BAGFAS BANDIRMA GÜBRE FABRİKALARI A.Ş

DANGEROUS SUBSTANCE GUIDE

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FACILITY OFFICIAL

HALİT KAMBUR

REVISION PAGE

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				Name Surname	Signature
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1 INTRODUCTION

Entry and presence of dangerous loads in the port area and handling it must be checked to ensure the general safety and security of the area, the load hold, the safety of all persons in or around the port area, and the protection of the environment.

In the port area, the safety and security of the ship, freight and crew, port site crew and all facilities in the back Office are directly related to measures to be taken with regard to dangerous load before and during loading and unloading**.**

This guide is limited to hazardous loads located in the port area which are exist, used and held for storage as part of the transport chain. In the case of the transfer of a substance within this scope, the rules and procedures in this guideline should be applied.

An important precondition for the safe transport and handling of dangerous loads is the proper identification, protection, packaging, preservation, marking, influence, designation and certification of these loads. This is the case if the activity is carried out in the port area or in a place remote from the port area.

Even if general transport chain includes land, port and sea items, it is very important that all measures taken by the responsible persons relating to matters specified in 1.4 and transmitted to the persons included in transport chain and final buyers

The safe transport and handling of hazardous cargo is based on the correct and precise application of the relevant regulations regarding the transport and handling of such loads and depends on the acceptance of all persons involved in the risk in this context and their understanding of the regulations in full and detailed. This may only be achieved by educating and retraining the relevant people in a correct and planned way.

This Guidance is issued for the first time in order to ensure the safe transport and handling of dangerous cargo in the port area so that the legal requirements and safety precautions may be met.

General information about the facility is given in the Facility Information Form below.

1.1.1 FACILITY INFORMATION FORM

1	Facility operator name / title	BANDIRMA GÜBRE FABRİKALARI A.Ş.
2	The contact information of the facility operator (address,	BANDIRMA GÜBRE FABRİKALARI A.Ş. Bandırma Erdek Karayolu 10 km. 10209 ERDEK/BALIKESİR TEL : 0266 714 10 00 (4 HAT) FAX : 0266 714 10 05 info@bagfas.com.tr
3	Name of facility	BAGFAŞ Bandirma Gübre Fabrikalari A.Ş
4	The province where the plant is located	BALIKESİR
5	The contact information of the plant (address, telephone,	Bandırma Erdek Karayolu 10 km. 10209 ERDEK/BALIKESİR Tel: 0266 714 10 00 (4 HAT) FAX : 0266 714 10 05 info@bagfas.com.tr
6	Geographical location of the facility	MARMARA
7	port authority where the facility is connected and contact details	BANDIRMA PORT AUTHORITY
8	The municipality where the facility is affiliated and contact details	ERDEK MUNICIPALITY
9	Free Zone where facility is located or Organized Industrial Zone name	-----
10	Expiration date of the Coastal Facilities Operation Permit / Temporary Operation Permit Certificate	10.11.2021

11	Activity Status of Plant (X)	Own Load and additional third person(X)	Own Load (….)	Third person	
12	Name and surname of the facility manager, contact details (phone, fax, e-mail)	HALİT KAMBUR Tel: 0266 714 10 00 Fax: 0266 714 10 05			
13	Hazardous substance operations of the plant Name and surname of responsible person,, contact details (phone, fax, e-mail)	ZAFER YALÇIN ,MUSTAFA TUNCAY , ENGİN ESMERAY,ONUR DÖNDER, HAYRETTİN ABA, ERTAN KOCABIYIK, MÜNİR YILMAZ, MUSTAFA GÖKÇE,ÖZER TURAN,HAŞİM AYGEN Tel: 0266 714 10 00 Fax: 0266 714 10 05			
14	Hazardous Material Safety of Plant Name and surname of the consultant,, contact	AHMET CAYIK +90 532 472 07 70			
15	The sea coordinates of the facility	40^0 23’ 43’’ NORTH/ 28^0 31’ 00’’ EAST			
16	Types of dangerous goods handling in Plant (MARPOL Annex I, IMDG Code, IBC Code, IGC Code, IMSBC Code, Grain Code, TDC	UN 1805 Phosphoric Acid Solution UN1830 Sulphuric Acid Solution UN 2067 Ammonium Nitrate UN1005 Ammonia			
17	Ship types to which may approach to Plant	General Cargo Ship, Container Ship,Bulk Cargo Ship, Chemical Tanker, Ammonia Load Liquefied Gas Ship (LPG / LNG)			
18	The premises distance (kilometre) to main road	1,5 km			
19	Distance to railway (kilometres) or railway connection (Yes / No)	10 KM. There is no Railway connection			
20	The name of the nearest airport and distance (kilometres)	Eti Maden Sulphuric Acid Facility in the northeast direction and approximately 3.5 km			
21	Load Handling Capacity of the Plant (Tons / Year, TEU / Year, Vehicle / Year)	Dry Load (ton / year): 2.000.000	Liquid Load (ton / year): 1.500.000		
22	Whether or not certified scrap handling is carried out	NO			
23	Is there a border gate (Yes / No)	YES			

24	Do you have customs clearance? (Yes No)	YES	
25	Load handling equipment and capacities	20T x 30 ... 8m with port cranes for dry cargoes, 400T / h is discharged by pipelines of liquid loads.	
26	Storage tank capacity (tonnes)	Sulfuric Acid: 30.000 (outside of the port area within the factory site) Phosphoric Acid: 36.500 (Outside the port area in the Factory site) Ammonia: 30.000 (outside the port area within the factory site)	
27	Open storage area (m2)	---	
28	Semi-closed storage area (m2)	---	
29	Indoor storage area (m2)	36.500 m2 (outside the port area within the factory site)	
30	The specified fumigation and / or decontamination area of fumigation (m2)	---	
31	Piloting and towing services Provider's name / title, contact details	BADETAŞ BANDIRMA DENİZ TAŞIMACILIĞI A.Ş TEL: 0 266 714 27 79	
32	Is the Security Plan established? (Yes No)	YES	
33	Waste Acceptance Facility Capacity (This section is based on the wastes will be arranged separately)	Waste Type	Capacity (m3)
		Bilge water	10 (1 pcs)
		DeWatered Bilge tank	25 (1pcs)
		Waste oil tank	10 (1 pcs)
		Sludge tank	10 + 15 (2 pcs)
		Toxic liquid Tank	20 (1 pcs)
		Thrash	Fixed 180ltr (0.18 m3) 8 pcs categorised keeping box and 5 m3 mobile truck.
		Waste water	1m3 mobile tank.

34	Properties of wharf/pier etc. areas

34		Length (meters)	Width (meters)	Min. Water depth (meter)	Max. Water depth (meter)	Largest ship tonnage to land (DWT or GRT)
1	No. 1 pier					Unused
	No.1 wharf	125.6	15	9.5	11	Unused
2	No. 2 pier					
	No.2 wharf	125	22	13	17	35.000
	No.3 wharf	125	22	12	16	40.000

		Number (pieces)	Length (meters)	Diameter (inches)
1	1 pier, 1 wharf sulphuric acid pipeline a) Main feed S. acid line b) S. acid line on the pier	1	 117 m. 15 m.	 8” 8”
2	1 pier, 1 wharf phosphoric acid pipeline a) Main feed F. acid wire b) F. acid line on the pier	1	 30 m. 0 m.	 8” 8”
3	1 pier, 1 wharf ammonia pipeline a) Main feed Ammonia line b) Above the pier Ammonia line	1	 235 m. 16 m.	 10” 10”
4	Number 2 pier, Number 2 wharf sulphuric acid pipeline	1	 288 m.	 8”

	a) Main feed S. acid line b) S. acid line on the pier			32 m.	8”
5	Number 2 pier, Number 2 wharf phosphoric acid pipeline a) Main feed F. acid wire b) F. acid line on the pier		1	 286 m. 34 m	 8” 8”
6	Number 2 pier, Number 2 wharf ammonia pipeline a) Main feed Ammonia line b) Above the pier Ammonia line		1	 310 m. 46 m.	 10” 10”
7	Number 2 pier, Number 3 wharf sulphuric acid pipeline a) Main feed S. acid line b) S. acid line on the pier		1	 268 m. 11 m.	 8” 8”
8	Number 2 pier, Number 3 wharf phosphoric acid pipeline a) Main feed F. acid wire b) F. acid line on the pier		1	 271 m. 11 m.	 8” 8”
		Marine Coordinates	Number	Water depth (meters)	largest ship which may land (DWT/GRT)
1	Number 1 pier, Number 1 wharf dolphins	40° 23’ 43” NORTH 28° 31’ 00” EAST	4	9.5-11 m.	Unused
2	Number 2 pier, Number 2 wharf dolphins	40° 23’ 43” NORTH 28° 31’ 00”	17	12-17 m.	35.000

		EAST			
3	Number 2 pier, Number 3 wharf dolphins	40° 23’ 43” NORTH 28° 31’ 00” EAST	17	13-16 m.	40.000

2 APPLICATION AND DEFINITIONS

2.1.1 Application

This guide deals with the entry and existence of dangerous cargo into the port areas at BAGFAŞ Port. Whatever the flag is, it is valid for all vessels that visit, but not for ship materials and equipment or military shipping vessels.

2.1.2 Definitions

For the purposes of these Provisions, the following definitions are used:

Coastal Plant dock, jetty, pier, breakwater, port, sea terminal or similar structure (floating or not) to which the ship may be connected. It also includes offshore facilities and buildings used for auxiliary or accidental purposes related to the loading or unloading of dangerous cargoes.

Coastal Plant Operator, means an organization consisting of persons or persons who take the time for day-to-day control of the operation of the dock.

Bulk, means the loads intended to be transported without the direct containment, which is the structural part of the ship or is contained in a tank permanently fixed in or on the ship.

Load Interests, shipper, carrier, transporter, consolidator, packaging center or any other person, company or institution in connection with any of the activities specified herein. They are concerned with the identification, protection, packing, preservation, marking, influence, indication and documentation of dangerous cargo delivered or transported by sea to the port at any time and control of the load at any time.

Certificate of Eligibility, means the certificate prepared by the Administration or on behalf of the Administration in accordance with the codes relating to ship construction and equipment and that the ship construction and equipment are suitable for the carriage of certain dangerous cargoes on that ship.

Hazardous loads, means the loads that may be harmful to people, animals and the environment when they are packaged in the following documents, in bulk packs, or in bulk as the structure is transported into the reaction with other substances:

- oils within Annex I of MARPOL 73/78;

- Construction and Equipment of Vessels Carrying Bulk Liquefied Gases

Gases under the codes;

- Dangerous Liquids / Chemicals in accordance with MARPOL 73/78 Annex II and Codes Concerning the Construction and Equipment of Vessels Carrying Bulk Dangerous Chemicals, including Waste;

- chemical hazardous solid bulk materials within the scope of group B annex to the Code (BC Code) for the Safe Application of Solid Bulk Carriers, including wastes and solid bulk materials (MHBs), which are only dangerous when poured;

- harmful substances in packaged form (covered by MARPOL 73/78 Annex III); and hazardous materials (in scope of IMDG), including materials or items,

Dirty Empty Packaging, Unclean empty packaging is still classified as dangerous goods and must be treated in the same way as containers filled with hazardous materials

IMDG code International Maritime Dangerous Goods Code issued by the UN's international maritime safety department

Class Dangerous Goods means differentiating / categorizing (dividing into groups) between different types.

UN number, means the number assigned to each hazardous item. The list of UN numbers may be found in the IMDG Code content

Proper shipping name is the official name for the labelling and transportation of dangerous goods for transport. This name is also linked to the UN number.

Packing Group is a group of packages which are allocated according to the risk of transported goods. There are 3 levels

- • Packing Group I is very hazardous
- • Packing Group II hazardous substances
- • Packing Group III used in hazardous substances

Emergency Response Procedures Hazardous substances are procedures that explain in detail how to handle dangerous substances in the event of an accident for handling ports/ handling vessels.

