the accidents related to dangerous cargoes, including the accidents at the entrance to the enclosed spaces.

2.3.16 Provide necessary support and cooperation for the inspections made by the port authorities and administrations.

2.3.17 Ensure that Class 1 (except class 1 Compliance Group 1.4 S), Class 6.2 and Class 7 dangerous cargoes, the temporary storage of which 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, apply to the administration for permit.

2.3.18 Temporarily stores the load carrying units where dangerous loads are transported in accordance with the separation and stacking rules and takes fire, environmental and other safety measures appropriate to the class of the dangerous cargo in the storage area. In the areas where dangerous loads are handled, fire extinguishing systems and first aid units are ready for use at any time and periodically carry out the necessary controls.

2.3.19 Obtain permission from the harbor master before the hot work and operations to be carried out in the areas where dangerous cargoes are handled and temporarily stored.

2.3.20 Prepares an emergency evacuation plan for the evacuation of ships from port facilities in case of emergency, submits it to the port authority and informs the relevant people about the plan approved by the port authority.

2.3.21 Ensures the internal loading of the load carrying units in accordance with the loading safety rules in the facility.

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	2-3
	 DANGEROUS CARGO HANDLING GUIDE 				

2.4 Responsibilities of the ship's owner

2.4.1 Ensures that the cargo to be carried by the ship is certified as suitable for transportation and that the cargo holds, cargo tanks and cargo handling equipment are suitable for cargo transportation.

2.4.2 Request all mandatory documents and information related to dangerous cargoes from the relevant person of the goods and ensures that they are present with the cargo during the transportation activity.

2.4.3 Ensure that the documents, information and documents required to be found on the ship regarding dangerous cargoes within the scope of legislation and international conventions are appropriate and up to date.

2.4.4 Check the transport documents containing information that the cargo transport units loaded on the ship are properly marked, plated and safely loaded.

2.4.5 Inform the relevant ship personnel about the risks of dangerous cargoes, safety procedures, safety and emergency measures, intervention methods and similar issues.

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

2.4.7 Ensure that the loading program, if any, on board is approved and documented and kept in working condition.

2.4.8 Inform the port authority and the port facility about the instant risk posed by the dangerous cargoes on the ship berthing to the port facility and the measures taken for it.

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

2.4.10 Inform the port authority of the dangerous cargo accidents that occur on the ship while sailing or at the port facility.

2.4.11 Provide necessary support and cooperation for the inspections made by the port authorities and administrations.

2.4.12 It does not accept to carry dangerous cargoes that are not included in the ship certificates issued by the relevant institutions and organizations.

2.4.13 Ensure that ship's crew in charge of handling dangerous cargoes use personal protective equipment appropriate to the physical and chemical properties of the cargo during handling.

2.4.14 Provide the requirements for the safety of loading of the cargo loaded on the ships.

2.5 Responsibilities of the Dangerous Cargoes Safety Consultant

2.5.1 Follow the compliance with the requirement to the transport of the dangerous cargoes.

2.5.2 Provide recommendations with regard to the transportation of hazardous materials to the port facility.

2.5.3 Prepare an annual report on the dangerous cargoes transportation activities of the facility operator to the port facility. (Annual reports are kept for years and submitted to the authorities upon request.)

2.5.4 Check the applications and methods described below;

2.5.4.1 Procedures regarding to appropriate identification of hazardous substances delivered to the facility, correct use of shipping names of dangerous cargo, certification, packaging, labeling and declaration, inspection on loading and transport of dangerous

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	2-4
	 DANGEROUS CARGO HANDLING GUIDE 				

goods in the certified and proper package, container or cargo unit in a safety way and reporting of inspection results.

2.5.4.2 Loading / unloading evacuation procedure related to handled and temporary dangerous goods,

2.5.4.3 Check that if the port facility considers the special requirements relating to dangerous goods while purchasing means of conveyance regarding to the handled dangerous goods.,

2.5.4.4 Control methods of transport equipment used in loading and unloading of hazardous substances,

2.5.4.5 Including the amendments to the legislation, to check that whether the port facility personnel have necessary training and whether the record of this training is available,

2.5.4.6 Convenience of the emergency methods to be applied in case of occurrence of an accident or incident that may effect the safety during the transport, loading or unloading of the dangerous goods.,

2.5.4.7 Convenience of the reports prepared on the serious accidents, incidents or serious infringements occurring during the transport, loading and unloading of the dangerous substances,

2.5.4.8 Determine the necessary precautions for the possibility of the re-occurrence of the accidents, incidents or serious violations and evaluation of the practices,

2.5.4.9 Check what extent the requirements of the transport of the dangerous good are considered among the selection of the sub-contractor,

2.5.4.10 Determine whether the personnel have detailed knowledge on operational procedures and instructions for the transportation, handling, storage and shipment / discharge of hazardous substances,

2.5.4.11 Convenience of the measures taken for the transportation, handling, storage and shipment / discharge of hazardous substances

2.5.4.12 Procedures on the identification of all necessary documents, information and certifications relating to hazardous materials.

2.5.4.13 Procedures on berthing, loading / unloading, sheltering or anchoring of ships carrying dangerous substances to the port facility day and night safely.

2.5.4.14 Procedures on the additional measures to be taken for loading and unloading of the dangerous goods according to the seasonal conditions.

2.5.4.15 Procedures on fumigation, gas metering and degasification operations. Procedures on keeping records and statistics of hazardous materials,

2.5.4.16 Accuracy of the matters related to the ability and capacity of the port facility for respond to emergencies,

2.5.4.17 Convenience of the regulations for early intervention for accidents involving hazardous substances,

2.5.4.18 Procedures on handling and disposal of damaged dangerous cargo and wastes contaminated with dangerous goods,

2.5.4.19 Information for the personal protective clothing and procedures among their use.

2.5.4.20 In addition to the IMDG Code, DCSC has information about the dangerous cargo activities of the port facility in general and the applications of IBC Code, IGC Code, IMSBC Code and MARPOL 73/78, depending on their interest, within the scope of dangerous goods handled at the port facility. It notifies the port facility manager in writing, on the condition that it does not exceed 6 (six) months, in

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	2-5
	 DANGEROUS CARGO HANDLING GUIDE 				

periods agreed with the port facility manager on whether the dangerous goods handled at the port facility are handled in accordance with the rules.

2.5.4.21 DCSCs prepare semi-annual reports in the format determined by the Administration regarding the responsibilities of the port facilities they serve or operate in accordance with the Regulation and this Directive. These reports are approved by the Coastal Facility Manager and submitted to the Administration.

2.5.4.22 Except for the port facilities that will receive TYUP for the first time, DGSC is present at the port facility and actively participates in the audits carried out within the scope of Article 8.

2.5.4.23 DCSC prepares the dangerous goods handling and/or temporary storage parts of the Dangerous Goods Handling Guide of the port facility together with the port facility and checks its accuracy. Signs the parts of the guide on dangerous goods handling and/or temporary storage.

2.6 Responsibilities of 3rd party, cargo / ship broker etc. operating in the port facility

2.6.1 Ensure that their personnel participating in the port facility has necessary training specified in the 26.07.2019 dated No. 56617 Circular of the Authority,

2.6.2 Comply with the requirements set out in the IMDG Code,

2.6.3 Comply with the procedures for Dangerous Cargo Guide and Hazardous substances formed by the port facility,

2.6.4 Handling, transport and storage of hazardous substances in the port facility and report any violation to the relevant authority,

2.6.5 Submit the (SDS) Form, which constitutes an integral part of the operations for the elimination of the Occupational Health and Safety risks that may occur during the use and storage of dangerous substances and prepared to inform the users accurately and adequately, to the port facility and Port Authority.

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	3-1
	DANGEROUS CARGO HANDLING GUIDE				

3 APPLIED RULES AND MEASURES TO BE FOLLOWED BY PORT FACILITY

The rules and measures given in this chapter are elaborated in Chapters 1,4,6,7,8,9 and 10 under Hazardous Material Emergency Plan and Accident Prevention Policy. The requirement for infrastructure is met by our port facilities.

3.1 Berthing

- 3.1.1 Adequate and safe mooring facilities are provided; and
- 3.1.2 Adequate safe access is provided between the ship and the shore.

3.2 Supervision

3.2.1 Any equipment which is used for handling and stowing processes and driven with or without power shall be checked and inspected to ensure that it is manufactured in accordance with the manufacturer's instructions and exists in good operating conditions and in compliance with proper standards.

3.3 Identification and certification

3.3.1 The port operator should ensure that dangerous cargoes entering his premises have been duly certified or declared by the cargo interests as being properly identified, packed, marked, labelled or placarded so as to comply with the appropriate provisions of the IMSBC Code or, alternatively, with appropriate national or international legal requirements applicable to the relevant mode of transport.

3.4 Safe handling and segregation

3.4.1 A port operator transporting or handling dangerous cargoes should appoint at least one responsible person who has adequate knowledge of the national or international legal requirements concerning the transport and handling of dangerous cargoes, including the segregation of incompatible cargoes.

3.5 Emergency procedures

3.5.1 The port operator should ensure that appropriate emergency arrangements are made and brought to the attention of all concerned. These arrangements should include:

- 3.5.1.1** the provision of appropriate emergency alarm operating points;
- 3.5.1.2** procedures for notification of an incident or emergency to the appropriate emergency services within and outside the port area;
- 3.5.1.3** procedures for notification of an incident or emergency to the port authority and port area users both on land and water;
- 3.5.1.4** the provision of emergency equipment appropriate to the hazards of the dangerous cargoes to be handled;
- 3.5.1.5** coordinated arrangements for the release of a ship in the case of an emergency; and

3.5.1.6 arrangements to ensure adequate access/egress at all times.

3.5.2 The port operator should consider the necessity of arrangements for a safe and quick emergency escape, taking into account the nature of the dangerous cargoes and any special conditions.

3.5.3 "Medical First Aid Guide (MFAG)" is used in order to provide the necessary medical first aid for the people affected by the damages of dangerous cargoes and the health problems caused by the accidents involving these cargoes.

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	3-2
	 DANGEROUS CARGO HANDLING GUIDE 				

3.5.4 "Emergency Plans (EmS)" are used for emergency situations involving dangerous cargoes.

3.5.5 In case of any emergencies or accidents, the first aid material to be used for response shall be kept in easily accessible locations known to personnel.

3.6 Emergency information

3.6.1 The port operator should ensure that a list of all dangerous cargoes in the warehouses and other areas, including the quantities, and if appropriate Proper Shipping Names, correct technical names (if applicable), UN numbers, classes or, when assigned, the division of the goods exact location is held readily available for the emergency services.

3.6.2 The port operator should ensure that the responsible person for a warehouse, shed or area, where dangerous cargoes are handled, is as far as possible aware of the status of occupancy with the dangerous cargoes in his area and is available in case of emergencies.

3.6.3 The port operator should ensure that the person responsible for cargo handling operations involving dangerous cargoes has the necessary information on measures to be taken to deal with incidents involving dangerous cargoes and that it is available for use in emergencies.

3.6.4 Electronic or other automated information processing or transmission techniques shall be employed to provide access to information.

3.6.5 Data sheets of hazardous materials shall normally be kept by the manufacturers of chemicals. Emergency response information and electronic databases shall be available and used in case of direct access to information.

3.6.6 The port operator should ensure that the port or berth emergency response procedures and port or port emergency telephone numbers are placed at prominent locations within or at warehouses, sheds or areas where dangerous cargoes are transported or handled.

3.6.7 The port operator should ensure that firefighting and pollution-combating equipment and installations are clearly marked as such and notices drawing attention to them are clearly visible at all appropriate locations.

3.6.8 The port operator should inform the master of any ship carrying or handling dangerous cargoes of the emergency procedures in force and the services available at the port.

3.7 Fire precautions

3.7.1 The port operator should ensure that:

3.7.1.1 All parts of the port and any ship moored to it are at all times accessible to emergency services;

3.7.1.2 Audible or visual alarms for emergency use are installed in the area or other means of rapid communication with emergency services are available;

3.7.1.3 The handling of dangerous cargoes is kept clean and tidy;

3.7.1.4 Before dangerous cargoes are handled, the master of a ship is informed of the location of the nearest means of summoning emergency services; and

3.7.1.5 the lighting and other electrical equipment in areas where dangerous cargoes are present on the port is of a type safe for use in a flammable or explosive atmosphere.

3.7.1.6 Notices in a pictogram form prohibiting smoking are clearly visible at all locations and at a safe distance from places where smoking would constitute a hazard.

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	3-3
	DANGEROUS CARGO HANDLING GUIDE				

3.7.1.8 The port operator should ensure that equipment used in an area or space where a flammable or explosive atmosphere may exist or develop, is of a type safe for use in a flammable or explosive atmosphere and used in such a manner that no fire or explosion can be caused.

3.7.1.9 Considering the fire and explosion hazards that can occur as a result of transporting dangerous goods, they may still contain residues and flammable vapors and pose a hazard.

3.7.1.10 The port operator should ensure that electrical equipment on a wandering lead is not used in areas or spaces where a flammable atmosphere may occur.

3.8 Fire fighting

3.8.1 The port operator should ensure that adequate and properly tested fire-fighting equipment and facilities are provided and readily available in accordance with the requirements of the regulatory authority in areas where dangerous cargoes are transported or handled.

3.8.2 The port operator should ensure that personnel involved in the handling or transport of dangerous cargoes are trained and practiced in the use of fire-fighting equipment in accordance with the requirements of the regulatory authority.

3.9 Environmental precautions

3.9.1 The port operator should ensure that dangerous cargoes are only handled in areas which comply with the requirements of the regulatory authority.

3.9.2 Dangerous goods spilled on the dock/pier cannot be thrown into the sea by sweeping or washing. These loads are prevented from going to the sea with rainwater.

3.9.3 During the loading and unloading of bulk cargo to and from the vessel, necessary actions shall be taken to prevent the dumping of any load from the vessel or the dock into sea.

3.9.4 Necessary actions shall be taken so that soil, water or areas of water discharge is/are not contaminated with any hazardous materials handled at onshore facilities. Additionally, these actions shall be applied for the piping line used during the handling of hazardous materials and for areas with conveyor system.

3.9.5 The capability to remove any contaminated bilge water, dirty ballast, sludge, slope and load waste from the vessel shall be provided.

3.10 Pollution combating

3.10.1 The port operator should ensure that adequate equipment is available to minimize the damage in case of a spillage of dangerous cargoes.

3.10.2 The equipment includes petroleum dispersion preventive fences, condensate lids, absorbing and neutralizing agents as well as cleaning agents and portable collection basins.

3.10.3 The port operator should ensure that personnel involved in the transport and handling of dangerous cargoes are trained and practiced in the use of pollution combating equipment and facilities in accordance with the requirements of the regulatory authority.

3.11 Reporting of incidents

3.11.1 The port operator, within his area of responsibility, should ensure that, if an incident occurs during the handling of dangerous cargoes which may endanger the

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	3-4
	DANGEROUS CARGO HANDLING GUIDE				

safety or security of persons, of ships within the port, of the port or of any other property, or the environment, the person having charge of the handling immediately causes the operation to be stopped, if it is safe to do so, and prevents it being resumed until appropriate safety measures have been taken. The port operator should require every member of his personnel to report to the person having charge of the operation, any such incident they see to occur during the handling of dangerous cargoes.

3.11.2 For the purposes of responding quickly and effectively; the short and proper description of the event should be communicated to the emergency center as soon as possible to treat the injured personnel and mitigate any potential damage.

3.11.3 The port operator should ensure that any incident involving dangerous cargoes which may endanger the safety or security of persons, or of ships within the port or of the port or of any other property or the environment is reported immediately to the port authority.

3.11.4 The port operator should ensure that any damaged or leaking package, unit load or cargo transport unit containing dangerous cargoes is reported immediately to the port authority and that suitable remedial action is taken.

3.12 Inspections

3.12.1 The port operator, where appropriate, should:

3.12.1.1 Check documents and certificates concerning the safe transport, handling and stowage of dangerous cargoes in the port area at the time of receipt;

3.12.2 The port operator should make such checks regularly to ensure implementation of the safety precautions in the port area and the safety of transport.

3.12.3 If any of the checks mentioned above reveal deficiencies which may affect the safe transport or handling of dangerous cargoes the port operator should immediately advise all parties concerned and request them to rectify all deficiencies prior to any further transport or handling of dangerous cargoes.

3.12.4 The port operator should ensure that every necessary support will be given to the port authority, or any other person or institution entitled to carry out inspections when they intend to carry out an inspection of dangerous cargoes.

3.13 Hot work and other repair or maintenance work

3.13.1 The port operator should ensure that no repair or maintenance work resulting in non-availability of the emergency/fire equipment required by these Recommendations is carried out at the port without prior permission of the port authority.

3.13.2 The port operator and the company carrying out the repairs, after having consulted the master of a ship, where appropriate, should ensure that they are in possession of a permit to proceed issued by the port authority before any repair or maintenance work involving hot work, or any other such work which may lead to a hazard because of the presence of dangerous cargoes, is carried out.

3.13.3 A prior notice to be served for the estimated duration of hot work or the lack of equipment as a result of the need for permission shall allow all emergency response authorities, such as fire department, to make a satisfactory announcement to express their objection and recommend additional measures. In case of particular circumstances, such as any hot work to be performed in a hold or closed areas near a hold, the skilled personnel capable of determining whether specific safety measures are necessary shall perform a detailed field survey.

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	3-5
	DANGEROUS CARGO HANDLING GUIDE				

3.14 Entry into confined or enclosed spaces

3.14.1 The port operator should ensure that no person enters any enclosed space such as, for example, a cargo space, cargo tank, void space around such tank, cargo handling space, or other confined or enclosed space which has contained or may contain dangerous vapor or oxygen depleting cargoes, unless the space is free of dangerous vapor and not deficient in oxygen, and is certified to that effect by a responsible person trained in the use of the relevant equipment and sufficiently knowledgeable to interpret correctly the results obtained. The responsible person should record the measurements taken.

3.14.2 Where it is necessary for operational purposes to enter a space which cannot be freed of dangerous vapor within a reasonable time and which, therefore, cannot be certified, or it is unlikely that the space will remain free of dangerous vapor, then entry should only be made by persons wearing a self-contained breathing apparatus and any other necessary protective equipment and clothing. The entire operation should be carried out under the direct supervision of a responsible person who should be provided with self-contained breathing apparatus, protective equipment and rescue harness. The breathing apparatus, protective and rescue equipment should not be of a type that could introduce a source of ignition into the space.

3.14.3 The port operator should ensure that entry into a space follows carefully established procedures which are contained in international codes and guides.

3.15 Contaminated wastes

3.15.1 The port operator should ensure that wastes contaminated with dangerous cargoes are immediately collected and disposed of in accordance with the requirements of the regulatory authority.

3.16 Alcohol and drug abuse

3.16.1 The port operator, within his area of responsibility, should ensure that no person under the influence of alcohol or drugs is allowed to participate in any operation involving the handling of dangerous cargoes.

3.16.2 Any such persons should always be kept clear of the immediate areas where dangerous cargoes are being transported or handled.

3.17 Weather conditions

3.17.1 The port operator, within his area of responsibility, should not permit dangerous cargoes to be handled in weather conditions which may seriously increase the risk.

3.17.2 Any unprotected load, which reacts dangerously when in contact with water, shall not be carried in rainy weather involving thunderstorms.

During thunderstorms, unsheltered cargo that react dangerously in case of explosive or water contact are not transported in rainy weather.

3.18 Lighting

3.18.1 The port operator, within his area of responsibility, should ensure that areas where dangerous cargoes are handled or where preparations are being made to handle dangerous cargoes and access to such areas are adequately illuminated.

3.19 Handling equipment

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	3-6
	DANGEROUS CARGO HANDLING GUIDE				

3.19.1 The port operator, within his area of responsibility, should ensure that all equipment used in the handling of dangerous cargoes is suitable for such use and used only by skilled persons.

3.19.2 The port operator, within his area of responsibility, should ensure that all cargo handling equipment is of an approved type where appropriate, properly maintained and tested in accordance with national and international legal requirements.

3.20 Protective equipment

3.20.1 The port operator, within his area of responsibility, should ensure, when necessary, that a sufficient quantity of appropriate protective equipment is available to all personnel involved in the handling of dangerous cargoes.

3.20.2 Such equipment should provide adequate protection against the hazards specific to the dangerous cargoes handled and should be of an approved type or made in conformity with an approved standard.

3.21 Communications

3.21.1 The port authority should ensure that every ship engaged in the transport of dangerous cargoes can maintain effective communications with the port authority. When appropriate and practicable such communications should be carried out by VHF in accordance with the provisions of SOLAS regulation IV/7 and complying with the performance standards set out in IMO Assembly resolution A.609(15) and the requirements of the regulatory authority.

3.22 Areas

3.22.1 Dangerous cargo areas

3.22.1.1 Dangerous cargo areas should, where possible, be located so that management and/or security personnel may keep them under continuous observation. Otherwise, an alarm system may be provided, or the spaces inspected at frequent intervals.

3.22.1.2 Those areas where hazardous materials are handled shall be furnished with necessary equipment and devices to prevent potential harmful effects of such hazardous materials.

3.22.1.3 The areas where hazardous materials are handled shall be provided with facilities of entrance to and exit from the same to allow for response to emergencies or the access roads to those units carrying loads that contain hazardous materials shall be kept open, if any hazardous materials are stowed or stored on the entire site and the site shall be furnished with systems that are capable of providing emergency facilities for rapid response.

3.22.2 Lorry parking areas

3.22.2.1 Separate areas may be designated for specific dangerous cargoes.

3.22.2.2 Segregation requirements of the regulatory authority should be met when designating areas.

3.22.2.3 Care should be taken that, in case of an emergency, adequate access is provided for handling equipment, emergency services, etc.

3.22.2.4 Adequate emergency facilities should be provided. These should be appropriate to the hazards of the dangerous cargoes to be handled.

3.22.3 Special areas for damaged dangerous cargoes and wastes contaminated with dangerous cargoes.

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	3-7
	DANGEROUS CARGO HANDLING GUIDE				

3.22.3.1 Such areas should, where appropriate, be covered, have a sealed floor or ground, separate drainage systems with shut-off valves, sumps or basins and means to discharge contaminated water to special facilities in order to safeguard the port area and the environment.

3.22.3.2 Such areas should be fenced off to prevent the entry of unauthorized persons and should have facilities for watchmen. The facilities should include adequate means of communication.

3.23 Training

3.23.1 The personnel who are in charge of actions and operations for the loading/unloading of hazardous materials at the onshore facility shall be provided with training on emergencies (fire, explosion, leakage etc.) and response, occupational health and safety, ISPS code security awareness and safety in line with their job descriptions and fields of work.

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	4-1
	DANGEROUS CARGO HANDLING GUIDE				

4 CLASSIFICATION OF DANGEROUS CARGOES, HANDLING, LOADING / UNLOADING, HANDLING, SEPARATION, STACKING AND STORING

4.1 Classification of Dangerous Cargoes

4.1.1 Classification of Dangerous Cargoes

Dangerous solid bulk cargoes are defined in SOLAS Rule VII/7. Under the IMSBC Code, the classification of dangerous goods is carried out according to section 2 of the IMDG Code and is classified as follows.

Class 4.1: Flammable solids

Class 4.2: Substances liable to spontaneous combustion

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

Class 5.1: Oxidizing substances

Class 6.1: Toxic substances

Class 7: Radioactive material

Class 8: Corrosive substances

Class 9: Miscellaneous dangerous substances and articles

The numerical order of the classes and divisions does not indicate the degree of danger.

4.2 Dangerous Cargoes Packing and Packages

Packaged dangerous goods are not handled at the port facility.

4.3 Dangerous cargoes Marking, Labels, Placards.

Packaged dangerous goods are not handled at the port facility.

4.4 Packaging and Approval Marking.

Packaged dangerous goods are not handled at the port facility.

4.5 Segregation and Separation

Mastering the techniques on how to stow dangerous cargoes correctly on-board ships is fundamentally the responsibility of the Ship Planner. Port Terminals are not concerned with planning of the stowage of dangerous cargoes on board; they are only responsible of stowing the cargo in the positions indicated in the ships plan, which is provided by the Shipping Line through the respective agencies.

There is no dangerous cargo storage in the port facility.

4.6 Separation distances and separation terms for hazardous materials applicable storage at storage area

There is no dangerous cargo storage in the port facility.

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	5-1
	 DANGEROUS CARGO HANDLING GUIDE 				

5 HANDBOOK OF DANGEROUS CARGOES

Dangerous cargo shipment / discharge with handling and port facilities in the temporary storage activities in order to contribute to the fulfillment of these activities in a safe manner;

- Dangerous Goods classes,
- Packages of dangerous substances,
- Packaging,
- Labels,
- Signs and packaging group,
- Ship and port separation table according to the class of dangerous goods,
- Warehouse / port separation distance of dangerous goods storage,
- Separation terms,
- Dangerous cargo documentation,
- Loads containing dangerous emergency action flowchart issues,
- Emergency contact information
- Emergency equipment locations and operating instructions
- Including the subjects of port facility rules

Prepared as Hazardous Material Handbook in the size of a pocketbook and given as annexed hereto.

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	6-1
	 DANGEROUS CARGO HANDLING GUIDE 				

6 PROCEDURES FOR THE OPERATION

6.1 Procedure of ships carrying dangerous goods safely Berthing, loading / unloading, shelter or anchorage during the day and at night

6.1.1 Direct when and where a ship, having any dangerous cargoes on board, should anchor, moor, berth or remain within the port area, taking into consideration relevant matters such as the quantity and nature of the dangerous cargoes involved, the environment, the population, the weather conditions.