Medical First Aid Guide Explanatory guide to how to get first aid for injured persons in Accidental Accidents with Dangerous Goods.

Certificate of Compliance, Means a document issued by the Administration or on behalf of the Administration, which is given as a bulk in the form of SOLAS regulation II-2 / 19.4 in bulk or on a ship carrying dangerous substances in solid form, the construction of the ship and the equipment being in compliance with the provisions of this Regulation.

Flexible tubing refers to flexible tubing and end connections which may be used to transfer dangerous materials and may include sealing the ends.

Handling means the loading and unloading of a ship, train wagon, vehicle, freight container or other means of transport, transfer from or to a warehouse or terminal area within or within a ship or between vessels or other means of transport, e.g. temporary storage of dangerous loads in the port area during transit from where they come from to where they go for the purpose of changing the transport vehicles or roads and moving within the port which is part of the transport supply chain for these loads.

Hot work, grinding, soldering, burning, cutting, welding, or any other repairs involving heat or sparks, which may cause danger due to the presence of hazardous loads in the environment or the imminent danger of such loads.

Loading arm, means hinged rigid piping systems and associated equipment which may be used to transfer hazardous loads, including rapid release couplings, emergency release systems, and hydraulic power pack. (including articulated pipes and stiff arms).

Master, means the person who commands the vessel. (do not include pilot and look out)

Packaging, packaging, loading or filling hazardous loads into containers, bulk cargo containers (IBCs), freight containers, tank containers, portable tanks, train cars, bulk containers, vehicles, shipyards or other freight forwarding units.

Pipeline, means all pipes, connections, valves and other utilities, apparatus and devices used in the port for handling or in connection with handling of dangerous loads including flexible pipes, loading arm or pipes of the vessel, fittings or equipment but with the exception of vessel pipes which is connected to flexible pipes, fittings or equipment,

Port area means the land and sea area determined by the legislation.

Port Authority refers to an entity consisting of person or persons authorized to use the provincial organization affiliated to the UDHB and to exercise effective control in a port area.

Regulatory agency is the national, regional or local administration which has the authority of the General Directorate of Dangerous Goods and Combined Transport Regulation affiliated to UDHB, with the authority to determine and enforce the legal requirements for a port area.

Responsible person (TMGD), means the person appointed by the employer or ship captain on the shore, having the authority to take all decisions relating to a particular task, carrying the necessary knowledge and experience for this purpose, properly documented in accordance with the circumstances, or recognized by the regulatory authority.

Vessel, means sea vehicles which may or not launch sea and are used for transport of dangerous substances including ones used for inland waters

Qualified person means a person who has valid knowledge, experience and competence to perform a specific task..

Stuffing, means placing to storage containers, bulk load containers (IBCs), freight containers, tank containers, portable tanks, bulk containers, vehicles, ship lifeboats, and other freight forwarding units and placing of bulk loads to ships, warehouses, lockers or other areas.

Shipping refers to mobilisation with use of one or more transportation methods in port areas.

Unstable substance means a substance which tends to become polymerized or to react dangerously when subjected to certain temperature conditions or when a substance contacts a catalyst due to its chemical structure. This tendency may be removed by providing special transport conditions or by giving the product sufficient amount of chemical inhibitor or stabilizer

3 RESPONSIBILITIES

3.1.1 Responsibility of Coastal Facility Operators

Sami Önat is the responsible person of BAGFAS Coastal Facilities and the responsibilities of the coastal facility operator are given below.

a) Ensures that ships are docked and secured in a convenient, sheltered, safe manner.

b) Ensures that the entry-exit system between the ship and the shore is appropriate and safe.

c) Provides that training for persons engaged in the loading, unloading and handling of dangerous loads.

ç) Ensures that hazardous loads are transported, handled, disassembled, stacked, temporarily suspended and inspected in a safe and proper manner by qualified, trained, occupational safety precautions personnel.

d) Requests all compulsory documents, information and documents relating to dangerous loads from load interest, and ensures they are provided with loads.

e) Keeps an up-to-date list of all dangerous loads on the business site.

f) Ensures that all operational personnel are trained for hazards of handling hazardous loads, safety precautions, safe operation, emergency precautions, safety and similar matters, and keeps training records.

g) Inspects the relevant documents to confirm that the dangerous load entering the facilities has been properly identified, classified, packaged, labelled, declared, approved and adhered to the proper packaging, container and freight transport unit and transported safely.

ğ) Notifies port authority by taking the necessary safety precautions for unsafe, unprotected or hazardous items which create risks to persons or the environment.

h) Ensures that emergency arrangements are made and all relevant persons are informed.

ı) Notifies the port authority of dangerous cargo accidents occurring in the area of responsibility of the business.

i) Provide the necessary support and cooperation in the controls made by the official authorities.

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

k) Provides docks and pier for vessels and marine vessels to load or unload bulk oil and petroleum products with appropriate installation and equipment.

l) Provides transport of hazardous materials, which are not allowed to be temporarily suspended or not permitted, to offshore premises as soon as possible without waiting.

m) May not berth vessels and marine vessels carrying dangerous goods without the permission of the port authority.

n) Creates a storage site for containers carrying hazardous material according to segregation stowage rules and takes the necessary fire, environment and other safety precautions. In the event of loading, unloading or limbo of dangerous goods on ships and sea vessels, the vessel responsible shall take necessary safety measures against loading and unloading or limbo operators, especially against heat and other hazards during hot seasons. Flammable materials must be kept away from spark-forming operations and tools or equipments which generate sparks must not be operated in dangerous load handling sites.

o) Prepares an emergency discharge plan for discharging ships and marine vessels from coastal facilities in an emergency.

3.1.2 Responsibilities of Load Related Institutions

a) shall prepare and cause to be prepared all compulsory documents, information and documents relating to dangerous loads and ensure that these documents accompany the carriage during the carriage activity.

b) shall ensure legislative classification, identification, packaging, marking, labelling and plating of hazardous cargoes.

c) shall ensure that hazardous cargo is safely loaded, stacked, secured, transported and discharged to approved and regulated packaging, container and freight transport unit.

ç) shall ensure that all relevant personnel are trained in the hazards of dangerous load carried on the sea relating to safety precautions, safe operation, emergency precautions, safety and similar matters, and shall keep training records.

d) shall obtain the necessary safety precautions for unsafe, insecure or hazardous items which are hazardous to persons or the environment.

e) shall provide necessary information and support in case of emergency or accident.

f) shall notify Ministry of dangerous load accidents occurring in the area of responsibility.

g) shall provide necessary information and documents in the controls carried out by the official authorities and provide necessary cooperation.

3.1.3 Responsibilities of Master

1) The responsibilities of the masters of vessels which shall unload or load the dangerous loads by approaching the port are listed below.

a) Ensures that the vessel, devices and equipment are in a condition suitable for dangerous load carriage.

b) Ensures that all mandatory documents related to dangerous loads, information and documents requested from the coastal facility and load responsible accompany the dangerous load.

c) Ensures that all safety precautions related to the loading, unloading, handling, transporting and discharging of dangerous cargoes on board the ship are carried out and maintained, and carry out the necessary inspections and audits.

d) checks hazardous cargo entering the ship is properly identified, classified, categorized, certified, packaged, marked, tagged, declared, safely loaded and transported in approved and proper packaging, container and freight transport unit.

d) Ensures that all ship personnel are informed and trained about the hazards of transported, loaded and evacuated dangerous load, safety precautions, safe operation, emergency precautions and similar matters.

e) Ensures that persons who have received appropriate and necessary training in loading, transporting, evacuating and handling hazardous work with occupational safety measures.

f) May not go out of the area allocated to him and may not anchor and approach the pier and dock without permission of the port authority.

g) Implements all rules and precautions during navigation, manoeuvring, mooring, berthing and separation of vessel in order to carry dangerous load safely.

ğ) Provides safe entry and exit between ship and dock.

h) Informs personnel of the dangerous items on the ship in terms of applications, safety procedures, emergency measures and intervention methods.

ı) Keeps current lists of all hazardous cargoes on board and declare them to interested persons.

i) Notifies the port authority of unsuccessful, unsecured ships, persons or dangerous items which constitute a risk to the environment by taking necessary safety measures.

j) Notifies the port authority of dangerous load accidents occurring on board. (002-Incident Reporting procedure)

k) Provides the necessary support and cooperation on the vessel controls made by official authorities.

3.1.4 Responsibilities of the Dangerous Goods Safety Consultant

(1) The duties and responsibilities of the dangerous goods safety advisors (TMGD) who are employed to assist and advise on the operation of the port enterprise to let them make shipping, carrying, packing, loading, filling and discharging of dangerous goods in accordance with international agreements and relevant legislative provisions which are parties to safety, without harming human health, other living beings and environment

The main task of the advisor is to facilitate the management of these hazardous substances activities in the safest way, under the responsibility of the person in charge of port operation, by determining and using the most appropriate tools and activities within the scope of the work requirements.

(2) When considering the activities within the Port Authority, an advisor mainly performs the following tasks:

a) To observe that the provisions of the international agreement and contract (IMDG Code, etc.) for the transport of dangerous goods are complied with.

b) To submit proposals for the operation of the transfer of dangerous substances in accordance with the provisions of the IMDG Code.

c) To prepare the annual activity report related to the transportation of dangerous goods by the operator within the first three months as of the end of the year and to present it to the Ministry on electronic media. The said annual report includes the following minimum points:

1) Hazard class and properties of dangerous substances.

2) Total amounts of dangerous substances by class.

3) IMDG Koda reports on the accidents that have taken place in business.

4) Which transport type of dangerous materials carried.

5) Whether cargo is carried or not in scope of exemption provided in IMDG Code if it is carried, amount and class.

6) Includes additional safety assessments of which security advisor deems necessary for the operation.

ç) To determine the dangerous substances to be carried and determining the requirements and procedures for compliance with the IMDG Code for this substance.

d) To guide the Port Operator when purchasing the transportation vehicles to be used for the transportation of dangerous goods which are operational subjects.

e) To establish procedures for the control of the equipment used in the transport, loading and unloading of dangerous goods.

f) To provide or receive training in respect of national and international legislation and any amendments made to them, in accordance with the port operators, and to keep records of such training.

g) To identify emergency procedures to be applied in the event of an accident or a possible event affecting safety during the transport, loading or unloading of dangerous goods, having employees periodically carry out exercises related to them and keeping their records.

ğ) To ensure that measures to prevent the recurrence of accidents or serious violations are taken in coordination with the workplace HSE specialist.

h) To ensure that the special conditions stipulated by the relevant legislation are taken into account when transporting dangerous goods in the selection and operation of subcontractors or third parties.

i) To ensure that employees involved in the transport, filling or evacuation of dangerous materials have information about operational procedures and instructions.

i) To take measures to increase the awareness of the relevant personnel in order to be prepared for possible risks in the transport, loading or unloading of dangerous goods.

4 RULES AND MEASURES TO BE MET / APPLIED BY COASTAL PLANT

4.1.1 General Rules

(1) Operators of coastal facilities having the Dangerous Goods Conformity Certificate shall take the following measures.

a) Coastal facility operators shall ensure that if dangerous goods may not be stored in the area of which they are discharged at the port or dock, so that they may be transported outside the coastal premises as soon as possible without being held at the port area.

b) Dangerous goods shall be packed appropriately and information shall be provided on the packaging which identifies the dangerous substance and information on risk and safety measures.

c) Wear protective clothing appropriate to the physical and chemical properties of the load during loading, unloading and storage of coastal facility personnel, ship's crew and other load relating officers engaged in the handling of dangerous goods. Annex-14 presents the use map of PPE.