6.1.2 Direct, in an emergency, a ship having any dangerous cargoes on board to be moved within the port area, or to be removed from the port area having due regard to the safety of the ship and its crew; and

6.1.3 Attach such requirements to any such directions as are appropriate to local circumstances and the quantity and nature of the dangerous cargoes involved.

6.1.4 The port operator should ensure that:

6.1.4.1 adequate and safe mooring facilities are provided; and

6.1.4.2 adequate safe access is provided between the ship and the shore.

6.2 Procedure of according to the seasonal conditions additional measures that Loading/Unloading, limbo operation of dangerous cargoes should be taken by port facilities.

6.2.1 Solid bulk dangerous cargoes that, on contact with water, may evolve flammable or toxic vapors or become liable to spontaneous combustion, should be kept as dry as reasonably practicable. Such cargoes should be handled only during dry weather conditions.

6.3 Procedures on keeping any inflammable, combustible and explosive materials away from operations which cause or are likely to cause sparking and abstaining from operating any tools, apparatus or device which cause or are likely to cause sparking in areas where hazardous materials are handled, stowed and stored.

6.3.1 Before starting any hot work, on board a ship or on a port, the responsible person of the company to carry out the hot work shall be in possession of a written authorization to carry out such hot work issued by the port authority. Such authorization should include details of the specific location of the hot work as well as the safety precautions to be followed.

6.3.2 In addition to the safety precautions required be the port authority, before starting any hot work, the responsible person of the company to carry out the hot work together with the responsible person(s) of the ship and/or port, should add any additional safety precautions required by the ship and/or port.

6.3.3 These should include:

6.3.3.1 the examination, and frequency of re-examination of local areas and adjacent areas, including tests, carried out by accredited testing establishments, to ensure the areas are free, and continue to be free, of flammable atmospheres and, where appropriate, are not deficient in oxygen;

6.3.3.2 the removal of dangerous cargoes and other flammable substances and objects away from the working and adjacent areas. This includes scale, sludge, sediment and other possible flammable material;

6.3.3.3 efficient protection of flammable structural members, e.g. beams, wooden walls, floors, doors, wall and ceiling coverings against accidental ignition; and

 KROMAN ÇELİK SANAYİİ A.Ş.	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	6-2
	DANGEROUS CARGO HANDLING GUIDE				

6.3.3.4 the sealing of open pipes, pipe lead-throughs, valves, joints, gaps and open parts to prevent the transfer of flames, sparks and hot particles from the working areas to adjacent or other areas.

6.3.4 A duplicate of the hot work authorization and safety precautions should be posted adjacent to the work area as well as at each entrance to the work area. The authorization and safety precautions should be readily visible to, and clearly understood by, all persons engaged in the hot work.

6.3.5 While carrying out hot work it is essential that:

6.3.5.1 checks are carried out to ensure that conditions have not changed; and

6.3.5.2 at least one suitable fire extinguisher, or other suitable fire-extinguishing equipment is readily available for immediate use at the location of the hot work.

6.3.6 During hot work, on completion and for a sufficient time after completion of such work, an effective fire-watch should be maintained in the area of the hot work as well as adjacent areas where a hazard resulting from the transfer of heat may be created.

6.3.7 Additional valuable guidance on hot work procedures may be found. In particular, the International Safety Guide for Oil Tankers and Terminals (ISGOTT) should be consulted.

6.3.8 In addition, Port Facility Occupational Safety Procedures shall be followed.

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	7-1
	DANGEROUS CARGO HANDLING GUIDE				

7 Documentation, Control and Record

7.1 Procedures regarding to all necessary documents, information and certification relating to dangerous substances and their procurement and control by the relevant persons.

7.1.1 The following documents related to hazardous substances are kept up to date.

IMDG Code International Maritime Dangerous Goods Code 1-2/ Supplementary book

IMSBC Code International Maritime Solid Bulk Cargoes Code

Blu Code of Practice for the Safe Loading and Unloading of Bulk Carriers

7.1.2 The Operational Division for Hazardous Materials handled by our Port shall develop all records fully and keep the same for submission upon request regarding any hazardous materials.

arriving at the port,

shipped from the port,

The records of hazardous materials are limited to the personnel who need to know the same.

7.2 Procedures of keeping a regular and accurate current list of all hazardous substances in the port facility area and other relevant information.

7.2.1 Records of dangerous cargo handled in our port will be kept by the Operations department to include the following information.

- .1 BCSN for cargoes listed in IMSBC Code. Secondary names may be used in addition to BCSN;
- .2 Cargo Group (A and B, A, B or C);
- .3 IMO class of the cargo, if any;
- .4 The UN number of the cargo, if any, preceded by the letters UN;
- .5 Total amount of cargo to be delivered;
- .6 Stack factor;
- .7 Load level regulation requirements and surface regulation procedures where necessary;
- .8 If any, the slip state of the cargo, including the slip angle;
- .9 For the transport of concentrates or liquefiable cargoes, a certificate containing the moisture content of the cargo and the maximum transportable humidity information;
- .10 Possibility of wet ground (see Paragraph 7.2.3 of this Code);
- .11 Toxic or flammable gases, if any, that the cargo may emit;
- .12 If any; flammability, toxicity, corrosiveness and tendency of the load to consume oxygen;
- .13 Self-heating properties of the load and the need for load level leveling, if any;
- .14 Properties to release flammable gases, if any, in contact with water;
- .15 Radioactive properties, if any; and
- .16 Other information requested by national authorities.

7.2.2 This information is recorded on computer or in the file layout so that only authorized personnel can access and presented upon request.

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	7-2
	DANGEROUS CARGO HANDLING GUIDE				

7.2.3 Procedures regarding to appropriate identification of hazardous substances delivered to the facility, correct use of shipping names of dangerous cargo, certification, packaging, labeling and declaration, inspection on loading and transport of dangerous goods in the certified and proper package, container or cargo unit in a safety way and reporting of inspection results.

7.2.4 Coordinately with the Operation, Planning checks the accuracy of the following information through the dangerous cargo documents delivered to the Port and organized by the Shipper;

- .1 BCSN for cargoes listed in IMSBC Code. Secondary names may be used in addition to BCSN;
- .2 Cargo Group (A and B, A, B or C);
- .3 IMO class of the cargo, if any;
- .4 The UN number of the cargo, if any, preceded by the letters UN;
- .5 Total amount of cargo to be delivered;
- .6 Stack factor;
- .7 Load level regulation requirements and surface regulation procedures where necessary;
- .8 If any, the slip state of the cargo, including the slip angle;
- .9 For the transport of concentrates or liquefiable cargoes, a certificate containing the moisture content of the cargo and the maximum transportable humidity information;
- .10 Possibility of wet ground (see Paragraph 7.2.3 of this Code);
- .11 Toxic or flammable gases, if any, that the cargo may emit;
- .12 If any; flammability, toxicity, corrosiveness and tendency of the load to consume oxygen;
- .13 Self-heating properties of the load and the need for load level leveling, if any;
- .14 Properties to release flammable gases, if any, in contact with water;
- .15 Radioactive properties, if any; and
- .16 Other information requested by national authorities.

7.2.5 This information is delivered to the tally clerk, Field Supervisor, Warehouse officer, HSE, and authorized staff through Terminals / Documents and security of the dangerous goods is provided.

7.2.6 In case that information sent from Operation is different from the cargo, Operation will immediately be informed, and shipper is instructed to verify the information on Dangerous goods / vehicle /container and correct the incorrect label brands.

7.3 Procedures regarding to appropriate identification of hazardous substances delivered to the facility, correct use of shipping names of dangerous cargo, certification, packaging, labeling and declaration, inspection on loading and transport of dangerous goods in the certified and proper package, container or cargo unit in a safety way and reporting of inspection results.

7.3.1 Coordinately with the Operation, Planning checks the accuracy of the following information through the dangerous cargo documents delivered to the Port and organized by the Shipper;

- .1 BCSN for cargoes listed in IMSBC Code. Secondary names may be used in addition to BCSN;
- .2 Cargo Group (A and B, A, B or C);
- .3 IMO class of the cargo, if any;

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	7-3
	DANGEROUS CARGO HANDLING GUIDE				

- .4 The UN number of the cargo, if any, preceded by the letters UN;
- .5 Total amount of cargo to be delivered;
- .6 Stack factor;
- .7 Load level regulation requirements and surface regulation procedures where necessary;
- .8 If any, the slip state of the cargo, including the slip angle;
- .9 For the transport of concentrates or liquefiable cargoes, a certificate containing the moisture content of the cargo and the maximum transportable humidity information;
- .10 Possibility of wet ground (see Paragraph 7.2.3 of this Code);
- .11 Toxic or flammable gases, if any, that the cargo may emit;
- .12 If any; flammability, toxicity, corrosiveness and tendency of the load to consume oxygen;
- .13 Self-heating properties of the load and the need for load level leveling, if any;
- .14 Properties to release flammable gases, if any, in contact with water;
- .15 Radioactive properties, if any; and
- .16 Other information requested by national authorities.

7.3.2 This information is delivered to the tally clerk, Field Supervisor, Warehouse officer, HSE, and authorized staff through Terminals / Documents and security of the dangerous goods is provided.

7.3.3 In case that information sent from Operation is different from the cargo, Operation will immediately be informed, and shipper is instructed to verify the information on Dangerous goods / vehicle /container and correct the incorrect label brands.

7.4 Procedures related to procurement of the Hazardous materials safety information sheets (SDS).

7.4.1 According to the Laws of our country as of January 1st, 2014, Dangerous Goods Safety Data Sheet (SDS) with the following information must be present with the dangerous goods to be transported through all transport modes (by road, rail, air and marine).

- Number,
- PSN name (Proper Shipping Name,) (required for marine transport)
- Class (with lower hazards)
- Packaging Group
- Marine Pollutants or otherwise,
- Tunnel Restriction Code (required for road transport).

7.4.2 It is checked that if this document is available with the Dangerous substance for all Dangerous cargoes to be accepted in the port.

7.5 Procedures for records and statistics of dangerous cargoes.

7.5.1 Administration, it is required that a report including the information of dangerous goods handled in our Port Facility will be reported to the Port Authority in by 6-month periods. The report sample issued by the Operation Department are shown below.

 KROMAN ÇELİK SANAYİ A.Ş.	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	7-4
	DANGEROUS CARGO HANDLING GUIDE				

7.5.2 Statistical evaluation of records of dangerous goods handled in our port is carried out by our Trade, operation departments.

7.5.3 Monthly inventory and control reports of Dangerous goods stocked in our Port Area is organized by the operation department and submitted to Administration.

7.5.4 Records and reports are archived by department by 5-year periods.

7.6 Information on the Quality Management system

Our certificates received by accredited organizations related to the quality management system are as follows.

ISO 9001:2015 (Validity date: 15.08.2027)

ISO 45001: 2018 (Validity date: 14.01.2027)

ISO 14001:2018 (Validity date: 14.01.2027)

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	8-1
	DANGEROUS CARGO HANDLING GUIDE				

8 EMERGENCY SITUATION, EMERGENCY PREPAREDNESS AND RESPONSE

8.1 Response procedures for hazardous substances that are dangerous for life, property and/or environment and hazardous situations involving hazardous materials.

8.1.1 The choice of protective actions for a given situation depends on a number of factors. For some cases, evacuation may be the best option; in others, sheltering in-place may be the best course. Sometimes, the set actions may be used in combination. In any emergency, officials need to quickly give the public instructions. The public will need continuing information and instructions while being evacuated or sheltered in-place.

8.1.2 Proper evaluation of the factors listed below will determine the effectiveness of evacuation or in-place protection (shelter in-place). The importance of these factors can vary with emergency conditions. In specific emergencies, other factors may need to be identified and considered as well. This list indicates what kind of information may be needed to make the initial decision.

8.1.2.1 The Dangerous Goods

- 8.1.2.1.1 Degree of health hazard
- 8.1.2.1.2 Chemical and physical properties
- 8.1.2.1.3 Amount involved.
- 8.1.2.1.4 Containment/control of release
- 8.1.2.1.5 Rate of vapor movement

8.1.2.2 The Population Threatened

- 8.1.2.2.1 Location
- 8.1.2.2.2 Number of people
- 8.1.2.2.3 Time available to evacuate or shelter in-place.
- 8.1.2.2.4 Ability to control evacuation or shelter in-place.
- 8.1.2.2.5 Building types and availability
- 8.1.2.2.6 Special institutions or populations, e.g., nursing homes, hospitals, prisons

8.1.2.3 Weather Conditions

- 8.1.2.3.1 Effect on vapor and cloud movement
- 8.1.2.3.2 Potential for change
- 8.1.2.3.3 Effect on evacuation or shelter in-place

8.1.3 Protective Actions

8.1.3.1 Protective Actions are those steps taken to preserve the health and safety of emergency responders and the public during an incident involving releases of dangerous goods.