ç) Persons fighting with fire at the handling of hazardous materials shall be equipped with firefighter equipment, and fire extinguishers and first aid units and equipment shall be available at all times.

d) The operators of coastal facilities prepare an emergency evacuation plan for the evacuation of ships and marine vessels from coastal facilities in case of emergency and submit them to the port authority for approval. (Annex-8 Emergency Meeting place is presented)

e) Operators of coastal facilities are obliged to take fire, safety and security measures. (In Annex-4 the plant general fire plan and in Annex-6 the fire plan for the areas handled by Hazardous Loads is presented.)

f) Operators of coastal facilities shall be notified by approving the matters specified in this item to the port authority. (002-Event notification procedure and 004-Emergency procedure are presented.)

g) The inspection of the provisions of this Article shall be carried out by the port authority, and when any nonconformity is detected, the handling operation shall be stopped and the nonconformity shall be remedied.

ğ) Personnel who do not have the required training and certification in accordance with the Regulation on Training and Authorization under the International Code on Dangerous Loads Carried by Sea, published on the Official Gazette dated 11.2.2012 and numbered 28201, are not allowed to enter and operate dangerous cargo handling operations and areas where these operations are performed.

IMDG Code of Conduct for Unloading and loading of Class 1 Explosives, Class 2 Gases and Class 7 radioactive materials which is transported to port area by land and sea shall not be undertaken.

4.1.2 Rules Regarding Dangerous Load Procedures;

a. In the port area, the storage of IMDG Code Class 6.2 contaminants is prohibited. Loads in accordance with Class 6.2 shall only be discharged from the vessels, depending on the carrying unit, under tackle, or, if loaded on board, loaded directly onto the ship (under tackle) from the vehicle door.

b. IMDG Code 5.1 Classified fertilizer loads from oxidising substances shall be discharged / pumped and not stored in the port area.

c. Internal discharging and internal loading operations of the containers / transport units taken on the IMDG site shall also be carried out in this area.

D. In port, Class 6.1 Toxic and 6.2 Infectious Materials shall not be discharged and loaded.

to. In the port area, all classifications in the transport units are the responsibility of the loader and the carrier to prepare the stacking-sorting, placing, labelling, packaging, preparing the freight proposal and related shipment documents.

f. After the hazardous cargoes are loaded in the container, the loading certificate shall be signed by the loader.

4.1.3 Dangerous Load Stowage Segregation, Site Surveillance and Control

a-) There is no storage and storage facilities in the port area.

a) A general layout plan of the areas where the Coastal Facility and Dangerous Goods are handled in ANNEX-001 is presented.
b) Hazardous substances are moving in such a way that they do not interfere in the conveyor (AN Fertilizer) and closed pipelines (Ammonia, Sulfuric Acid, Phosphoric Acid).
c) Procedure 009-Port Site AN Fertilizer Explosion Procedure was established in order to prevent accidents or to reduce the effects of accidents during the AN Fertilizer evacuation.
d) In case of leakage of ammonia pipe drainage, Procedure 010-Ammonia leak-blast procedure is applied.
e) Routine checks should be performed to be prepared against any possible source of fire, leakage or other problems. (Annex-13 Emergency leak plan is presented.)
f) Handling of the leaked equipment is carried out under the supervision of responsible personnel.
g) Procedure 011- Procedure for Sulfuric Acid and Phosphoric Acid burns.
h) Port area where dangerous cargoes are located; 7/24 camera and security personnel are kept under surveillance with patrol tours.
i) All work to be carried out in the Port where dangerous cargoes pass, except for the loading / unloading operations, is subject to the permission of the Operation Directorate.
j) In the event of an accident or leak, the Procedure 002-Event location notification procedure shall be followed and Form 001-Accident event notification form is filled in. In the event of injury to employees and the people in the vicinity, the Form 002- Accident and occupational disease notification form is filled in and the records are stored.

4.1.4 Entrance-Exit between Ship and Coast

(1) According to the provision of the Regulation on the Transport of Dangerous Goods by Sea, the Port Operator shall ensure that the entrance-exit system between the ship and the coast is appropriate and safe;

a- There is a strong communication between the vessels approaching the port docks and the coastal facility and in order to ensure that the ship's personnel are not exposed to the risks of the port area and their entrance and exit; the ship's personnel are provided with a ring transport service to the main port gate from the docks.

b- It is forbidden to walk the ship's personnel on the port, which is indicated by the signboards hanging on certain places of the docks. There are marked pedestrian walkways reserved for the port personnel.

c- The ship's boarding piers shall be used for ship docking.

d- There is sufficient lighting on the docks to ensure that the vessels approaching the coastal facility are illuminated adequately.

e- General layout plan of the port (ANNEX-001) is also required.

f - Emergency contact points and contact information presented in ANNEX-003 are hung on the scaffolding control room.

4.1.5 Dangerous Goods Handling Guide

Hazardous loads are divided into nine classes and subclasses according to the hazard rate of each class. These are briefly given below.

Class 1 - Explosives: in solid or liquid state, which cause damage in large quantities around due to high temperature and pressure fluctuation. Moving is very dangerous and most ports are forbidden to handle. However, they may be transported by obtaining permission from the competent authorities. Ports must be cautious and take necessary precautions against the factors that shall activate the passive explosives. This class consists of six sub-classes. They bear great risk both vessel and port integrity and security of the personnel at ports.

Class 2 – Gases: They have explosive, poisoning and burning properties. They are harmed because of the deterioration of their integrity in their containers. This class consists of three sub-classes. Gases are important for the port personnel due to whether their poisoning effect or damage by burning. Danger areas are expanding by spreading them into the air. The gases are generally

compressed and transported under high pressure or under reduced pressure when cooled. Depending on their chemical properties, gases; flammable gases, non-flammable gases, non-toxic gases, flammable gases and corrosive gases. In some cases, the gases display one or more of these properties at the same time. (Dinç, 2001: 7)

Class 3 – Liquids: Liquids in this class form liquids which form flammable gasses at temperatures below 61 ° C. There are no subclasses. In the case of warming, three groups are separated according to the combustion points of the gases they are leaving. Liquids allow the fire to spread around faster during combustion due to its ability to spread rapidly on the surface. An unrecognized leak during port operations may cause major accidents.

Class 4 – Solids: Solids in this class have a fire hazard for environmental loads. This class consists of three sub-classes. Solids are combustible in the combustion process. When they meet with the proper air and heat source, they may cause significant accidents to the port facility.

Class 5 - Oxidizing Materials and Organic Peroxides: The substances in this class provide the necessary environment for flammable substances or accelerate the fire or cause explosions in the structures. This class is divided into two sub-classes. The oxygen needed for the flammable substances is provided by these substances. It is important to keep the air flow under control in the presence of these substances.

Class 6 – Toxic and contagious materials: This class is a danger to living things in terms of their structures. As living things directly affect and pose a threat, food items in their immediate vicinity are also threatened by contaminated indirect routes. This class consists of two sub-classes. It poses great danger to the port personnel when they are taken in contact with the body, inhalation or intake. In particular, the use of contaminants as a carrier may lead to further infections.

Class 7 – Radioactive substances: Radioactive substances cause permanent damage by mutation of cells in contact with living bodies. The International Atomic Energy Agency (IAEA) is responsible for the classification of radioactive substances. These class loadings are divided into three categories according to the amount of radiation they have. These are category I with least risk, category II with intermediate risk, and category III with high risk. Handling of Class 7 in ports is only possible with permission from the competent authority. Class 7 does not allow cargo to enter ports as many port authority infrastructures are not available.

Class 8 – Abrasive materials: These materials cause permanent damage to the skin of the creature they are in contact with. In addition, they disrupt the integrity of structures in other materials which have a contact. These loads are divided under 3 packaging. These are for the highest level hazardous abrasives in the packaging group, II medium level abrasives in packing group II and the lowest level abrasives in packing group III.

Class 9 – Other dangerous substances: The substances in this class include any substances not included in the other eight classes, but which are at risk of being hazardous during transport. There is no generalization for loads in this class, and the load type is too large. For each load, separate safety precautions must be taken. The IMDG Code specifies these loads by name. As mentioned above, the number of dangerous loads is very high. Labelling and marking applications are carried out for these loads specified in the IMDG Code. In the marking practice, "the name of load used in transport" the number designated by the United Nations Committee on the Transport of Dangerous Goods, starting with the UN and being four digits, shall be marked on the outside of the package. During the transfer of loads on this site, precautions to be taken in case of emergency may be learnt by recognizing the load with the UN number on the brand. The labels are affixed to the places where they are visible in the outer part of the container where the load is carried in the labelling process, in the shape of at least 10x10 cm. In some cases, the loads may have been brought to the port by the transport units. In such cases, there must be signs on the outer parts of the load-bearing units that indicate the dangerous load. This marking process is also called plate fixing. The plate fixing system is very similar to the labelling system and the measures of the rhombus should be at least 25x25 cm. The dangerous cargoes that are brought to the port must have transport documents to be loaded or unloaded from the ship. The transport document must include the UN number that starts with the UN, the technical name given to the load, the subclass of the load class, the packing group, the type and number of loads sent, the total volume or mass of the specified load, the sender and receiver information, A dangerous cargo manifest is being prepared so that the transport of dangerous cargoes on ships may be controlled. With this manifest, the cargoes on board or to be loaded on board are shown separately from other cargoes. This manifesto makes it easier to control which loads shall be loaded on the ship or which loads shall be taken from the ship. The other one of the transport documents is the Container / Vehicle Packing Certificate. This certificate is issued by the authorized person in dangerous loads to the load handling unit IMDG Code Section 5.4.2 in which it declares that it has been safely installed. Ports must have special areas where hazardous cargoes are controlled by specific areas of entrance and exit. It is very important that the loads brought here are in dangerous load class and stacked according to rules. Stack conditions are given in IMDG code Section 7.1. It is important from the safety point of view that the port personnel stack in accordance with these rules. Special precautions should be taken for Class 1 explosives and Class 7 radioactive substances. Class 1 explosives should be kept in special areas isolated from fire and explosions. Class 7 radioactive materials must be kept in special containers in lead containers at a sufficient distance from other cargoes where personnel entry is restricted. The separation of dangerous cargoes is also very important. Accidents may happen as a result of the loads associated with each other. For this

reason, IMDG noted in Part 7.2 of the Code how hazardous cargoes should be separated. In addition, these separation rules are important for the use of packaged cargoes in intra-container stacking and vehicle cargoes. It is the responsibility of the loader to load hazardous cargoes into the container and vehicle. However, when the container and the vehicles are in the port, the responsibility belongs to the port. It is therefore important that the cargoes are separated in accordance with each other. As an example, it is necessary to test the separation of the class 9 other hazardous loads into the remaining eight classes. Dangerous loads may cause accidents due to undesirable situations during transportation. There are special procedures to be carried out in these accident cases. EmS procedures prepared by IMO are available for ships carrying dangerous cargo. These procedures are used in conjunction with the IMDG code. Emergency Procedures for Dangerous Freight Forwarding Vessels have been adapted by the Maritime Safety Committee and first published by the IMO in 1981. When the IMDG Code changes are published, the new EmS attachments are also published. (IMO, 1996: 26) Since 2003 the EmS has been divided into two, e.g. F-A, S-E, the first is related to the measures to be taken in the fire and the second is the measures related to the spreading of the oil. “Emergency Procedures for Dangerous Freight Vessels” (EmS) have been issued by the IMO in addition to the IMDG codes. (Zorba, 2009: 148) Medical first aid information is needed for emergencies in case of any accident during the transportation of dangerous cargo. For this reason, the Medical First Aid Guide (MFAG) for Use in Accidents involving Dangerous Freights has been prepared by the IMO as a supplement to the International Medical Guide for Ships (IMGS) prepared by the World Health Organization (WHO). The MFAG has been co-operated with the WHO and the International Labour Organization (ILO). It is possible that these guides are used in port accidents involving dangerous cargo handling operations.