8.1.3.2 Isolate Hazard Area and Deny Entry means to keep everybody away from the area if they are not directly involved in emergency response operations. Unprotected emergency responders should not be allowed to enter the isolation zone.

8.1.3.3 This “isolation” task is done first to establish control over the area of operations. This is the first step for any protective actions that may follow.

8.1.4 Evacuate

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	8-2
	DANGEROUS CARGO HANDLING GUIDE				

8.1.4.1 Evacuate means to move all people from a threatened area to a safer place. To perform an evacuation, there must be enough time for people to be warned, to get ready, and to leave an area. If there is enough time, evacuation is the best protective action.

8.1.4.2 Begin evacuating people nearby and those outdoors in direct view of the scene. When additional help arrives, expand the area to be evacuated downwind and crosswind to at least the extent recommended in this guidebook. Even after people move to the distances recommended, they may not be completely safe from harm.

8.1.4.3 They should not be permitted to congregate at such distances. Send evacuees to a definite place, by a specific route, far enough away so they will not have to be moved again if the wind shifts.

8.1.5 Shelter In-Place

8.1.5.1 Shelter In-Place means people should seek shelter inside a building and remain inside until the danger passes. Sheltering in-place issued when evacuating the public would cause greater risk than staying where they are, or when an evacuation cannot be performed. Direct the people inside to close all doors and windows and to shut off all ventilating, heating and cooling systems.

8.1.5.2 In-place protection (shelter in-place) may not be the best option if.

8.1.5.2.1 the vapors are flammable;

8.1.5.2.2 if it will take a long time for the gas to clear the area; or

8.1.5.2.3 if buildings cannot be closed tightly.

8.1.5.2.4 Vehicles can offer some protection for a short period if the windows are closed, and the ventilating systems are shut off. Vehicles are not as effective as buildings for in-place protection.

8.1.5.3 It is vital to maintain communications with competent persons inside the building so that they are advised about changing conditions. Persons protected-in-place should be warned to stay far from windows because of the danger from glass and projected metal fragments in a fire and/or explosion.

8.1.5.4 Every dangerous goods incident is different. Each will have special problems and concerns. Action to protect the public must be selected carefully. These pages can help with initial decisions on how to protect the public. Officials must continue to gather information and monitor the situation until the threat is removed.

8.2 Information on resource, capability and capacity of the coastal facilities regarding to respond to emergencies.

8.2.1 The facility features an approved fire plan. Firefighting teams shall be created for each shift. Demonstrations and exercises, either scheduled or unscheduled, shall be provided for training purposes within the scope of various scenarios at indefinite times. The firefighting equipment stipulated by the approved plan shall be made available fully and maintenance, inspection and test activities shall be conducted for the same.

8.2.2 The facility has an approved action plan against Environmental and Marine Pollution. For each shift, pollution-fighting teams are created. Demonstrations and exercises shall be provided twice a year within the scope of a scheduled scenario, and the reports and records of the same shall be kept. The equipment relating to Environmental and Marine Pollution shall be stored at the facility with counting and inspections in place. Additionally, the facility shall have a protocol for materials stored in the area to ensure support in case of circumstances with inadequate means.

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	8-3
	DANGEROUS CARGO HANDLING GUIDE				

8.2.3 The response teams shall be appointed against the spillage of hazardous materials in line with this guideline and pursuant to IMSBC Code.

8.3 Regulations related to the first aid for accidents involving dangerous substances (first aid procedures, first aid resources and capabilities and so on.)

8.3.1 In case of occurrence of emergency or detecting its symptoms, Emergency Manager (EM) initiate the appropriate measures pursuant to Emergency Management System (EMS) according to the relevant plans. Emergency Management Group (EMG) reviews the decisions regarding to the measures to be taken within scope of the IMSBC Code and put it into effect. Improvements continuously monitored by EMG and taking higher level of measures or help are decided, if needed.

8.3.2 EMG operations will be carried out by Emergency Management Center (EMC) or its equivalent. Emergency management at different levels depending on the severity of emergencies:

- Facility / Site
- Institutions
- County, EMC
- City EMC
- Possible to be managed by the central government.

8.3.3 Emergency Management at the facility level will be performed by using safe, fast internal and external communication opportunities with well-designed organization, personnel prepared with training and exercises, Emergency Plans including procedures and documentation. The Emergency Management processes will be followed and controlled by basically applying the following measures.

FURTHER OPERATIONS	Related Sections
WARNING: Announce the occurrence/probability of emergency and unexpected situations.	All Personnel and Ship
CALL FOR HELP: Transfer of the necessary information to relevant organizations	All Personnel
RESPONSE: Respond to the Emergency as soon as possible with the right equipment and trained personnel stated under the Plan.	Response teams
FIRST AID: Administration of the first aid activities until professional support team arrives	All Personnel having First Aid Training
RESCUE: Saving material, tools, information, documents and other important papers of Port Facility	First Aid Personnel
PROTECTION: Taking recovered materials, tools, information, documents and other important papers under protection	Security Personnel
INFORMATION: Sending necessary explanations to the costumer and other persons and Press	Press and Public Relations
REQUIRED NOTICES: Sending of required notifications in accordance with regulations to the public authority	Authority

8.4 On-site and offsite Notifications required to be made in case of emergency.

For required notifications;

The detailed information of the emergency or accident occurrence and which dangerous substances were involved in the accident are as follows.

- a) Time of accident occurrence,
- b) How the accident occurs and its reason, if known,

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	8-4
	DANGEROUS CARGO HANDLING GUIDE				

- c) Place where the accident occurs (onshore facility and/or vessel) and its position and impact area,
 - ç) Details of vessels involved in the accident, if any (name, flag, IMO no, owner, operator, cargo and its content, full name of the captain and similar details),
 - d) Meteorological conditions,
 - e) UN number of hazardous material and description of proper handling (the legislation provided in the description of hazardous materials shall apply) and quantity,
 - f) Hazard class and sub-hazard class, if any, of hazardous materials,
 - g) Packaging group of hazardous materials,
 - ğ) Additional risks posed by hazardous materials, if any, such as marine pollutant,
 - h) Marking and labelling details of hazardous materials,
 - ı) Properties and number of packing, cargo handling unit and container by which hazardous materials are carried, if any,
 - i) Manufacturer, shipper, transporter and recipient of hazardous materials,
 - j) Extent of resulting damage/pollution,
 - k) Number of casualties, injuries and loss, if any,
- Emergency response practices performed at the onshore facility regarding the accident.

Internal and external contact numbers are in ANNEX-3,
The Flow Chart of Notifications to be made in Emergency Situations is the same as in the Hazardous Material Emergency Plan.

8.5 The procedures for reporting accidents.

8.5.1 Communication

8.5.1.1 Communication channels for the determination of the on-site and off-site communication methods and an effective management of the emergency in case of possible emergency cases in the Port Facility are specified as follows;

- Mobile Phones and the satellite phone, if available
- Computers
- Radio
- Siren
- Messengers

8.5.1.2 Internal communication is primarily provided by the radio and intercom for the emergencies occurred in the port. The communication between the Port and Ship is carried out by radio or VFH marine band radio provided by the Port.

8.5.1.3 Secure communication with the Official authorities, adjacent facilities and relevant authorities are provided as soon as possible in case of any emergency that may occur in the Port.

8.5.2 Reports

8.5.2.1 EMC shall operate a reporting system that correctly notifies Emergencies to the relevant authorities as soon as possible. EMC including the information required to be notified in an emergency case shall create these reports in a proper way.

8.5.2.2 Hazardous goods accidents must be reported to the Port Authority. The report format shall be free-form and include 8.4 details in full.

8.6 Coordination, support and cooperation method with authorities.

 KROMAN GELİK SANAYİ A.Ş.	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	8-5
	DANGEROUS CARGO HANDLING GUIDE				

8.6.1 All accidents related to hazardous materials will primarily be coordinated with Port Authority. Aid units of city / County Fire Department, DEMP and adjacent facilities will provide support and cooperation by informing the Port Authority.

8.6.2 In case of any signs of explosion, fire or emergency noticed at an adjacent facility;

Measures shall be tightened at the facility in the first place,

Teams shall be caused to get prepared for providing with the adjacent facility with assistance.

8.6.3 Assistance and support teams shall be assigned for responding to any event in consideration of the urgency of situation and the severity of hazard if there is no possibility to request help or time.

8.6.4 Preparations shall be in place for measures such as unloading and reduction of loads and removal of the vessel to anchorage site in case of any interface vessel in consideration of class, quantity and hazard risk of loads available at hazardous cargo site and on site.

8.7 Emergency evacuation plan for the evacuation of the ship and vessels from the coastal facility in case of emergency

8.7.1 Preparation for Emergency Separation System

8.7.1.1 All emergencies should be reported to the Port Authority.

8.7.1.2 If the emergency separation of ship is decided, the safe places that the ship can be transferred under controlled conditions must be specified by the Port Authority.

8.7.1.3 In case of an emergency situation that requires emergency separation, the ship's captain and port facilities shall initiate the emergency separation by mutual agreement and inform the situation to the Port Authority as soon as possible. A representative from Port Authority or Port Master, Terminal Manager / Business Officer, Ship Captain, Guide Captain shall come to a mutual agreement on the time and type of the separation before the immediate action where the severity and time of the emergency allow.

8.7.1.4 The ship's machinery, steering gear and Marine Systems equipment shall be ready for use immediately.

8.7.1.5 All cargo discharge, ballast discharge process must be stopped and shall be prepared for the separation process.

8.7.1.6 Saltwater system of the ship must be watered, and water mist must be used for strategic departments.

8.7.1.7 If the atmosphere needs vent operation, the engine room staff must be ready, all unnecessary receiver entrance must be closed, all the necessary safety measures relating to the normal operation must be fulfilled and a warning notice must be published.

8.7.1.8 If the necessary responds are over the terminal resources for all emergencies, local police or fire department must be reported immediately.

8.7.1.9 The decision to depart the ship under control is set out on the safety principle and it should cover the following requirements.

8.7.1.10 - The adequacy of the Trailers

8.7.1.11 - The ship's ability to depart with its own power.

8.7.1.11.1 - The availability of a safe place that a ship can or will be taken in an emergency case.

8.7.1.11.2 - Fire-fighting competence

8.7.1.11.3 - The proximity of other vessels

8.7.1.11.4 - Fire Ropes

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	8-6
	DANGEROUS CARGO HANDLING GUIDE				

8.7.1.12 Fire ropes shall be kept on the top and shoulder of the ships as long as the ship is at Port Facility. The eye of the rope should be wound down to the sea level and the section on the board must be tight with at least five rounds to the bollard. Part of the top board of the rope must be stretched from the bollard. A cord that can carry the rope must be tied right before the eyes of the rope and the eye of the rope must be located in a way that it is three meters above the sea level. The eye of rope must be kept at this level while the ship is at Port Facility.

8.7.2 Realization of Emergency Separation

8.7.2.1 If all the preparations above examined and deemed appropriate, the ship will be immediately departed.

8.7.2.2 Emergency separation will be provided by the fulfillment of the following processes in order.

8.7.2.3 A close coordination and cooperation between Terminal, Ship and Port Authorities is required for each phase.

8.7.2.4 Emergency Separation Process is as below.

- Activating an alarm
- Inform about the emergency by VHF phone
- Making the first official assessment of the situation between the ship's captain and officer of Port Facility.
- Suspension of operation
- Implementing Port facility and ship emergency plan measures
- Removal of the flexible hose connection.
- The deterioration of the current situation and availability of the aforementioned emergency separation.
- Making the assessment of the situation between the ship's captain, port facility officer, port authority or port master, guide captain
- The decision to the emergency separation
- Inform the adjacent facilities and other vessels
- The deployment of Trailers around the ship for an emergency separation, complement of the preparation and announcement of the situation
- Completing the preparations for the ship by the captain and indicating that it is ready.
- Granting approval for the opening of the release hook by the competent person.

8.7.3 Post Emergency Separation

8.7.3.1 –Declaration of the decision on vessel back up and navigation route after the separation process of vessel.

8.7.3.2 –Transition / mooring of the vessel to designated area in company with towboats or its own machine.

8.7.3.3 –Port Facility: Determining possible damages or deficiencies through examining the port facility.

8.7.3.4 –Consideration of the time when the vessel and port facility become available for freight handling.

8.7.3.5 -Sharing problems, if any, occurred during emergency separation

An agreement is reached by and between pilotage and towage organizations and onshore facility authorities regarding any fire, explosion or similar emergencies which are likely to arise during loading/unloading.

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	8-7
	DANGEROUS CARGO HANDLING GUIDE				

Adequate towing boats having satisfactory towing power as furnished with necessary equipment to fight fire in line with weather and marine conditions shall reach the scene as soon as possible in case of emergencies pursuant to the protocol executed with the authorized company to remove the vessel away from the facility and move it to a safe location.

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

8.8.1 Waste Collecting and Handling

8.8.1.1 Consequential wastes are collected to waste bins taxonomically and handled to be stored properly. Waste occurred as a result of the maintenance process are handled in that scope.

8.8.1.2 Additional waste classes, if available, are provided to be integrated into the current waste classes.

8.8.2 Waste disposal

8.8.2.1 According to the hazardous or non-hazardous properties, the waste collected are isolated from the facility by selling them or using contracted organizations which are in conformity with legal recycling/disposal methods.

8.8.2.2 Opportunities of all contractors and carriers within the body of waste management in terms of appropriate methods of waste handling and/or disposal are examined.

8.8.2.3 In case of any contracting service received for handling, selling and/or disposal of the waste, those contracting companies are observed whether they fulfill their legal liabilities or perform recycling or disposal without damaging the environment.

8.8.2.4 It is an obligation to keep all the records concerning waste disposal.

8.9 Emergency drills and their records.

8.9.1 Implementation of Practices;

Emergency organization personnel should get various trainings to get ready for their duties with the purpose of providing against emergencies within the facility. If necessary, such trainings must be organized through specialized agencies. In that scope, relevant personnel have received trainings regarding Hazardous cargos and have been certified. Practices, which shall be performed in an effort to examine the efficiency of Emergency Plans and be prepared for facts, have to be planned in a way that they will be performed considering the worst scenario likelihood within the facility.

8.9.2 Practice Scenarios;

Planning practices needs two anticipations one of which is a single incident that the port experience and the other is the worst scenario with the combination of these single incidents. In accordance with the scenarios prepared, practices are ensured to be performed in the fastest and most efficient way possible.

8.9.3 Emergency Practices which will be performed within the facility;

8.9.3.1 Have to be indicated within annual training plans.

8.9.3.2 May be planned as local or general responses,

8.9.3.3 Safety, Spillage, etc. may be combined in practice scenarios,

8.9.3.4 Practices can be performed with or without notices.

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	8-8
	DANGEROUS CARGO HANDLING GUIDE				

8.9.3.5 Practices are based upon different emergency scenarios.

8.9.3.6 A practice may be actually performed as it can be negotiated as a desk work or a seminary,

8.9.3.7 Each practice is prepared with scenarios of different hours, days, seasons and incidents.

8.10 Information on fire protection systems.

8.10.1 Emergency and fire equipment is given as follows:

Fire hydrants, Fire extinguishers, Fire cabinets and Fire hoses, On-site fire alarm detectors, Electrical and diesel fire pumps

The fire inventory is as in the Emergency Plan.

8.11 Procedures for approval, inspection, testing, maintenance and availability of the fire protection system.

8.11.1 Fire-Protection Water Tanks and Fire-Protection Water

8.11.1.1 The storeroom should be cleaned up at least once a year by discharging the content in order to prevent possible hazards from moss and mud built up in the bottom and sides in the event of fire. Inlet valves, check valve and filters are maintained during the discharge process of pondages.

8.11.1.2 In case of sudden drawdown on water level, it must be checked for a seep or leakage and repaired if necessary.

8.11.1.3 Following the annual check, if necessary, internal and external cleaning and maintenance should be performed in sealed stores.

8.11.2 Fire-Protection Pumps

8.11.2.1 Points to take into consideration regarding operation of pumps and troubleshooting in addition to scheduled maintenance are specified below.

8.11.2.1 Pumps, stuffing boxes, pressure bolts are checked interrelated, and it is ensured whether the pump can be turned up manually with ease or not. Water drops from stuffing box during the operation of the pump is typical. In order to prevent such water flow to the ground, the threaded opening under the stuffing box must be connected to the drainage with a tube.

8.11.2.2 Fire-protection pumps must be operated and recorded at least 1 hour a week.

8.11.2.3 Pump and suction pipe are ensured to be completely full of water. If it is not, water filling plug and bleed valve must be opened and such parts mentioned must be filled up with water until they overflow and when the water stops at the plug level, the plug must be tightened properly.

8.11.2.4 Pump motor will draw excessive current because of the starting current at the initial stages of the operation. As a result of the simultaneous operation of all pumps, cutout switches may be tripped, or diesel generators may be broken down seriously because of the heavy current. Therefore, limit relays that regulates the transition -from the star located at the shielded switch which drives the pump motors to triangle- must be arranged according to the number of pumps and the amount of pumps to be operated simultaneously and with respect to different and appropriate time intervals and timely initiation of pumps is provided.

8.11.2.5 After performing previously mentioned preliminaries and checks, pumps are operated by pressing the drive switches. During the operation, electric motor

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	8-9
	DANGEROUS CARGO HANDLING GUIDE				

voltage and the ampere driven must be checked from time to time. If the ampere driven is high at normal operation, a troubleshooting is needed. There may be a mechanical breakdown or force at the pump or motor. Substandard voltages may be hazardous for motor.

8.11.2.6 Monometers must be checked regularly, and one or more pumps must be stopped in case of excess pressure increases.

8.11.2.7 Delivery pipes of pumps must be equipped with valves initially and check valves thereon.

8.11.2.8 If the check valve of the failed pump on the delivery pipe is blocked by materials such as paper, garbage, pieces, moss, mud and interrupts the proper close of the check valve, a part of the water pumped by the other pumps is pumped to the pool while passing through this failed pumps and suction pipes. This failure blocking the water discharge must be fixed in condition of fire occurrence. If a spinning is detected on some of the couplings of failed pumps during the operation of a part of the pumps, it must be interpreted as a sign for the above-mentioned failure.

8.11.2.9 It must be ensured that the pump and the engine are at the right direction during the operation. For that reason, return path must be drawn on the coupling and control must be performed accordingly.

8.11.2.10 The bearings of the pump and engine must not be hotter than hands can resist. If the heat is high, it may be resulted from an internal mechanical forcing or coupling maladjustment. In such situations pump must be stopped and the failure must be corrected immediately.

8.11.2.11 For pumps driven by diesel engine, starting the engine must be carried out in line with the instructions.

8.11.2.12 In condition that a deficiency or malfunction is detected as a result of control, it is fixed by the responsible.

8.11.3 Fire Protection Hydrant Installation

8.11.3.1 Entering rainwater into fire-protection hydrant hose closets should be prevented; hoses should be without fracture, solid and constricted enough. At least one of the hoses should be maintained as always connected to fire protection valve.

8.11.3.2 Fire-protection valves should be impermeable and working. Broken nozzles, valves and hoses should be replaced immediately, and faults should be repaired and towed. Therefore, sufficient hose, nozzle, fire-protection valve, clamp, sleeve and spare materials belong to those should be kept. Waiting the failure is not allowed with any reason at firefighting equipment.

8.11.3.3 While determined failures were fixing after drills, running fire-protection hoses should not be put into closet with water in it. Facilities should supply proper hose suspension to drain the water off in hoses and to be dry and facilities should not replace before ensuring that hose is quite dry. If sea water was ejaculated by hoses, firstly inside of them should be washed by fresh water and then they should be dried at a windy place.

8.11.3.4 All pipes belong to installation of sprinkler and fire-protection hydrants have to be controlled in general every three months, rusty parts should be painted, decayed parts should be replaced, valves and retched valves should be controlled, and failure should be fixed.

8.11.3.5 If any lack or malfunction is determined as a result of all fire-protection hydrants, hoses, and nozzles control it is fixed by related liable.

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	8-10
	DANGEROUS CARGO HANDLING GUIDE				

8.11.4 Portable Extinguishers

8.11.4.1 Sufficient quantity of spare device should always be in facility storages for failure, control and maintenance. Instead of extinguishers those were used for purposes above should be replaced with reserves.

8.11.4.2 All extinguishers are had visual test monthly and inspected. After control, extinguishers' upper surface is marked. During the control, especially extinguishers with dry powder are turned down and slightly hit the base, so powder in pipe is allowed to move. Otherwise, powder in extinguishers stays at same location for a long time can be hardened by subsiding to base. After the result of control; if any lack or malfunction is determined, it is fixed by related liable.

8.11.4.3 Extinguishers are inspected annually in general by firm according to TS ISO 11602-2 Fire Protection: Portable and wheeled extinguisher standard. Extinguishers are tested by related firm in ten years most intervals, chemical powder is inspected at the end of the fourth year.

8.11.5 Protection against freezing.

8.11.5.1 Protection of Generators

8.11.5.1.1 By outside temperature's decreasing under +4C, water may start to freeze. Therefore, radiator's generators with water-cooled motor should be ensured with antifreeze.

8.11.5.2 Protection fire-protection pumps.

8.11.5.2.1 Fire-protection pumps and absorption pipes are always full of water. So ambient temperature should not be under +4 C.

8.11.5.3 Protecting of fire-protection distribution pipes.

8.11.5.3.1 Main pipes and branch pipes are had to be protected against the freezing about hydrant sinks. So, lines are protected against freezing by isolation or being floored underground.

8.12 The measures to be taken in case of failure on fire protection systems.

8.12.1 The facility is a system with established alternative competency which backs up firefighting equipment.

8.12.2 The support of adjacent facilities, Fire departments and AFAD (Disaster and Emergency Management Directorate) shall be sought in cases where the facility's own firefighting equipment is inadequate or out of service.

8.12.3 Other hazardous and combustible materials / vehicles, which are likely to be affected from fire, shall be removed away from the area, if possible.

8.12.4 A necessity may arise to determine under which conditions assistance and support are provided and their scope.

8.12.5 The capabilities of towing boats or marine vehicles featuring marine fire extinguishing system available in the area should be taken into consideration.

8.13 Other risk control equipment.

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	9-1
	DANGEROUS CARGO HANDLING GUIDE				

9 SAFETY AND HEALTH AT WORK MEASURES

9.1 Occupational health and safety measures.

Harbor Structure Management is obligated to take all necessary measures to prevent employees to be affected of these substances if this is not possible; minimizing it and to protect employees from the danger of these substances when working with chemical substances.

9.1.1 Risk assessment

9.1.1.1 Harbor Structure Management is obligated to do a risk assessment in accordance with 29/12/2012 dated, 28512 numbered Occupational Health and Safety Regulation provisions published at official gazette to determine if there is dangerous chemical substance at Harbor Structure and if there is; determining negative effects in terms of employees' health and safety.

9.1.1.2 Following details are specifically considered at risk assessment to be made at studies with chemical substances:

9.1.1.2.1 Danger and harms of chemical substance in terms of health and safety.

9.1.1.2.2 Turkish material safety verse form (SDS) to be provided from sellers, manufacturers or importers.

9.1.1.2.3 Duration, type and level of contagion.

9.1.1.2.4 Quantity, conditions of usage and frequency of usage of chemical substance.

9.1.1.2.5 Vocational exposition limit values and biological limit values given at annexes of this regulation.

9.1.1.2.6 . Effect of preventive measures to be taken or taken.

9.1.1.2.7 If available, results of last health surveillance.

9.1.1.2.8 Each of these substances and their interactions with each other at works that was worked in with more than one chemical substances.

9.1.1.3 Harbor Structure Management obtains extra information from supplier or other sources that is necessary for risk assessment. This information also includes special risk assessments involved in current regulations if available intended for users.

9.1.1.4 A recent activity includes dangerous chemical substance is only started after taking all types of measures those were specified by doing risk assessment.

9.1.1.5 Measures to be taken at studying when dangerous chemical substances.

9.1.1.5.1 Risks in terms of employee's health and safety when studying with dangerous chemical substances are disabled or minimized with following measures:

9.1.1.5.2 Proper regulation and organization of work are done at Harbor Structure.

9.1.1.5.3 Studies with dangerous chemical substances are made with minimum number of employees.

9.1.1.5.4 Substance quantity and exposition period employees will be exposed is allowed to be at minimum level.

9.1.1.5.5 Chemical substance quantity to be used at Harbor Structure is kept at minimum level.

9.1.1.5.6 Workplace building and extensions are always kept clean and neat.

9.1.1.5.7 Proper and sufficient conditions are provided for employees' personnel cleaning.

9.1.1.5.8 Necessary regulations are made to store, transport, use and process dangerous chemical substances, waste and residuals properly at Harbor Structure.

9.1.1.5.9 Safe or less dangerous chemical substance is used instead of dangerous substance in terms of employees' health by using substitution method. If substitution

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	9-2
	DANGEROUS CARGO HANDLING GUIDE				

method cannot be used because of specification of the work, according to risk assessment result and with order of precedence, following measures are taken and risk is reduced:

9.1.1.5.10 Proper process and engineering control systems are chosen by also considering technological developments at studying with dangerous chemical substances involving maintenance and repair works those can be hazardous in terms of employees' health and safety.

9.1.1.5.11 Block protection measures like installing sufficient ventilation system and proper work organization are taken to prevent risk at its source.