4.1.6 Fire Prevention Measures

- In all port areas and docks there are alarm buttons and announcement system located in places suitable for the fire station, fire water storage tanks, fire hydrants, fire cabinets (nozzles, fire hoses), pier and dock areas. (Annex-004 Fire plan for areas where dangerous cargoes are handled)

- There is one electric and diesel type fire pump that shall feed the seawater with the fire station at the port in case of fire.

- Tow boats with the ability to extinguish fire for fire intervention which may be found on the port pier and in the port connected vessels are provided from the General Directorate of Coastal Safety. (Appendix-009 Inventory of Port Service Ships)

4.1.7 Emergency Procedures:

The Emergency Procedure is presented in Procedure-004. Emergency Plan (Annex-5) and Emergency Procedure (Procedure 004) are ensured by Occupational Health and Safety Specialist and Terminal Manager.

4.1.7.1 Medical First Aid Possibility and Abilities In Port For Accidents Originating from Hazardous Substances;

1. In case of medical first aid such as poisoning and injury caused by dangerous substances, work doctor and nurse should inform the nurse about the necessary emergency intervention.

2. In case of emergency, the Emergency Management Plan presented in ANNEX-005 shall be complied with under the coordination of the persons in the emergency management scheme presented in ANNEX-007.

3. In the event of an accident, the Procedure 007- Accident Procedure is applied.

4. Form 001-Accident incident notification form and Form 002- Accident and occupational disease notification forms are issued as a result of incidents causing injury, records are kept by Occupational Health and Safety Specialist.

5. In all operations to be carried out in the port area, the personnel is provided to use appropriate KDD. (In KD-012 KDD usage map is presented.)

   In case of accidents involving dangerous substances in the port facility, the Medical First Aid Guide (MFAG: Medical First Aid Guide) which is attached to the IMDG code will be used. Full time 1 Nurse is working in the infirmary, which is located in the port administrative building. First aid training is provided in accordance with the legislation.

4.1.7.2 Notifications to be made on-site and off-site in case of emergency;

Notification of Hazardous Material Events, (presented in procedure-002)

(1) Any event related to dangerous cargo in the port area and caused by any kind of dangerous material which may cause damage to persons, vessels in the port or vessel, port or any other property or area may be referred to the Port Authority as "Dangerous Goods Events Notification Form "as soon as possible.

IMDG code against FIRE and LEAK which dangerous substances listed in the IMDG code listed for dangerous substances specify followings:

For fire, EK-005 Emergency pallet, Annex-004 Fire plan of the areas where the General and Dangerous Goods are handled, EK-007 Emergency Management Chart, EK-003 Emergency Contact points and contact information are available.

Urgent response is made in accordance with the procedures and principles specified in the Emergency Plan for Leakage and in accordance with the port operating instructions, Annex-013 Emergency Leak Plan.

Possibility of emergency response against leakage and fire is available at the port. (In accordance with Annex-005 Emergency Management Plan in Annex-007 Emergency Management scheme. Environmental spills shall be intervened with emergency response equipment against sea pollution in Annex-011 Port facility.)

4.1.8 Procedures for reporting incidents

(1) As a result of the accident caused by dangerous substances, the background and reasons of the accident are investigated and a report is prepared so as to discuss and evaluate at the port security committee. The work safety committee is responsible evaluation the accident in terms of intervention rate, correct method use and efficiency, root causes and situations. Measures to prevent further events are taken by the port enterprise. (Reporting of 007 accidents and 006 Hot Work procedures are presented.) Dangerous material accidents are reported to the Port Master. (the event notification procedure is presented in procedure 002).

5 CLASSES, TRANSPORT, SHIPMENT / DISCHARGE, HANDLING, DISASSEMBLY, STACKING AND STORAGE OF DANGEROUS SUBSTANCES

CLASS 1 - EXPLOSIVES

SECTION 1.1 They have mass explosion feature. Example: TNT, dynamite

SECTION1.2 Cluster explosives. Example: Hand bomb

SECTION1.3 Explosives with risk of fire. Example: Fireworks

SECTION1.4 Explosives without significant effect. Example: Fuse Sparkler

SECTION1.5 Severely explosive and capable of mass explosion. Example: Ammonium Nitrate-Fuel Oil Mixture

SECTION 1.6 Those which are very explosive and do not explode in bulk

* The markers of the explosives are the same, the numbers in the middle indicate the respective subclass

CLASS 2 – GASES

SECTION2.1

Flammable gases

Example: LPG, Hydrogen, Acetylene

SECTION2.2

Non-combustible, non-toxic gases

Example: Nitrogen, Oxygen (burner)

SECTION2.3

Toxic gases. Choking gases. Irritating gases

Example: Carbon dioxide, chlorine, toxic gases

CLASS 3 - FLAMMABLE LIQUIDS

SECTION3.1

Materials of which ignition points are under 60.5 ° C.

Example: benzene, benzene, toluene

SECTION3.2

Materials with a flash point of 60.5 - 93 ° C.

Example: tar, fuel oil, motor oils

Flash Point: The lowest temperature at which a liquid vapour forms a flammable mixture with air. The substance with a low flash point is more dangerous.

Electrostatic Charge: It is the charge of the friction of hoses and pipes or non-conductive materials through which liquid or gas passes.

STATIC ELECTRICITY PROTECTION: In cisterns of vehicles carrying hazardous materials all other connections, such as pumps, connected to the cistern must be grounded before being filled, to protect from the potential of an electric potential that may occur until the end of filling and draining.

CLASS 4 - FLAMMABLE SOLIDS

SECTION 4.1 Flammable and readily flammable solids. Example: Red phosphorus, magnesium, naphthalene, sulphur

SECTION 4.2 Self-igniting substances. Example: Phosphorus compounds of white phosphorus, sodium-potassium and calcium

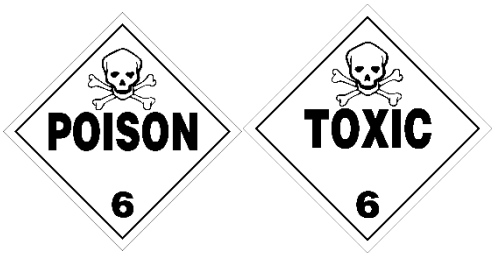
SECTION 4.3 Substances which react with water to produce flammable gases. Example: Sodium potassium, calcium metals, calcium carbide

CLASS 5 - OXIDANTS

SECTION 5.1 Oxidizing substances. They have a burning effect due to the oxygen they contain. Example: Ammonium nitrate, calcium chlorate

SECTION 5.2 Organic peroxides. They burn really fast because of carrying Oxygen. Very sensitive to friction. Burning is harmful to the environment. Example: Tert-butyl hydro peroxide.

CLASS 6 – TOXIC SUBSTANCE



SECTION 6.1

Toxic liquid and solid substances

Example: Arsenic, cyanide

SECTION 6.2

Microbial contaminants

Example: Anthrax, medical wastes

CLASS 7 – RADIOACTIVE SUBSTANCES

It radiates ionic rays and breaks electrons in atoms and molecules to form radiation diseases.

Example: active gamma sources used in radio therapy, sources in nuclear medicine laboratories, etc.

CLASS 8 – ABRASIVE LIQUIDS

They cause damage and wear when they come into contact with leather or metals.

Example: Sulphuric acid, hydrochloric acid, mercury, nitric acid

CLASS 9 – OTHER DANGEROUS SUBSTANCES

It is not in the other 8th class, but it is naturally dangerous.

Example: Asbestos, pesticide, rock wool

Harmful for the environment

5.1.1 STORAGE OF HAZARDOUS MATERIALS

- The separation matrix of hazardous substances is as follows.

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

8	4	2	2	1	x	x	x	1	1	1	2	2	x	3	2	x	x	
9	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

If there are 1, 2, 3 or 4 phrases between the two classes, these items are incompatible and the process of discrimination ends here. These two items must be loaded in different containers. This table is paying attention when loading dangerous materials with personnel who work in our facility. Those in the discrimination table having x wards usually have a matching class or second hazard. The discrimination table established by the IMDG code is only relevant to general prohibitions and the essential UN numbers must be taken into account. The special provisions required for the separation are specified on the list of dangerous cargoes, and if there is a contradiction between the provisions, the list of dangerous cargoes is checked. (The 001 Pump ejection procedure is followed.)

Pre-loading inspection is carried out before loading the container in our facility. These controls are aimed to help those who handle the load with a possible problem. After the pre-load check, the stack plan and loading list are prepared for the loaders and given to the operators.

The physical condition of the container is strictly checked before these operations are performed.

The distinction aims to separate the dangerous loads that are in danger from each other and to allow the loads to be placed in separate containers. Our facility attaches importance to the distinction between hazardous cargoes and containers. Mixed loads must be checked for loading according to IMDG code separation rules.

Before placing the loads in the dangerous substance class into the container, necessary inspections regarding the separation should be made and the loading document must be signed by the loader. The load shall not be loaded on board the ship if any container is found to have an improper mixed load. When such a situation is encountered, it is absolutely necessary to remove and re-install the inappropriate loads in the container. As a port operator, the cost of this operation and the cost of delay or penalties may be assessed by the port authority or the competent authorities. Our facility must always check mixed charges to avoid such situations. In the case of hazardous material loading, the loading document may be created by you.

		2.1	2.2	2.3	3	4.1	4.2	4.3	5.1	5.2	6.1	8	9
Flammable gases	2.1	0	0	0	S	A	S	0	S	S	0	A	0
Flammable and non-toxic gases	2.2	0	0	0	A	0	A	0	0	A	0	0	0
Toxic gases	2.3	0	0	0	S	0	S	0	0	S	0	0	0
Flammable liquids	3	S	A	S	0	0	S	A	S	S	0	0	0
Flammable participant	4.1	A	0	0	0	0	A	0	A	S	0	A	0
Self flammable substances	4.2	S	A	S	S	A	0	A	S	S	A	A	0
Hazardous when contact													
with water	4.3	0	0	0	A	0	A	0	S	S	0	A	0
Oxidizing substances	5.1	S	0	0	S	A	S	S	0	S	A	S	0
Organic peroxides	5.2	S	A	S	S	S	S	S	S	0	A	S	0
Toxic substances	6.1	0	0	0	0	0	A	0	A	A	0	0	0
Abrasive materials	8	A	0	0	0	A	A	A	S	S	0	0	0
Dangerous goods and articles	9	0	0	0	0	0	0	0	0	0	0	0	0

0= Decomposing is not required

A= > 3 m or not decompose

S= Exposed> in 6 m storage>12 m or exposed> 3 m or in storage> 6 m

6 OPERATIONAL ISSUES

6.1.1 Docking of ships

Annex-12 shows the ship anchorage plan of. During shipbuilding and load evacuation, the 001 Shipment Discharge Procedure is treated appropriately. The Ship's Personnel must have the Annex-10 Hazardous Materials Handbook. In an emergency, the Ek-003 Emergency Contact Points and the contact information are hanged on the dock.

The measures to be taken day and night for loading or unloading dangerous loads are as follows;

DAYTIME:

- MSDS of the load from the agency is checked.
- Information of ship is given with pilot towage organization.
- Load characteristics are checked from the dangerous load lists by looking at the UN number which is loaded from the IMDG code book.
- The clothing to be worn by the staff to be employed is identified. (Annex-14 PPE usage map)
- The package characteristics of the load are determined. (General cargo)
- IMO class law enforcement officers shall be interviewed with the agency if fire brigade is required (class 1) and they shall be interviewed to see if they shall be at the port of arrival at the ship berthing date and time.
- If the load is landed to the port area, the risk analysis is made according to the load of the region to be loaded and made ready.
- During the landing of the load, necessary precautions are taken in the area where the land is to be taken, and continuous control of these measures is ensured.
- Ship approaching is made in communication with the pilot tugboat organization in accordance with the position given by the port planning, while waiting for the port guard officer to board the ship (Annex 12 Schedule of Anchoring Ship)
- Discuss with the master the presence of pre-existing MSDS information and any other required measures.
- The warehouses to be used for loading and unloading are determined.
- This warehouse and burden are checked by the port and ship personnel.
- Packaged products are checked for packaging and container products are checked for labels.
- Discharge / installation are completed with OSH refuge.