9.1.1.5.12 In case of taken measures for protecting employees collectively against chemical substances' negative effects are not sufficient, personnel protection methods are adopted with these measures.

9.1.1.6 Sufficient control, supervision and inspection is made to allow taken measures to be active and perpetual.

9.1.1.7 Harbor Structure Management provides analysis and measurements of chemical substances regularly those could be hazardous for employee's health. If any changing is realized at conditions those can effect Harbor Structure employees' exposition to chemical substances, these measurements are rep. ed. Measurement results are assessed by considering vocational exposition limit values specified in this Regulation annexes.

9.1.1.8 Harbor Structure Management also considers specified measurement results. All situation vocational exposition limit values are crossed, Harbor Structure Management takes protective and preventive measures to fix this as soon as possible.

9.1.1.9 On condition of remaining Regulation Provision about Protecting Employees from Dangers of Explosive Places secret, Harbor Structure Management makes administrative arrangements and takes technical measurements according to following order of precedence in accordance with turnover's specification involving to process, store and transport chemical substances, to prevent interacting chemical substances' touching each other mutually on the purpose of protecting employees from dangers which originate from chemical substances' physical and chemical feature, by basing results of risk assessment and risk avoidance principles:

9.1.1.9.1 For inflammable and explosive substances to reach dangerous concentration and having dangerous quantity of chemically unstable substances are prevented at Harbor Structure. If this is not possible,

9.1.1.9.2 Having inflammable sources those can cause fire or explosion at Harbor Structure. Conditions those can cause harmful effect of chemically unstable substances and mixtures are disabled. If this is also not possible,

9.1.1.9.3 . Required measures are taken to minimize or prevent employees to be affected by chemically unstable substances and mixture's harmful effects in case of fire or explosion originate from inflammable or explosive substances.

9.1.1.10 Protective systems those were provided for protecting work equipment and employees, are designed, produced and supplied in accordance with legislation in force in terms of health and safety. Harbor Structure Management provides all equipment and protective systems to be used at explosive places, to be in accordance with provisions of Regulation About Equipment a Protective Systems Used at Probable Explosive Places (2014/34/AB) published at 29758 repeated numbered and 30/06/2016 dated official gazette.

9.1.1.11 Arrangements to reduce effect of explosion pressure are made.

9.1.1.12 Facility, machine and equipment are allowed to be always under control.

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	9-3
	DANGEROUS CARGO HANDLING GUIDE				

9.1.1.13 Minimum safety distances are complied with placing storage tanks those have liquid oxygen, liquid nitrogen and liquid argon at workplaces.

9.1.2 Emergencies

9.1.2.1 Especially following details are considered in case of emergencies originate from dangerous chemical substances at Harbor Structure on condition of keeping details specified in Regulation about Emergencies at Workplaces published 28681 numbered and 18/6/2013 dated Official Gazette as a secret:

9.1.2.1.1 Preventive measures to reduce negative effects of emergencies are taken immediately and employees are informed about the situation. Necessary studies are done to return emergency to normal and only employees assigned at emergencies to do maintenance, repair and compulsory works and teams came to scene from another place are let to get into effected area.

9.1.1.1.2 Personal protective equipment and special security equipment is given to the people allowed to enter the affected area and it is being sure that they are using them as long as the emergency situation goes on. People who do not have personal protective equipment and special security equipment are not allowed to enter the affected area.

9.1.2.1.3 Information about the Dangerous chemicals and emergency situation intervention and evacuation procedures are all ready for use. Workers employed for the cases of emergency at the Port Facility and the establishments active in first aid, emergency medical attention, saving and firefighting outside the workplace should be provided with these information and procedures easily. This information include;

For the workers employed for the cases of emergency at the Port Facility and the establishments active in first aid, emergency medical attention, saving and firefighting outside the workplace to be ready beforehand and so they can practice the appropriate attention, the danger resulting from the work done, precautions to take and works to be done,

A special danger or information about the works needed to be done that are likely to happen in an emergency situation,

9.1.3 Workers' education and informing them.

9.1.3.1 Port Facility Management, provided that the provisions mentioned on the Regulation 15/5/2013 dated 28648 numbered Occupational Health and Safety Education Procedures and Principles remain hidden, ensures the workers' and their representative's training and informing. This training and informing especially include the aspects mentioned below;

9.1.3.1.1 Information gained as a result of the risk evaluation.

9.1.3.1.2 Information about the dangerous substances that may occur or taking place at the Port Facility and about the recognition of these substances, health and security risks, occupational diseases, occupational exposure level values and other legal regulations.

9.1.3.1.3 Necessary precautions and things to do so that the worker is do not danger themselves or the other workers.

9.1.3.1.4 Information on the Turkish material safety data sheets supplied from the manufacturer for the dangerous chemical substances.

 KROMAN GELİK SANAYİ A.Ş.	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	9-4
DANGEROUS CARGO HANDLING GUIDE					

9.1.3.1.5 Information on labelling/locking the parts, covers, pumping system and suchlike instalment where the dangerous chemical substances are according to the regulations.

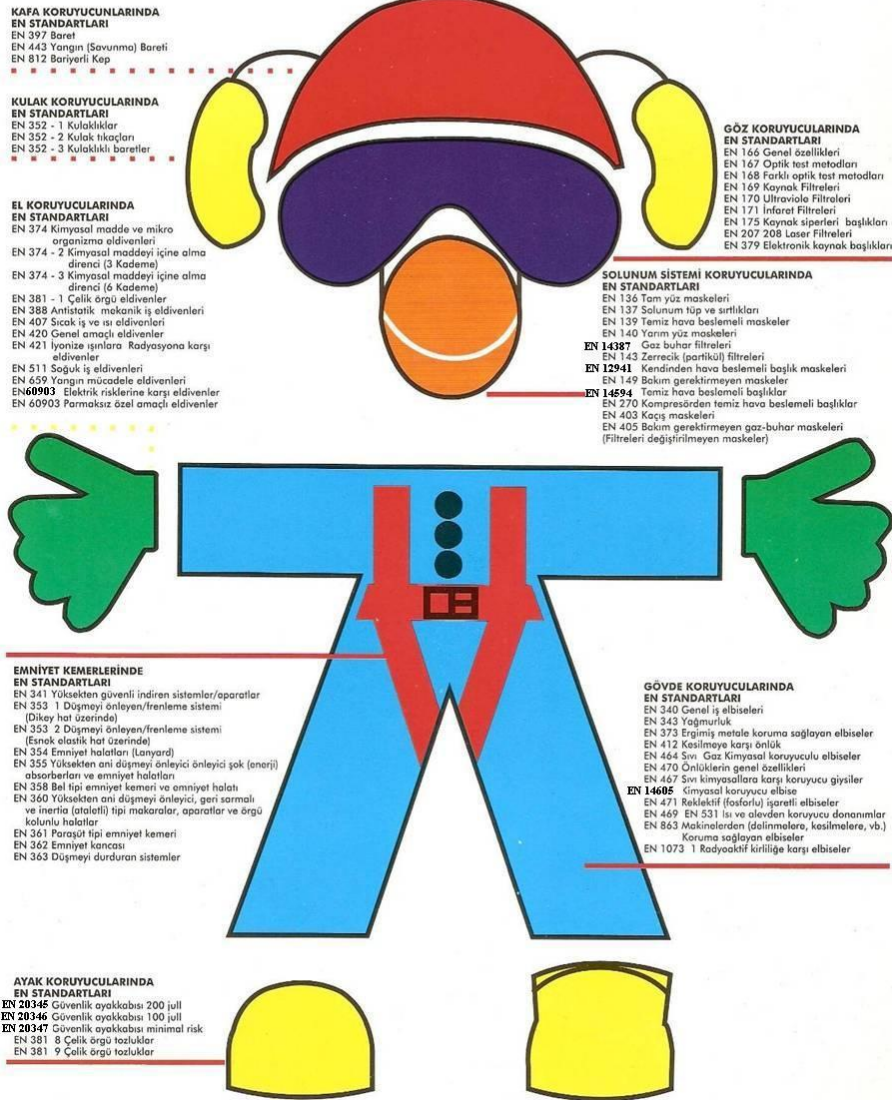
9.1.3.2 The training and information to the workers and their representatives on the works with the dangerous substances are a training supported by a verbal or written instruction due to the risk degree resulting from the risk evaluation done and its type. These instructions change according to the changing conditions.

9.2 Information about the personal protective clothes and procedures to use them.

Personal Protective Devices of the Response Teams

Personal protective clothing is in the standards specified in the figure, and the table indicating which of these clothes will be worn by whom is as in ANNEX-15.

KİŞİSEL KORUYUCU DONANIMLARINDA EN STANDARTLARI



	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	9-5
	DANGEROUS CARGO HANDLING GUIDE				

9.3 Enclosed space entry permit measures and procedures

The Port Facility Management is obliged to take all necessary measures to ensure the safety of the area and to protect the employees from the dangers of the enclosed area during the works to be carried out in enclosed areas.

9.3.1 It is obligatory to work in accordance with the work permit procedure in enclosed areas.

9.3.1.1 In order to secure the working area, the work permit form is filled in in accordance with the procedure for working in enclosed areas. **Document No:(110/F-25)**

Authorized Person;

- To make a risk assessment and taking all necessary precautions
- To fill in the work permit form in enclosed areas **Document No:(110/F-25)**
- He/She is responsible for supplying and making use of the special protective equipment required by the job to the person(s) who will do the work.

Responsible Person;

- To take the measures determined in the working area,
- To fill in the work permit form in enclosed areas **Document No:(110/F-25)**

9.3.1.2 It is strictly forbidden to start work in enclosed areas without ensuring the compliance of the measurement, control, precautions and measures specified in the work permit form.

9.3.1.3 Necessary measurements and controls will be carried out under the responsibility of Kroman Port Management.

9.3.1.4 If it is necessary to check that there is enough oxygen in the area just before entering, a ventilation system should be installed to provide enough oxygen in the enclosed area.

9.3.1.5 The enclosed environment must be completely isolated. Locking the isolation electrical equipment (hanging the Energy Safety Card) and removing the mechanical equipment. Pipes and ducts connected to the area must be closed.

9.3.1.6 Even if permission has been obtained to enter enclosed areas that require permission, the responsible person must fill in the work permit form before entering the enclosed area. **Document No:(110/F-25)**

9.3.1.7 Work permit form in enclosed areas Document No:(110/F-25)

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	10-1
	DANGEROUS CARGO HANDLING GUIDE				

10 OTHER POINT

10.1 Validity of the Hazardous Substances Compliance Certificate.

10.1.1 The validity period of the Hazardous Substances Compliance Certificate is 3 years.

Validity of the Hazardous Substances Compliance Certificate: **01.10.2028**

10.2 Responsibilities of the Dangerous Goods Safety Consultant

As in section 2.5.

10.3 Matters for carriers of the hazardous substances arriving/leaving coastal facility by land (matters on required documents that must be available in the road vehicle at the entrance/exit of port or coastal facility area, equipment and tools required for this vehicle, speed limits in the port area etc.).

10.3.1 Packaged dangerous cargoes and bulk dangerous cargoes (liquid or solid):

10.3.1.1 Name of the consignor (shipper) and date of delivery to the port area, normally not less than 24 hours before arrival;

10.3.1.2 For packaged dangerous cargoes: the Proper Shipping Names of the dangerous goods, the UN number, the class or, when assigned the division of the goods, including for class 1, the compatibility group letter, (if applicable), any subsidiary risk, the number and type of packages, packing group, the flashpoint range (as appropriate), the quantity and additional information as required by chapter 5.4 of the IMDG Code;

10.3.1.3 for bulk dangerous cargoes: the product name and any other information required by the relevant IMO code; and

10.3.1.4 the name of the ship into which the dangerous cargoes are to be loaded (if applicable), the ship's agent and the port.

10.3.2 Necessary certificates

Hazardous Cargo Declaration, Hazardous Cargo Transport Dispatch, Multi-Mode Hazardous Cargo Form, Hazardous Cargo Manifest, Packaging and Container/Vehicle Loading Certificate, Safety Data Sheet, carrying certificate showing exemption for the shipping under ADR/RID/IMDG Code 3.4 and 3.5, SRC 5 certificate appropriate and valid for transport with regard to shipping under ADR, ADR written instruction, Vehicle Conformity Certificate appropriate and valid for carriage, transport document, CSC Certificate for the shipping made with container, the certificate showing eligibility of the tree in case of using heat treated tree with regard to transport or loading safety and cargo transport unit (CTU), cargo safety certificate signifying that container or the cargos in vehicle are secured within the scope of IMDG Code,

As regards the cargos to which fumigation application is made or contain hazardous gas in the cargo transport unit leaving port facility and the cargo transport units arriving port facility, the result of risk evaluation or transport conformity certificate if gas measurement is done,

Without lack of compulsory documents regarding the transport listed above, hazardous cargo that arrives port facility and leaves port facilities cannot be shipped. The cargos not taken under security in appropriate way within the scope of IMDG Code is treated as hazardous cargo too.