NIGHT TIME:

• At night, in addition to the daytime conditions, the safety and lighting control of the area where the dock and the load are to be carried out is made.

• If the safety strip is pulled in the area where the load is to be taken, the security strip pulled is constantly checked by the port security.

• Security groups control site in day and night conditions.

• In each case, the dominant spot observer is placed on the ship against the danger that may come from the sea.

• Checking of ship has been completely unloaded or loading has been completed are carried out by the port personnel and the points to be loaded with the master and the agent are determined and the loading is carried out according to the IMDG code bases. After the loading is completed, it is negotiated with the plotting and towage and the ship is safely leaved the port.

6.1.2 Weather Condition Alerts

All operations are stopped due to lightning strike, high speed winds and still air (in winds below 2 knots) or by the instruction of the port authority. Fixed ventilation systems shall be turned off during lightning storms.

The wind speed limits of the BAGFAS terminal are shown below;

Wind-meters / second	Definition	Beaufort Sea scale
LESS 0.5	**CALM**	**0**
0.5 - 1.5	**LIGHT AIR**	**1**
2.0 - 3.0	**LIGHT BREEZE**	**2**
3.5 - 5.0	**GENTLE BREEZE**	**3**
5.5 - 8.0	**MODERATE BREEZE**	**4**
8.5 - 10.5	**FRESH BREEZE**	**5**
11.0 - 13.5	**STRONG BREEZE**	**6**
14.0 - 16.5	**NEAR GALE**	**7**
17.0 - 20.0	**GALE**	**8**
20.5 - 23.5	**STRONG GALE**	**9**
24.0 - 27.5	**STORM**	**10**

28.0 - 31.5	**VIOLENT STORM**	**11**
MORE 32.0	**HURRICANE**	**12**

Loading / discharging shall be stopped when the wind speed reaches 13.5 meters / second, and all hoses shall be removed when reaching 16.5 meters / second.

6.1.3 Prevention of sparking

Sparking should be avoided when opening and closing the covers, hose connection or disassembly, and working with metal tools on the deck. (Port maintenance procedure has been provided in Procedures -005 and hot working procedure has been provided Procedures 006.)

6.1.4 Gas Measurement and Degassing Operations

The procedure for entering the confined spaces was suspended in the facility at -003.

Objective, indicates the precautions to be taken to enter closed containers such as tank, boiler, tunnel etc. for reasons such as maintenance, repair, cleaning.

1) With the request of the operation department of the empty tanks, the general working permission form is filled and the tank top and bottom manhole covers are opened and ventilated (Maintenance Department / Technical Safety)

2) ex - proof fan is installed in the tank which is requested to be cleaned, a fan is installed in the time requested by the operation department.

3) After the ventilation of the tank requested to be cleaned is completed, the Technical Safety Department carries out GAS MEASUREMENT in the tank. If the measured values are in accordance with the values specified in "Input to Closed Volumes", the process continues. If the values are not available to enter the tank, the tank ventilation is continued. Procedures 003 Degassing procedure is presented.

4) It is determined by the department concerned about the person entering the tank to prepare for entrance to the closed area. This worker's name is written to work permit.

5) When work is done in the closed vessel (tank), one person is waiting outside as a supervisor for work until the end of the work and helps his friend.

6) Anti static jacket, safety belt, chemical protective gloves, boots, fresh air mask and filter are given to person to be entered to closed area (tank).

7) Anti static jacket, safety belt, chemical protective gloves, boots, fresh air mask and filter are given to person to be entered to closed area (tank).

8) GAS SENSOR DETECTOR is installed on the side of the employee who is entering to the tank. If the detector gives a warning, the amount of gas is increased. In this case, the person is immediately taken out and the work is stopped.

10) It is a must to wear seat belt to the tanker. The rope is connected to the seat belt and is left out of the tank. It is used by the supervisor to take someone out in case of any fainting.

11) The lighting in the closed container is made with 24V Ex-Proof lamps with isolation. The use of non-proof equipment is strictly prohibited.

12) If hot (with fire) work is done in the tank, all the above applications are done. Operation may be done after "Emergency Work Permit" is issued.

13) Calibrations of portable gas detectors and personal gas detectors are done annually. Records are stored in the HSE Division.

14) The "Entry to Closed Volumes" is filed when Form is signed. The records are stored.

7 DOCUMENTATION, CONTROL AND REGISTRATION

Procedure-008 (Documentation, control and recording procedure was established) to determine the precautions to be taken to reduce and control the adverse effects of any chemicals that come into, stored in, and used in the BAGFAS facility.

General Definitions:

Chemical substance: Any element, composition or mixture that is found in nature or that is produced or that occurs as a result of an operation or waste,

Hazardous chemical substance: Substances with one or more of explosive, oxidizing, very easily extinguishing, easily exacerbated, exacerbated, toxic, very toxic, harmful, corrosive, irritant, allergic, carcinogenic, mutagenic, toxic for reproduction and environmentally hazardous substances, physic-chemical or toxicological the characteristics and use of or the presence in the workplace and the risk of health and safety risks to employees, occupational exposure limit values,

Explosive substance: solid, liquid, pasty, gelatinous substances which may quickly exothermically react with sudden gas evolution without atmospheric oxygen and / or spontaneously explode by heating when partially closed or burst rapidly in defined test conditions,

Oxidising substance: substances which cause considerable exothermic reaction, in particular with other substances, especially flammable substances,

Very easily extinguishing substance: liquid substances with a flashpoint below 0 ° C and a boiling point below 35 ° C and with gaseous substances, which may withstand air at room temperature and under pressure,

Highly flammable substance: Solid, flash point below 21 ° C, which may be heated by air at ambient temperature and eventually extinguishes, ignites spontaneously for a short time with fire source and continues to burn after removal of the source of ignition. , in the presence of water or moist air, in dangerous quantities, very easily extinguishing gases,

Flammable substance: Liquid substances with a flash point between 21 ° C and 55 ° C,

Very toxic substance: Substances which cause acute or chronic damage to human health or death when ingested in very small quantities, taken orally, by the skin,

Toxic substance: Substances which cause acute or chronic damage to human health or death when inhaled in small quantities, ingested by mouth, absorbed through the skin,

Harmful substance: substances which cause acute or chronic damage to human health or death when inhaled, ingested by the mouth, absorbed through the skin,

Abrasive substance: In the case of living tissue, substances which may cause touch destruction,

Irritant substance: Substances which are not classified as corrosive, which may cause local erythema, eschar or edema in the immediate, prolonged or repeated manner directly on the mucosa or skin,

Allergic substance: substances which, when inhaled, cause the skin to become excessively sensitive, and which, if exposed later, cause characteristic adverse effects,

Carcinogenic substance: substances which cause cancer formation or accelerate cancer formation when ingested and penetrating to the skin,

Mutagenic substance: substances which, when ingested by the mouth, through the mouth, cause genetic damage to the genital area or accelerate the formation of this effect,

Toxic substance for reproduction: substances which reduce the reproductive function and capacity of the male and female when ingested by the mouth, and / or bring in non-heritable adverse effects that affect the child to be born or accelerate the formation of adverse effects,

Environmentally hazardous substance: When entering the environment, the immediate or later short or long-term dangerous substances for one or more elements of the environment,

Processing of chemical material: The production, processing, use, storage, transport, treatment and disposal of wastes,

Occupational Exposure Limit Value: Unless otherwise stated, the upper limit of the time-weighted average of the concentration of chemical substances in the air in respiratory tract of employees,

Respiratory zone: The center is the mid-point of the line connecting the ears of a person, with a radius of 30 cm,

Biological limit value: The upper limit of the concentration of a chemical substance, metabolite or a substance to be detected in an appropriate biological medium,

Health surveillance: Assessments made to determine the health status of workers in relation to their exposure to a specific chemical substance,

Danger: The potential for damage or damage that may exist in the workplace or that may affect the worker or workplace,

Risk: refers to the possibility of loss, injury or harmful consequences arising from danger.

APPLICATIONS :

1) Firstly, necessary information should be collected from MSDS.
2) If the chemical is available in Cas No and IENECS No MSDS, the information obtained should be checked from other MSDSs.
3) Information need to be gathered to implement the method:
   - **a)** Cas No
   - **b)** IENECS No
   - c) Hazard signs (T, T +, F, C, Xi, Xn etc.)
   - d) R codes and if applicable GHS H phrases
   - e) If Chemical Mixture: R-codes and Hazard symbols (T, T +, F, C, etc.) of the chemicals which make up the mixture with the concentration data.
   - f) S codes
   - g) LD50 value
   - h) TLV / TWA value
   - i) Chemical Boiling Point
   - j) Operation temperature
   - k) Processes and durations applied or executed in the contract
   - l) Usage concentration of the chemical (100% o r%?)
   - m) How much of it is used?

4) Based on the R codes, either from R code table or Hazard Control Band for the chemical, Hazard Control Band for Respiration is found.

5) Chemical GHS Hazard Classification If H is present, the following table may contain a Hazard-Controlled Band for Respiration.

For Respiration

DANGER CONTROL BAND	GHS HAZARD CLASSIFICATION (H Phrases)
A	H 319, H335, H336, H304
B	B H302, H332, H318
C	C H301**, H331**, H314, H334, H341*, H351*, H361f*, H361d*, H370*, H371*, H373*, EUH031;
D	H300, H330, H360D*, H372*; EUH032
E	H340*, H350*, H350i, H360F*
* There is a risk for exposure (ingestion , ,nhalation or contact with skin) If acceptable Oral LD50 in the range of 200-300mg/kg Dermal LD50 in the range of 400 – 1000 mg/kg Steam LC50 in the range of 2-10 mg / l	

6) If we may find the TLV / TWA value of the chemical in the MSDS, we may find it in the Layout of Hazard Band for the items with Respiratory Hazard Control Band 'Occupational Exposure Limit Values table. If it is higher than the R code, the Hazard Control Bands in the 'Hazard Band Placement for Materials with Occupational Exposure Limits' table should be considered.

Hazard Band Placement For Materials With Occupational Exposure Boundary Value

Hazard Control Band	**SOLIDS** **(mg/m3)**	**LIQUIDS** **(ppm)**
A	1 < c ≤ 10	50 < c ≤ 500
B	0,1 < c ≤ 1	5 < c ≤ 50
C	0,01 < c ≤ 0,1	0,5 < c ≤ 5
D	0,001 < c ≤ 0,01	0,05 < c ≤ 0,5
E	c ≤ 0,001	c ≤ 0,05

7) Amount used in the workplace may be determined from the following table. However, if different people are involved in the same use, they should be added only if they are made in the same environment and if the chemical may be spread to the air.

Usage Level

Amount		Solid	Liquid	
	Weight	**Type of Supply**	**Volume**	**Type of Supply**
Low	Grams	Package or bottle	millilitre	Bottle
Medium	Kilograms	Bottle or barrel	litre	Barrel
High	Tons	Bulk	cubic meters	Bulk

Alternatively, the following tables may be used to determine the amount of use. First, the level of use is determined according to the chemical use concentration.

When the period of use is determined; if different people are involved in the use of the same use period, these amounts are only made in the same environment and should be added if possible, so that the chemical may be spread to the air.

Usage	Sometimes	At certain intervals	Frequently	Continuous
Day	< 30 mins	30-120 mins	2-6 hours	>6 hours
Week	< 2 hours	2-8 hours	1-3 days	>3 days
Month	<1 day	1-6 days	6-15 days	>15 days
Year	<5 day	15 days-2 months	2-5 months	>5 months
CLASS	**1**	**2**	**3**	**4**

0 = Chemical substance has not been used since at least 1 year

Then the quantity of usage is determined according to the quantity class and the usage range.