10.3.3 Speed Limit in Port Facility

Speed limit in our port facility is 10 km.

 KROMAN GELİK SANAYİ A.Ş.	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	10-2
	 DANGEROUS CARGO HANDLING GUIDE 				

10.4 Matters for carriers of the hazardous substances arriving/leaving coastal facility by sea (matters on day/night signals to be shown by ships carrying hazardous goods and vessels, cold and hot work procedures in ships and so on.)

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

Ships carrying dangerous goods hoist the B (Bravo) flag during the day and have a red light that can be seen from all directions at night.

10.4.2 Day/Night Signs to be Displayed by Ships and Marine Vehicles Carrying Dangerous Goods at the Port or Coastal Facility, Cold and Hot Working Procedures on Ships:

Ships carrying dangerous goods in the coastal facility will obtain the necessary permission from the Regional Port Authority for the cold and hot works to be carried out and will inform the coastal facility authorities. The principles of hot work to be carried out on ships carrying dangerous cargo in the coastal facility are given in Section 10.7.

10.5 Additional points will be added by the port facility.

10.5.1 Training

10.5.1.1 Management

10.5.2.1 Management should ensure that all shipboard and shore personnel involved in the transport or handling of dangerous cargoes or in the supervision thereof are adequately trained, commensurate with their responsibilities within their organization.

10.5.2.2 Management at all levels should exercise day-to-day responsibility for health and safety. In order to draw up safe operational procedures for the transport and handling of dangerous cargoes, management should carry out an assessment of the risks involved. In certain cases, a quantified risk assessment may be necessary.

10.5.1.2 Personnel (cargo interests, port operators and ships)

10.5.1.2.1 Every person engaged in the transport or handling of dangerous cargoes should receive training on the safe transport and handling of dangerous cargoes, commensurate with his responsibilities.

10.5.1.3 Shore-based personnel

Should receive general awareness/familiarization training, function-specific training and safety training.

10.5.2 Training content

10.5.2.1 General awareness/familiarization training

10.5.2.1.1 Every person should receive training on the safe transport and handling of dangerous cargoes, commensurate with his duties. The training should be designed to provide familiarity with the general hazards of relevant dangerous cargoes and the legal requirements. Such training should include a description of the types and classes of dangerous cargoes; marking, labelling and placarding, packing, segregation and compatibility requirements; a description of the purpose and content of the transport documents; and a description of available emergency response documents.

10.5.2.2 Function-specific training

10.5.2.2.1 Every person should receive detailed training concerning specific requirements for the

10.5.2.2.2 transport and handling of dangerous cargoes which are applicable to the function that he performs.

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	10-3
	DANGEROUS CARGO HANDLING GUIDE				

10.5.2.3 Safety training

10.5.2.3.1 Each person should receive training commensurate with the risks in the event of a release of dangerous cargoes and the functions he performs, on:

10.5.2.3.2 Such training should be provided or verified upon employment in a position involving the transport or handling of dangerous cargoes and should be periodically supplemented with retraining, as deemed appropriate by the regulatory authority.

10.5.2.3.3 Records of all safety training undertaken should be kept by the employer and made available to the employee if requested.

10.6 Accident Prevention Policy

As Kroman Port management, we are aware of that the operations realized in our port have the potential that will lead to accidents inherently. However, we believe all accidents may be prevented. Therefore, we undertake to manage operation ideally to protect subcontractors, visitors, neighbors and environment at the highest level through preventing accidents.

With the aim of preventing accidents and mitigate the effects in the direction of Kroman Port management Quality Management Systems, as Kroman Port, we will apply the POLICIES about.

- taking high level security measures for human and environment around Port facility and procuring all resources for this purpose,
- making the risk evaluation based on quantitative analysis related to ordinary and extraordinary operation and keeping these evaluations updated continuously with the purpose of determining and assessing accidents
- having performed the arrangements covering maintenance, repair and temporary stopping related to detected risks and preparation of requisite procedures
- following technological development and providing support required for continuous improving of security measures in facilities with the aim of preventing accidents and mitigate the effects
- making necessary arrangements required for design of new facility, process along with planned changes and having performed risk evaluations absolutely before realization and assessing acceptability
- determining emergencies that will be detected before with systematic analysis, preparing emergency plans for these emergencies and reviewing with drills following realization of audit regularly
- tracking performance of system within the framework of procedures to evaluate conformity to the targets identified with Quality Management Systems, in case of failing to provide conformity, searching corrective activities
- evaluating efficiency and conformity of Quality Management Systems periodically and systematically, documentation, certification, performing review by us as top management and giving support for continuous improvement of Quality Management Systems
- employing the personnel who have knowledge, education and experience convenient for the positions that will affect safety and security of operational job process within organization,
- ensuring that our employees in charge develop themselves constantly by means of giving trainings,
- adhering to national and international law, regulation, bylaws and standards

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	10-4
	DANGEROUS CARGO HANDLING GUIDE				

- ensuring health and securities of employees, contractors, visitors and neighbors and protection of environment whereby preventing accidents and eliminating the effects systematically through taking necessary measures and searching potential incompatibilities with policy

AS MANAGEMENT AND ALL EMPLOYEES.

10.7 Hot Work Procedure

1. No permit is given for the hot works to be done aboard ship. However, in necessary cases, after taking permits in the direction of legal legislations by ship agency, it will be realized under the control of port facility.

2. If hot work is to be carried out in the areas where dangerous cargoes are handled and/or temporarily stored in our Port Authority, it is necessary to inspect the areas where the operation will be carried out frequently, including tests performed by accredited test institutions, in order to ensure that there is no flammable and/or explosive atmosphere and that they are not inadequate in terms of ventilation. It should be ensured that dangerous loads and other flammable materials are removed from the working areas and adjacent areas.

- Combustible building materials must be effectively protected against accidental flame up.
- Open pipes, pipe passages, valves, joints, cavities and open parts must be closed and sealed to prevent flames, sparks and hot particles from spreading from work areas to adjacent or other areas.
- At the work area and at all work area entrances, a plate with the permit of the hot work to be done and the safety measures to be taken should be hung, and at least one fire extinguisher or other suitable fire extinguishing equipment, together with all its apparatus, should be kept in an easily accessible place.
- The hot work permit and safety precautions should be easily visible and clearly understood by the people who will do the hot work.

3. In order to ensure the safety of the working environment, the fire work permit form Document No: (110/F-24) is filled in accordance with the instruction for working with Fire, Document No: (110/T12/01).

Unit officer;

- To take all necessary precautions by making a risk assessment in the working environment,
- Filling the fire work permit form with Document No: (110/F-24),
- To supply and make use of the special protective equipment required by the job to the person(s) who will work,
is responsible.

 KROMAN GELİK SANAYİ A.Ş.	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	10-6
	DANGEROUS CARGO HANDLING GUIDE				

Section 2 – Hot Work Permit

As per the method of hot work and location described in Section 1, identify control requirements in the relevant parts below.

General Hot Work / Ignition Controls

Identify those general hot work and ignition controls required to be undertaken as part of the hot work: (identify as yes or not applicable)	Yes	NA	Control
☐	☐	☐	Fire extinguishers supplied by the workgroup / contractor are to be located immediately adjacent to the hot work area and within 10m (building / fixed location fire extinguishers are <u>not</u> to be relied upon)
☐	☐	☐	Catch mats or boards are to be positioned over grid-mesh, flooring, grates to catch sparks or slag
☐	☐	☐	Combustible and flammable materials or fuel sources are required to be cleared from the area (consider a 15m area around the hot work where practicable and include surfaces below & above the work area)
☐	☐	☐	Drains, cable racks, electrical cables and other heat/fire sensitive items are to be covered (consider a 15m area and use fireproof blankets, catch boards and approved covers as applicable)
☐	☐	☐	A water hose is to be run to the job location and primed ready for use (where appropriate for work locations outdoors and in areas clear of electrical equipment)
☐	☐	☐	A Fire Watcher is required to watch the area during and/or post work to monitor fire risk, sparks, slag, hot objects (consider for work that is arc welding, oxy-cutting or likely to present an ignition hazard post work, and for work in hazardous areas, in confined spaces, outdoors, in windy conditions): ☐ During Work, and/or ☐ Post Work for a time period of _____ minutes

Specific Hot Work / Ignition Controls

	Yes	NA	If Yes, Include Additional Control Details to be Used:
The hot work is to be undertaken on or adjacent to plant that will require an isolation (such as services, pipes, tanks, pressure vessels)	☐	☐	
A fixed fire protection or detection system will need to be taken out of service (approval is required for the impairment and the Fire System Log Book is to be filled in – see also BAC Authorisation below; approval contacts include:	☐	☐	
The work area will require specific cleaning, purging, ventilating or pre-work atmospheric monitoring (due to flammable/explosive vapours, dusts, liquids or solid residues in the work area / location)	☐	☐	
The work area will require pre-work cleaning, stripping, surface preparation, or atmospheric monitoring during works (as a result of surfaces / coatings that may create harmful emissions when heated or cut)	☐	☐	
The nature of the work requires specific respiratory protection to be worn	☐	☐	
The nature of the work requires specific controls to be implemented to protect gas leads or other sensitive plant items involved in the work	☐	☐	
The hot work involves arc-welding whereby specific controls relating to ensuring electrical safety will be required	☐	☐	

Additional Hot Work Controls within Confined Spaces

☐ NA (Not Applicable)

Controls:

	Yes	NA
Locate equipment outside the space where practicable (such as gas cylinders, hoses, etc unless involved with respiratory devices)	☐	☐
Extraction fan inlet is to be located as close as practicable to the contamination source	☐	☐
Contaminants are to be expelled from the space (so that they cannot be recirculated and will not harm other workers)	☐	☐
As arc-welding activities are to be suspended for substantial periods, power sources will need to be de-energised, electrodes removed from holders and holders placed so that accidental contact or arcing cannot occur	☐	☐
As gas welding/cutting activities are to be suspended for substantial periods, torch and cylinder valves are to be closed with the torch and hose connections removed from the space and depressurised	☐	☐

Completion Hot Work

☐ NA (Not Applicable)

Controls:

	Yes	N/A
After the end of the job is controlled area for at least half an hour.	☐	☐
Field is checked for at least eight hours and one hour intervals.	☐	☐
There is no need to do control after hot working.	☐	☐

Permit Request:

Name: _____ Signature: _____ Date: _____ Time: _____

Approved

Name: _____ Signature: _____ Date: _____ Time: _____

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	10-7
	DANGEROUS CARGO HANDLING GUIDE				

10.8 Responsibilities of Personnel in Operation

10.8.1 Operation Officer

10.8.1.1 10.8.1.1 Acts according to the checklists in 10.9.

10.8.1.2 A coordination meeting will be held at least 1 day prior to the acceptance of dangerous cargoes to the port facility and the representatives of operation, Field planning, HSE unit, TMGD and other related persons shall participate to the meeting.

10.8.1.3 If a decision is taken at the meeting in favor of accepting the dangerous cargo, management, operation, storage, safety and emergency response departments shall be notified and the necessary preparations and acceptance process will be commenced.

10.8.1.4 If it is required to notify the Port authority, the situation shall be notified to the Port authority in writing by specifying the reasons.

10.8.1.5 Number of equipment and cranes, teams and shifts as well as the port to be used shall be specified at this meeting.

10.8.1.6 Organize the work order with the 2nd Cap.

10.8.1.7 Ensure that the cargo handling is made according to the approved cargo plan With the Planning Specialist

10.8.1.8 Every person engaged in the handling of dangerous cargoes exercises reasonable care to avoid damage to packages, unit loads and cargo transport units.

10.8.1.9 Whilst dangerous cargoes are being handled, precautions are taken to prevent unauthorized access to handling areas.

10.8.1.10 If there is any loss of containment of dangerous cargo, every practical step is taken to minimize risks to persons and adverse effects to the environment.

10.8.1.11 Wrappings and packaging to be used in the activities of changing of cargo transport units, repair thereof or placing of the damaged packages inside the saving packages should be in accordance with the structure of dangerous materials and they shall be produced and certified as they are set out in chapter 6 of the IMDG Code

10.8.1.12 Packaged cargoes containing Class 4.3 cargo and bulk cargo shall be prevented from being affected by rain, seawater and other factors.

10.8.1.13 If the evacuation of ship is partially completed, gas measurements will be conducted prior to assignment for the evacuation of cargo in the hold of the ship.

10.8.1.14 During handling of dangerous solid loads, Canvas is laid between the ship and the port, and a responsible person is assigned for cleaning the cargo scattered around.

10.8.1.15 At the areas where solid bulk dangerous cargoes releasing poisonous or flammable gases are handled, periodic controls will be conducted for measuring poisonous or flammable gas concentrations as well as their probable dissemination and the precautions taken will be recorded.

10.8.2 Shift Supervisor

10.8.2.1 Acts according to the checklists in 10.9.

10.8.2.2 The personnel equipped with the necessary protective equipment check before the operation.

10.8.2.3 Necessary warnings will be made in order that the trucks do not to make loading exceeding loading limit and people in charge will pay necessary attention with respect to this issue.

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	10-8
	DANGEROUS CARGO HANDLING GUIDE				

10.8.2.4 The drivers will wait at a specified location away from the vehicle during the loading and unloading of vehicles. It will be controlled if the driver has the necessary protective equipment or not.

10.8.2.5 The shift superintendent will be responsible from controlling the work security, control of equipment, entry and exit of outsiders, safe handling of the cargo, environmental cleaning and duly performance of these works.

10.8.2.6 Organize the work order with the 2nd Cap.

10.8.2.7 Ensure that the cargo handling is made according to the approved cargo plan.

10.8.2.8 Performs the necessary separation according to the classes of dangerous loads.

10.8.2.9 Every person engaged in the handling of dangerous cargoes exercises reasonable care to avoid damage to packages, unit loads and cargo transport units.

10.8.2.10 Whilst dangerous cargoes are being handled, precautions are taken to prevent unauthorized access to handling areas.

10.8.2.11 If there is any loss of containment of dangerous cargo, every practical step is taken to minimize risks to persons and adverse effects to the environment.

10.8.2.12 Wrappings and packaging to be used in the activities of changing of cargo transport units, repair thereof or placing of the damaged packages inside the saving packages should be in accordance with the structure of dangerous materials and they shall be produced and certified as they are set out in chapter 6 of the IMDG Code

10.8.2.13 Packaged cargoes containing Class 4.3 cargo and bulk cargo shall be prevented from being affected by rain, seawater and other factors.

10.8.2.14 If the evacuation of ship is partially completed, gas measurements will be conducted prior to assignment for the evacuation of cargo in the hold of the ship.

10.8.2.15 During handling of dangerous solid loads, Canvas is laid between the ship and the port, and a responsible person is assigned for cleaning the cargo scattered around.

10.8.2.16 At the areas where solid bulk dangerous cargoes releasing poisonous or flammable gases are handled, periodic controls will be conducted for measuring poisonous or flammable gas concentrations as well as their probable dissemination and the precautions taken will be recorded.

10.8.2.17 Water balls should be place in vicinity of areas where dangerous materials like coal, which have spontaneous combustion but not affected by water, are stored and watering works should be carried out in a way to avoid combustion. It will be considered if there is a drainage system for collecting the polluted water in the environment when the temporary storage area is announced.

10.8.3 HSE Responsibility

10.8.3.1 Acts according to the checklists in 10.9.

10.8.3.2 The worker at the operation informs about the danger of load and equips it with the necessary protective equipment.

10.8.3.3 Environmental safety is ensured.

10.8.3.4 Ensure that personnel are not duties in the ship's warehouse or on the ground before gas measurements are made.

10.8.3.5 Take necessary fire precautions and control system operation.

10.8.3.6 Controls the presence of the required warning and warning signs.

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	10-9
	 DANGEROUS CARGO HANDLING GUIDE 				

10.8.3.7 Wrappings and packaging to be used in the activities of changing of cargo transport units, repair thereof or placing of the damaged packages inside the saving packages should be in accordance with the structure of dangerous materials and they shall be produced and certified as they are set out in chapter 6 of the IMDG Code

10.8.3.8 Packaged cargoes containing Class 4.3 cargo and bulk cargo shall be prevented from being affected by rain, seawater and other factors.

10.8.3.9 If the evacuation of ship is partially completed, gas measurements will be conducted prior to assignment for the evacuation of cargo in the hold of the ship.

10.8.3.10 During handling of dangerous solid loads, Canvas is laid between the ship and the port, and a responsible person is assigned for cleaning the cargo scattered around.

10.8.3.11 At the areas where solid bulk dangerous cargoes releasing poisonous or flammable gases are handled, periodic controls will be conducted for measuring poisonous or flammable gas concentrations as well as their probable dissemination and the precautions taken will be recorded.

10.8.3.12 Water balls should be place in vicinity of areas where dangerous materials like coal, which have spontaneous combustion but not affected by water, are stored and watering works should be carried out in a way to avoid combustion. It will be considered if there is a drainage system for collecting the polluted water in the environment when the temporary storage area is announced.

10.8.4 Responsible for Contaminated Scrap Cargo

10.8.4.1 The radiation contaminated dusts accumulated in the collection pool in the port facility will be measured and will be taken by the NRA (Nuclear Regulatory Authority).

10.8.4.2 The radiation well, where the substances detected in the scrap cargo and contaminated with radioactive source and/or radiation are temporarily stored, will contain the necessary measures to prevent the approach of unauthorized persons. Radiation wells will be kept under constant surveillance during the temporary storage of radioactive materials.

10.8.4.3 If the radiation Level-3 status is detected in a scrap-laden vehicle in the measurements; The vehicle will be towed to the quarantine area and abandoned. The vehicle will be kept in the quarantine area until the necessary emergency response is completed. The quarantine area will be marked with a warning sign and the people in the facility will be informed.

In case of detection of radioactive source and/or materials contaminated with radiation, said source and/or materials will be taken into the radiation well. NDK shall be notified of the number, size and approximate weight of radioactive sources within 24 hours at the latest.

Operators, facility employees or third parties who have not received training in radiation protection and who do not have appropriate protective clothing, equipment, equipment and equipment will not be allowed to enter the quarantine area.

Radiation measurement of the radiation detection and quarantine area, the radiation well, the dust accumulated in the collection pool, the water discharged from the collection pool and the scrap-laden vehicles that will leave the port area will be measured.

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	10-10
	DANGEROUS CARGO HANDLING GUIDE				

10.9 Safe Handling of Dangerous Goods Operation Procedure Checklist

GENERAL

P.NO	Action	HSE	OPR. SPC	SUPER VİZOR
ACCEPTANCE OF THE LOAD				
1.	A coordination meeting will be held at least 1 day prior to the acceptance of dangerous cargoes to the port facility	X	X	
2.	The SDS form about load is provided.		X	
3.	A detailed stowage plan, which identifies by class and sets out the location of all dangerous goods and marine pollutants on board, may be used in place of such a special list or manifest. (IMO FAL form 7)		X	
4.	The Certificate of Conformity for the ship carrying the dangerous cargoes will be checked.		X	
5.	Approved cargo handling / evacuation plan requested		X	
6.	The dangerous cargo (es) to be accepted to the port: 1. Risk arising from dangerous cargo 2. Interaction with dangerous cargoes existing at the port facility, 3. Interaction with cargoes planned to be accepted to the port facility in the near future, 4. Conditions for stowage 5. Conditions for segregation 6. Requirement of materials and equipment with respect to emergency response 7. Sufficiency of emergency response equipment 8. Interaction with the neighboring area (s) The issues mentioned herein above will be discussed within the scope of current IMDG CODE documents and a management decision for accepting/rejecting will be taken.		X	
7.	If a decision is taken at the meeting in favor of accepting the dangerous cargo, management, operation, storage, safety and emergency response departments shall be notified and the necessary preparations and acceptance process will be commenced.		X	
8.	Number of equipment and cranes, teams and shifts and pier shall be specified.		X	
9.	The personnel who will work in the operation will be provided with information as regards the risks of the cargo and they will be equipped with the necessary protective outfit.		X	
10.	Required warnings, warning signs are provided around the area being handled.		X	
P.S.: In standard handled loads, meeting is optional. Previous meeting resolutions may apply.				

 KROMAN GELİK SANAYİ A.Ş.	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	10-11
	DANGEROUS CARGO HANDLING GUIDE				

Safe Handling of Solid Dangerous Goods Operation Procedure Checklist
Loading or unloading of solid dangerous cargoes will be made direct delivery plan at the berths within our port facility.

P.NO	Action	HSE	OPR. SPC	SUPER VİZOR
HANDLING				
1.	Necessary warnings will be made in order that the trucks do not to make loading exceeding loading limit. After loading the trucks will surely top off.	X	X	X
2.	The drivers will wait at a specified location away from the vehicle during the loading and unloading of vehicles. It will be controlled if the driver has the necessary protective equipment or not.	X	X	X
3.	Controlling the work safety, control of equipment, entry and exit of outsiders, safe handling of the cargo, environmental cleaning and duly performance of these works.			X
4.	Loading and unloading in accordance with the cargo plan		X	X
5.	If the evacuation of ship is partially completed, gas measurements will be conducted prior to assignment for the evacuation of cargo in the hold of the ship.	X	X	X
6.	Canvas is laid between the ship and the port, and a responsible person is assigned for cleaning the cargo scattered around.	X	X	X
7.	Dangerous areas, where handling is done in line with the risks of the dangerous cargo, are determined, regulatory authority's buildings, other facility near the facility, the types of cargo handled at these facilities and features of other cargo which are temporarily stored and handled at the facility, and the fastest and the safest access opportunities as to emergency responses will be taken into consideration.	X	X	X
8.	At the areas where solid bulk dangerous cargoes releasing poisonous or flammable gases are handled, periodic controls will be conducted for measuring poisonous or flammable gas concentrations as well as their probable dissemination and the precautions taken will be recorded	X		
9.	Water balls should be place in vicinity of areas where dangerous materials like coal, which have spontaneous combustion but not affected by water, are stored and watering works should be carried out in a way to avoid combustion. It will be considered if there is a drainage system for collecting the polluted water in the environment when the temporary storage area is announced.	X	X	X
10.	Canvas to be used for avoiding the solid bulk dangerous cargoes from falling to the sea during evacuation or while loading to the ship, will be kept between the ship and the port during the operations.	X	X	X
11.	The master who will load/unload the solid bulk dangerous cargoes will receive the detailed loading or unloading plan which includes details as to the position and quantity of the cargo in the ship from the berth operator prior to the beginning to loading or unloading process. An agreement shall be reached between the master and the berth operator as to the said loading or unloading plan.		X	X

	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	10-12
	DANGEROUS CARGO HANDLING GUIDE				

10.10 EmS (Emergency Procedures for Vessels carrying Dangerous Goods) and MFAG (Medical First Aid Guide)

In emergencies, it is important to use IMSBC, IBC or IGC Codes for bulk cargo as well as all available IMDG Code, EMS and MFAG information.

10.10.1 EmS

EmS contains procedures for the actions that can be taken if there is a fire or spill of dangerous goods.

It contains general procedures applicable to an entire substance class as well as procedures specific to certain products.

Examples of the information found in the specific "emergency schedules" are necessary protective equipment and the types of extinguishing agents that can be used to put out fires involving dangerous goods.

EmS is divided into EmS for fires and EmS for spills. There will be EmS numbers for every UN number in column 15 of the Dangerous Goods List. EmS number does not have to be specified in the Dangerous Goods Declaration.

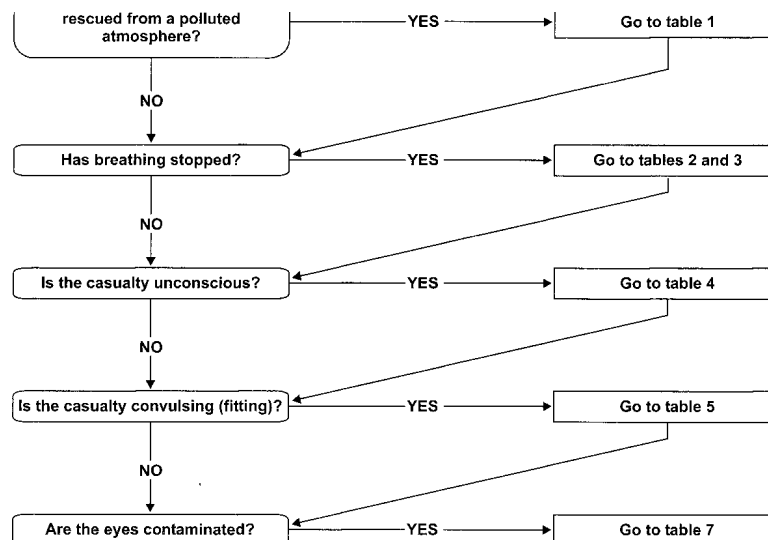
10.10.2 MFAG

MFAG table numbers do not have to be stated on the Dangerous Goods Declaration.

MFAG consists of a flow chart which shows what actions should be taken, based on the situation and symptoms, when a person has been exposed to dangerous goods of some kind. However, it is important that the person has been trained to use MFAG in advance so that it will work in an emergency.

The person can also contact a doctor to get assistance treating an injured person.

Usage information below.



 KROMAN ÇELİK SANAYİİ A.Ş.	Document Nu.	Release Date	Rev. No	Revision Date	Page Nu.
		1.4.2016	8	03.09.2026	10-13
	002/8				

002/8

DANGEROUS CARGO HANDLING GUIDE