Quantity Class	0	1	2	3	4
1	None	Low	Low	Low	Low
2	None	Low	Low	Medium	Medium
3	None	Medium	Medium	Medium	High
4	None	Medium	Medium	High	High
5	None	Medium	High	High	High

In the case of chemical dust; The ease of mixing into the air is determined using the following tables. It should be noted where the chemical is used.

Solids (BAU)

Low	If the hazardous substance is present in the form of grain, wax or granule, or if only very little dust appears during operation, then the pollination behaviour is low.
Medium	If the dangerous substance is large dusty or dust is formed again after a short time during operation and there is dust on the surrounding surfaces,
High	If the dangerous substance is fine dust, or dust clouds are formed which may remain in the air for a few minutes during operation, the pollution behaviour is high in this case,

Solids (ILO -HSE)

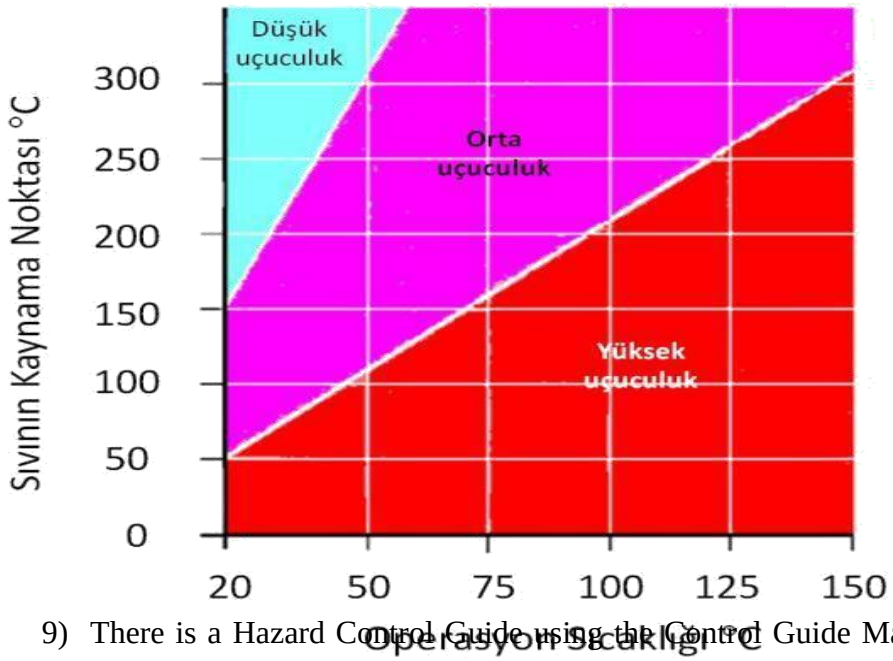
Low	Pelletized materials. A small amount of dust is observed during use. Ex. PVC pellets, wax stamps
Medium	Crystal, granular solids. When used, dust appears, but this dust goes down quickly. Generally, there is dust on the surface after use. e.g. Soap powders.
High	Fine, light powders. When used, a cloud of dust appears and remains for a while. Ex. Cement, carbon, chalk dust

8) If chemical is liquid; According to the boiling point, the following table shows the easiness of mixing into the air. Correction must be made according to the operation temperature. It may either be found in the formula or in the graphic below.

Liquids

Ease to release	**At room temperature (T 20**	**Any Application**	**Room Temperature**

	C)	Temperature (0C)	Steam Pressure (kPa)
High	Boiling point is below 50 ° C	Boiling Point ≥ 5 x Application Temperature + 50	< 0,5
Medium	Boiling point is between 50 ° C and 150 ° C	Other Cases	0,5 - 25
Low	Boiling point is above 150 ° C	Boiling Point ≤ 2 x Application Temperature + 10	> 25



9) There is a Hazard Control Guide using the Control Guide Matrix (using Hazard Control Band, Air Mixability-Volatility and Usage Quantity).

Used	Low pollination or Volatility	Medium Volatility	Medium pollination	High	pollination
Amount					

Hazard Control Band A

Low	1	1	1		1
Medium	1	1	1		2
High	1	1	2		2

Hazard Control Band B

Low	1	1	1		1
Medium	1	2	2		2
High	1	2	3		3

Hazard Control Band C

Low	1	2	1		2
Medium	2	3	3		3
High	2	4	4		4

Hazard Control Band D

Low	2	3	2		3
Medium	3	4	4		4
High	3	4	4		4

Hazard Control Band E

Control method 4 is selected for all items belonging to the hazard control band E

If there is an R code related to the risk of chemical contact with the skin, the hazard control band is found using the table below. It may also be found in the first R table.

Hazard Control Band	Assigned R Phrases
HA	**R66**
HB	**R21, R38, R36/37, R36/37/38, R36/38**
HC	**R20/21, R43, R48/21, R68/21, R48/20/21/22, R48/20/21, R20/21/22, R48/21/22, R68/20/21, R68/21/22, R68/20/21/22**
HD	**R24*, R34, R40*, R39/24, R48/24, R62*, R63*, R68*, R23/24, R23/24/25, R39/23/24, R39/23/24/25, R39/24/25, R48/23/24, R48/23/24/25, R48/24/25**
HE	**R24, R34, R27*, R35, R26/27, R45*, R46*, R60*, R61*,R26/27/28, R27/28, R39/26/27, R39/26/27/28**

*** NOTE: If you know that your substance is NOT absorbed by the skin, assignment to the hazard group may not be performed. Please note that other substances with carrier effects may carry substances that are not absorbed by the skin through the skin.**

If there are H phrases, the following table may be used.

For Skin

Hazard Control Band	GHS Hazard Classification (H Phrases)
HA	**H066**
HB	**H315**
HC	**H312**; H317, TRGS 907; H371*; H373***
HD	**H311; H314; H341*; H351*; H361*; H370*;H372***
HE	**H310; H314 ; H340*; H350*; H360***

* If it may be assumed that there is a risk for exposure (swallowing, inhalation or skin contact)
** an oral LD50 ranging from 200-300 mg / kg,
Dermal LD50 at 400-1000 mg / kg,
LC50 for steam in a range of 2-10 mg / l

If the R codes are R20,22-R23,25 or R26,28 then the table below should be used.

R Phrases	Then consider the following R statement:	Hazard Group
R20, R22	**R21**	**HC**
R23, R25	**R24**	**HD**
R26, R28	**R27**	**HE**

The amount of contact between the chemical spray or spill and the skin is assessed using the following table

Skin Contact	Impact Surface
Small surface contamination (Eruption)	**Small**
Great level of contamination **(e.g. all of the hand)**	**Big**

12) How long is the chemical contact with worker's skin? Decided by the following table.

Skin Contact	Impact Surface
Under 15 min. / day	**Short**
Over 15 min. / day	**Long**

Finally, the Skin Hazard Group of the chemical is found using the table below.

DANGER GROUP	IMPACT SURFACE	IMPACT TIME	PREVENTION REQUIREMENTS
	SMALL	SHORT	LOW
	SMALL	LONG	LOW
	BIG	SHORT	LOW
HA	BIG	LONG	MEDIUM
	SMALL	SHORT	LOW
	SMALL	LONG	MEDIUM
	BIG	SHORT	MEDIUM
HB	BIG	LONG	MEDIUM
	SMALL	SHORT	LOW
	SMALL	LONG	MEDIUM
	BIG	SHORT	MEDIUM
HC	BIG	LONG	HIGH

	SMALL	SHORT	MEDIUM
	SMALL	LONG	MEDIUM
	BIG	SHORT	MEDIUM
HD	BIG	LONG	HIGH
	SMALL	SHORT	HIGH
	SMALL	LONG	HIGH
	BIG	SHORT	HIGH
HE	BIG	LONG	HIGH

Finally, the MSDS of the chemical is transferred to a form with the help of the tables taken and the "Chemical Exposure Risk Assessment" is completed. No action is taken if the statements in the form are sufficient

CRITERIA FOR CLASSIFICATION AND LABELLING OF DANGEROUS GOODS AND PREPARATIONS

SYMBOL AND DANGER SIGN	SELECTION OF RISK COMMENTS
Explosive (E)	**R2** Risk of explosion with shock, friction, flame and other sources of ignition **R3** The risk of a very serious explosion in terms of shock, friction, flame and other sources of ignition.
oxidising (O)	**R7** May cause fire **R8** May cause fire when contact with flammable materials. **R9** It is explosive when mixed with flammable materials.
Very flammable (F+)	**R12** It fires very easily Fluid substances and preparations with a flash point below 0ºC and a boiling point equal to or lower than 35ºC (or the boiling point at the boiling point).

easily flammable **(F)**	**R11** It is easily extinguished Liquids and preparations which have a flash point below 21 ° C but are not readily flammable. **R15** In contact with water it releases very easily exothermic gases.. **R17** Spontaneously flammable in air.
Flammable	**R10** Flammable Liquids and preparations having a flashpoint equal to or higher than 21 º C and equal to or lower than 55 ºC.
Caustic (C)	**R35** Causes severe burns - If the entire thickness of the skin is damaged or if this result is predicted.

	R34 Causes burns - If the entire thickness of the skin is exposed to damage for up to four hours or if this result is predicted,
Irritating **(Xi)**	**R38** Irritates skin. - Substances and preparations causing significant skin uptake for up to 24 hours after exposure for up to 4 hours **R36** Irritating eyes. - Substances and preparations that cause significant ocular lesions that develop within 72 hours of exposure and last for at least 24 hours. **R41** Serious eye damage risk - Substances and preparations that cause significant ocular lesions that develop within 72 hours of exposure and last for at least 24 hours **R37** Irritating to respiratory system Substances and preparations which cause serious irritation in the respiratory system. **R43** May create sensitivity to skin

Harmful to the environment (N)	**R52** Harmful to aquatic organisms **R53** May cause long-term adverse effects in the aquatic environment **Acute toxicity**: 96 hours LC50 (for fish) $10mg/l < LC_{50} \leq 100 mg/l$ 48 hours EC50 (for daphnia) $10mg/l < EC_{50} \leq 100 mg/l$ 72 hours IC50 (for algae) $10mg/l < IC_{50} \leq 100 mg/l$ **R54** Toxic to flora. **R55** Toxic to fauna. **R56** Toxic to soil organisms. **R57** toxic to bees. **R58** May cause long-term adverse effects in the environment **R59** dangerous for ozone layer

R CODES ACCORDING TO PHYSIC-CHEMICAL PROPERTIES

R1 explosive in dry condition

For explosive substances and preparations presented in solution or wet form to the market, for example nitrocellulose containing more than 12.6% nitrogen.

R4 Creates very delicate explosive metallic compounds.

For substances and preparations which constitute delicate explosive metallic derivatives, for example picric acid, styrenic acid.

R5 Heating may cause explosion.

For substances and preparations which are thermally unstable and not classified as explosive, eg> 50% perchloric acid.

R6 Explosive in air or airless environment

For substances and preparations which become unstable at ambient temperature, for example acetylene.

R7 May cause fire

Classification according to toxicological properties

Marking	R-phrase
T* (Very Toxic)	R26, R27,R28,R39
T (Toxic)	R23,R24,R25,R39,R45,R46,R48,R49,R60,R61
Xn (Harmful) Xi (Irritating)	R20,R21,R22,R36,R37,R38,R41,R65
C (caustic)	R34,R35

Classification According To Ecotoxicological Properties

Marking	R-phrase
N (Harmful for environment)	R50, R51, R52, R53

CATEGORY 1	Substances known to have carcinogenic effects on humans. (There is enough evidence)	T+, T ;R45, R49
CATEGORY 2	The substances that should be regarded as carcinogenic to humans. (There is evidence for a strong assumption)	T ;R45, R49
CATEGORY 3	Possible substances that may cause anxiety in humans due to carcinogenic effects .	Xn ; R40

MUTAGEN SUBSTANCES

CATEGORY 1	Substances known to have mutagenic effects on humans. (There is enough evidence)	T ;R46
CATEGORY 2	Substances to be considered as having mutagenic effects on humans (evidence for strong hypothesis)	T ;R46
CATEGORY 3	Substances which have possible causes of concern in humans due to mutagenic effects.	Xn ; R68

TOXIC SUBSTANCES FOR REPRODUCTION

CATEGORY 1	Substances known to reduce fertility in humans (There is sufficient evidence)	T ;R60, R61
CATEGORY 2	Substances to be considered as having an effect on fertility on humans. (There is evidence for a strong assumption)	T ;R60, R61
CATEGORY 3	Substances causing concern for human fertility	Xn ; R62

7.1.1 Receiving and Storing of Chemicals to Facility:

CUSTOMER CHEMICALS STORED IN TANKS:

MSDS is absolutely required for customer chemicals entered to facility and stored in tanks. The new material is assessed by risk and environment dimension by the SEÇ-K Department and the Product Information Form is prepared and placed on the filling area. Hazard symbols of chemicals stored in tanks are hung in the signs on the tank in accordance with International standards.

CHEMICALS USED IN FACILITY:

- Chemicals which are ordered by the procurement or brought for use in activities carried out by the subcontractor are checked by the Technical Safety Personnel in accordance with the "Permitted Chemical List". The subcontractor is obliged to provide the MSDSs belonging to the chemical company and to keep them in use.
- The "Product Safety Data Sheet" prepared by SEÇ-K Engineer for all chemicals used in the test is prepared on the main page and single page and is available at the usage points. Employees are given the necessary training in this regard.
- The chemicals that need to be stored are stored according to the information on the MSDS forms with the conditions provided by the relevant unit. Take absorbent and protective measures against leaks and spills. The waste chemicals are disposed of in accordance with the "Waste Management Procedure".
- Emergency Response Procedure for Emergencies "(Procedure 004).
- Records and statistics of dangerous cargoes are provided by "SHIPPING OPERATION INSTRUCTIONS".

7.1.2 Shipping Transactions:

OBJECTIVE: To disclose the rules to be complied with by the personnel who ensure that all liquid goods placed in the facility tanks and the dry cargoes taken at the General Warehouse Storage within the framework of the Customs Law and Regulations and the Commercial Code provisions,

- To make a deduction from the places where the incoming ships register their bonded warehouses and where they transfer the warehouses and their entrance signs.
- To prepare the reports of incoming vessels and make declarations to the headquarters.

- To compare and record the value of the quantity certificate and the inventory checklist values that are issued with the Inspector in conjunction with the ship arrivals and monthly inventory.
- To give written information to Customs when transferring goods from tank to tank.
- To prepare monthly inventory reports. To get table and graphical breakdown of monthly exits and entries..
- To prepare the documents which should be given to the customs directorate.
- Prepare pier documents for future ships. .
- To arrange the referral documents in accordance with the records, to submit the signature report to the tanker driver with analysis reports.
- To check and sign the report of the inventory prepared by the YGM to be given to the Customs Directorate.
- To provide information about stocks by communicating with customers and coordinating shipments.
- To arrange the S / Truck or Truck / IBC packing slip suitable for the records according to the records.
- To make shipment from the tanks appropriate to the Customs Entry and Import Declarations.
- To arrange the delivery notes in accordance with the records and to sign them to the tanker driver.
- To prepare the forms for processing the exits by making transactions on the system outputs related to the goods.
- To process the information of the goods coming out every day on the Customer Cards according to the goods, types and amounts.
- To check whether there is a written customer statement for each shipment and the suitability of the confirmations.
- To report daily shipments and quantities of nationalized goods and send them to the relevant units.

8 EMERGENCY SITUATIONS, PREPAREDNESS AND RESPONSE TO EMERGENCIES

8.1.1 General Information About Response

In BAGFAŞ Port, a plan was prepared for emergency response to sea pollution. emergency response equipment list is given in Annex-13. Within the plan, the subject has been examined in detail and general information is presented below.

Depending on the hazard posed by the spill in case of chemical spillage into the sea, arresting the spread, imprisonment of the spread and collection from the sea. In particular, the precautions to be taken include:

- Stopping, controlling and completely preventing the pouring of chemical material into the sea,
- Monitoring the movement and behaviour of contaminants, vapours, clouds or residues if coastal or marine resources are threatened or risk to be threatened,
- Intervention operations to protect vulnerable areas at sea or onshore, if coastal or marine resources are threatened,
- Where possible, stopping or minimizing the spread of chemical substances, imprisonment with barriers,
- Protection of vulnerable areas, assessment of appropriate monitoring, cleaning and other intervention alternatives for chemical contamination, if possible, where chemicals may not be collected from the sea by pumps or strippers or if coastal areas are already contaminated.

In this part of the plan, general information about how to respond to chemical spills shall be given, various techniques related to imprisonment and collection shall be examined and the design features, advantages, disadvantages and usage patterns of different methods shall be discussed. Operations Coordinator shall select the most appropriate response methods in light of the principles and information provided in this section, taking into account all other data related to the chemical pollution handled. The protection priorities which shall be taken into account in the operations of interfering with chemical spills shall most likely begin with the following:

- Human health and safety,
- Living spaces and cultural values,
- Endangered or rare wildlife (flora and fauna)
- Commercial resources,

- Facilities and areas for recreation

8.1.2 Emergency Organizational Teams

Emergency organization teams are defined in Annex 14.

8.1.3 Emergency Notifications

With regard to this section, Intervention shall be made according to contract made between BAGFAŞ and Mare Deniz Temizleme hizmetleri on 10.02.2014 with emergency response equipment at the Port Facility against marine pollution presented in Annex-13. The Emergency Plan shall be followed.

8.1.4 Reporting of Accidents

In the activities of our company, we perform the necessary corrective and preventive activities for the investigation of the incidents of non-conformity, events and environmental accidents detected within the scope of occupational health and safety and environmental management system, investigation and analysis of root causes,.

4.DEFINITIONS

Non-conformity: Any deviations from the law, procedures, practices and working standards or the like, from the performance of the management system that may cause direct or indirect damage to the property, damage to property,
Event: Potential cause or cause of accident
Accident: An unwanted event that causes death, illness, injury, damage or other loss
SSI: Social Security Institution

5. APPLICATION

In the activities of the company, the following transactions are carried out on the basis of periodical observations made on the basis of prepared regulations and laws related to occupational health and safety, performance measurement and monitoring, nonconformities determined by internal audits and related parties, irregularities,

• Instant intervention
• Reporting
• Research
• Corrective and preventive actions
• Follow-up

5.1. Instant Response

The detected nonconformities, incompatibilities and / or incidents are first reported to the unit responsible. The unit manager informs the workplace physician and other healthcare personnel on duty 24 hours a day to prevent a possible work accident. In case of urgent intervention, the person who has attended the first aid training and has received the official certificate is intervened until the firm ambulance arrives.

5.2 Reporting

Personnel who determine the situation as a result of the detected non-compliances and incompatibilities, fill in the Work Accident Report Form (ISGF / 001) and report the situation to the unit manager. It is primarily evaluated by the unit manager. If the hazard is a problem that may be eliminated by routine operations, the unit responsible determines the activity to be performed. If nonconformity concerns other processes, it is assessed with the participation of all other persons and all or a few, where necessary, with the participation of the work safety expert and the workplace physician, and the activity to be performed is determined. These events are then assessed at the HSE board meetings. The incident is held by the unit accountant or by the person in charge at 002-Event Site Notification Procedure immediately after the business accidents and environmental accidents.

Personnel who have a work accident shall be informed about the first aid treatment as soon as possible by the reviewer or the current first aid officer. If the medical intervention requires the accident, the personnel who is involved in the accident shall be delivered to the nearest hospital with one of the company vehicles or the ambulance as soon as possible according to the urgency of the situation.

The departmental officer fills in the medical examination form for our staff who has a work accident and, in very urgent cases, carries the medical examination form to the hospital. For emergency work accidents outside normal working hours, the staff may go to the hospital without receiving the medical examination form, and the medical examination form is delivered to the relevant hospital on the following business day.

After the Work Accident, it is filled to the Work Accident Report Record containing the type of the accident and other information. A copy of the relevant record is sent to the workplace physician. These forms are evaluated at HSE meetings.

According to the formation of the accident; Within 24 hours, the incident is informed to Police and medical examination form is sent to the relevant Regional Directorate of the SSI within 48 hours. In addition, the "Workplace Accident Notification Form" (Annex 1) is prepared to be sent to the relevant Regional Directorate of the Ministry of Labour and Social Security within the same period.

After determining the mistakes caused by any fault in the person or workplace exposed to the work accident, necessary corrective and preventive action decisions are taken to prevent possible work accidents.

Personnel who detect the situation in case of a near miss of an accident shall be informed to the near miss HSE.

HSE management representative, unit managers and company manager may request corrective and preventive action based on the nature of the situation after non-compliance, accident and near miss.

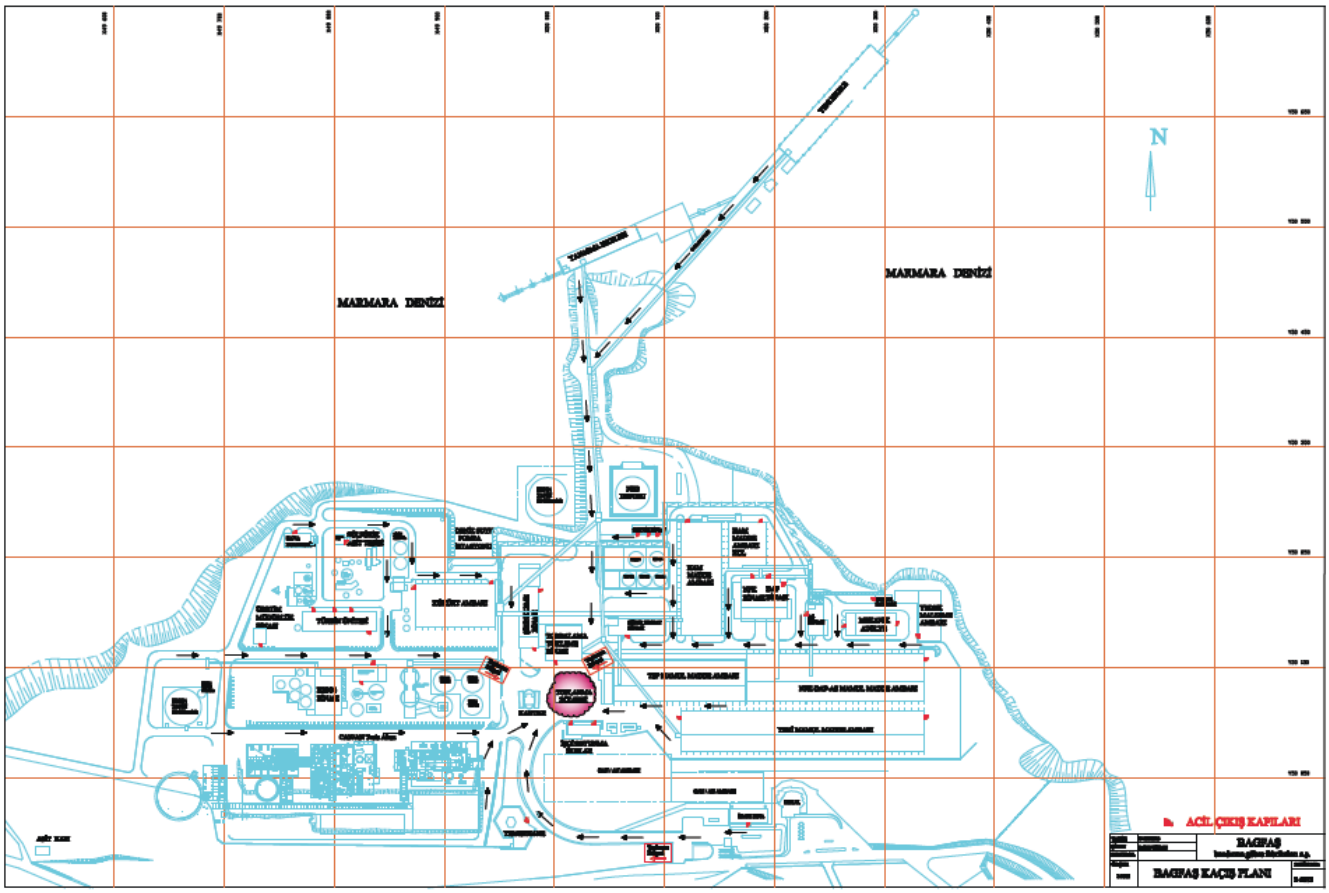
Procedures related to the notification of occupational diseases are carried out by workplace physician and HSE Responsible is informed.

5.3. Research

In-situ research is conducted in order to examine the root causes of the identified incidents, incidents and work accidents, determine the necessary corrective and preventive actions and prepare a more detailed report.

The Unit Manager is decided by the HSE Management representative on whether the reported nonconformities and events need to be investigated. In the survey, nonconformities and / or events are examined in detail and the effectiveness of the proposed corrective and preventive actions is assessed. The following reasons are taken into account when investigating the causes of accidents.

8.1.5 Emergency Evacuation Plan



8.1.6 Waste Management:

The purpose of this procedure is to provide the Procedure 012-Waste Management Procedure, which describes the methods to be applied for the reduction, collection, storage, transport, recovery and disposal of all wastes generated in Bagfas area.

DEFINITIONS

- **Solid (uncontaminated) Waste:** Solid wastes that are not contaminated with chemicals and they are intended to be thrown by the manufacturer and must be disposed of regularly to protect the environment. Household wastes (food waste, trash), industrial household waste and packaging waste (wood, nylon, cardboard, etc.) are examined in this category.
- **Hazardous (Contaminant) Waste:** Solid or liquid that releases flammable, explosive, toxic, corrosive, toxic gases in contact with water and air are the wastes described in the Hazardous Waste Control Regulation. (Battery, tire, battery, electronic waste, chemical waste, etc.)
- **Medical Waste:** Contaminated wastes are carriers of disease.
- **Transportation License:** The license that is used to transport hazardous wastes out of the factory from the Ministry of Environment and renewed every 3 years.
- **Disposal License:** In order to dispose of hazardous wastes by incineration or at landfill sites, It is a license that must be obtained from the T.R. Ministry of Environment and renewed every 3 years.
- **Waste Area:** Areas where wastes are stored and labelled according to their class.

APPLICATION

Collection of Wastes

- The wastes generated in the facility are classified according to legal requirements and collected separately in the waste containers of the following colour and type. The type of waste collected on waste containers is defined.

DANGEROUS WASTE

= Contaminated Waste **YELLOW**

= Contaminated Packages **ORANGE**

HOUSEHOLD AND INDUSTRIAL WASTES

= Domestic / Domestic Quality Industrial Wastes **GREEN**

RECYCLED WASTES

= Paper, cardboard, nylon, wastes **BLUE**

Transportation of Wastes in the Plant

It is not allowed to pollute the waste by infiltration and spillage by closing the mouth of waste boxes. The movements of the waste from the collection containers in the units where they are

collected to the temporary places in the waste area are made by the SEÇ-K Department with General Work Permit.

If the wastes are to be transported from outside the facility to the waste site, they are transported using licensed vehicles

Waste Labelling And Storage Waste Site

The Department of Hazardous Waste is responsible for the SEÇ-K. The hazardous waste site is kept under lock. All employees are responsible for the disposal of waste at the relevant points.

The wastes brought to the waste area are defined by the "waste type, date, quantity" labels by the SEÇ-K Division. These labels must be prepared in accordance with the "Hazardous Waste Control Regulation".

It is the responsibility of the SEÇ-K Division to create a "Waste Tracing Schedule" and to register the wastes for the wastes sent to the waste site.

A settlement plan was created to assess the wastes that could interact with each other in the Waste Field and not to create an environmental risk. All wastes are left regularly in the relevant areas, according to the type on the sign.

Impregnation of the waste storage base is ensured and the outflow of the leaks is prevented by the ceiling. Absorbent materials and emergency equipment are available for the collection of chemical spills and spills that may be caused by the waste. In the event of a possible accident, the SEÇ-K Division is informed.

8.1.7 Drills

The periods of drills and the variety of trainings are indicated in the following tables.

Name of Drill:	**Period**	**Scope**
Evacuation Drill	Once a year	General Facility
Chemical Spill Drill	Once a year	General Facility
Fire drill	Once a year	General Facility
Intervention / Protection / Rescue / First Aid Drill	Once a year	General Facility
Marine Pollution Drill Mare - Neighbour	Once a year	General Facility
Types of Trainings		
Fire Fighting	Once a year	General Facility
Working with Chemicals	Once a year	General Facility
First aid	Once a year	General Facility
Emergency and Response Methods	Once a year	General Facility

8.1.8 Fire Protection Systems

Our facility has a fire extinguisher, fire cabinets and hydrants for use in possible fire situations. The location of the fire fighting and fire protection equipment of the installation is specified in the "Fire Plan of the Installation" given in ANNEX-6.

In addition, there are 2 active fire brigade vehicles which are available 24 hours a day in our facility.

8.1.9 Fire Systems Control

The control and maintenance of these systems are carried out by the supplier company for the periods given in the Regulation on Fire Protection of Buildings (6 months, annual and 5 years test maintenance and tube changes). Our fire systems are regularly checked and their records are kept in the HSE department.

Information on fire protection system of port facility; The location of the fire fighting and fire protection equipment of the port is specified in the "Fire Plan of the Installation" given in ANNEX-6 and the fire station, fire hydrants, fire cabinets all over the port area are located in places suitable.

9 GENERAL RULES FOR OCCUPATIONAL HEALTH AND SAFETY

Occupational Health And Safety Measures

9.1 Occupational Health And Safety Measures

The BAGFAS internal regulations rules prepared in the scope of Occupational Health and Safety Law No. 6331 are applied in Bandırma Gübre Fabrikaları AŞ.

In the case of occupational health and safety applications, the target of the port operator is "0". HSE activities are carried out in line with this target, employees are provided with continuous training and awareness is ensured by having safe working instructions at the port.

We have three experts working under the Occupational Health and Safety Law No. 6331 and working in the name of occupational health and safety within the scope of our annual work plan.

9.1.1 Risk assessment

Risk assessment has been carried out in accordance with the provisions of the Occupational Health and Safety Risk Assessment Regulation published in the Official Gazette No. 28512 dated 29.12.2012 in order to determine dangerous and risky situations in the operation of BAGFAS port facility and to determine the negative effects of employees in terms of health and safety.

9.1.2 Emergency Situations

BAGFAS port management shall take into consideration the following particulars especially in the case of emergency arising from dangerous chemical substances at the port facility, provided that the particulars specified in the Regulation on Emergency Situations in Emergency Places published in the Official Gazette dated 18.06.2013 and numbered 28681 are reserved

- Preventive measures to reduce the adverse effects of emergencies are taken immediately and employees are notified. The necessary actions are taken to return the emergency to normal as soon as possible and only authorized personnel are allowed

to enter the affected area and teams assigned to the incident from outside the workplace for maintenance, repair and compulsory work.

- Personal protective equipment and special safety equipment appropriate for the person allowed to enter the area where the chemical handling is permitted are provided and used as long as the emergency situation continues. Persons without suitable personal protective equipment and special safety equipment are not allowed to enter the chemical handling area.
- Information on hazardous chemicals and emergency response and evacuation procedures are available. It is ensured that organizations working on issues such as first aid outside the workplace, emergency medical intervention, rescue and fire fighting may be easily accessed by staff assigned to emergency situations at the port facility. This information is intended to be used in the event of an emergency in the event of an emergency in order to ensure that organizations engaged in emergency situations, such as first aid, emergency medical intervention, rescue and fire fighting, information about possible special danger and work to be done.

We also have a fire department in our business which shall interfere with any fire incident for 24 hours. Fire extinguishers and fire extinguishing systems are located in the places referred to in item 8.10.

9.1.3 Training and Informing of Employees

BAGFAS port management provides training and information to employees and their representatives, provided that the provisions of the Regulation on the Procedures and Principles of the Occupational Health and Safety Training of Employees dated 15/5/2013 numbered 28648 are reserved. This training and information especially includes:

- Information obtained as a result of the risk assessment. Information on the identification of hazardous chemical substances in the port facility which may arise, health and safety risks, occupational diseases, occupational exposure limit values and other legal regulations.
- Measures to prevent employees from putting themselves and other employees in danger, and what to do.
- Information on supplier safety data sheets for hazardous chemical substances.

- Information on labelling / locking in accordance with applicable legislation on hazardous chemical substances, containers, piping and similar installations.
- The training and information to be given to employees or their representatives when working with hazardous chemicals shall be in the form of training supplemented by oral instructions and written information, depending on the level and nature of the resulting risk assessment. This information is updated according to the changing circumstances.

9.2 Information About Personal Protective Equipment And Procedures For Their Use

Information is given on the port site personnel engaged in the work related to dangerous loading of the personal protective equipment during training and practice / drills, where there are protective clothing suitable for the physical and chemical properties of the load during loading, unloading and storage of coastal facility personnel with responsibility for the handling of dangerous goods. The necessary protective equipment and equipment are provided by "BAGFAS" in order to ensure the safety of the port employees and the workplace.

- Personal protective equipment (PPE) is personally owned. Employees must use personal protective equipment and work safety materials. It shall be provided to the employees to keep the supplied protective equipment and equipment available at all times.
- Personal protective equipment shall be checked before starting work. Personal protective equipment which are not in proper condition (shelf life) shall be reported and replaced with new ones.
- Attention should be paid to the documentation of TSE, EN, CE and Turkish Accreditation Agency before purchasing protective equipment and equipment. If imported safeguards are used, the country standard or test results shall be taken into account.

PRACTICE

Identification of Hazards

A study involving all areas of work and activities is carried out by the HSE Representative to identify hazards and risks.

In order to determine the hazards and risks, a team is formed with the employees from the related departments under the coordination of HSE Management Representative.

The following are considered when identifying hazards and assessing their risks.

a) Routine, non-routine activities,

b) Activities of personnel with access to the place of work (subcontracting activities are covered within the scope of temporary risk assessment)

c) Human behaviour, capabilities and other human factors,

d) Hazards arising from outside the workplace and capable of affecting the health and safety of persons under the control of Bagfaş in the workplace,

e) Hazards arising from work-related activities under the control of Bagfaş in the vicinity of the workplace,

f) Infrastructure, equipment and supplies at the workplace provided by Bagfaş or by others,

g) any changes made or proposed to be made to Bagfaş's activities or materials,

h) the changes to the HSE management system, including transitional amendments and their effects on operations, processes and activities; When the equipment-process change, change in chemical substances, change of personnel, purchase of machinery within the scope of new investment, change of machine equipment, construction works, possible hazards and risks related to these changes are reviewed by the team and necessary updates are made.

i) Applicable legal obligations related to the risk assessment and the implementation of the necessary controls,

j) The design of business areas, processes, facilities, machinery / equipment, operating procedures and business organization and their adaptation to human capabilities.

Following the identification of the danger, it is decided who may be damaged in which ways. Employees, subcontractors and visitors are considered. All activities are examined for non-routine situations as well as for day-to-day operating conditions. At this stage it is also taken into consideration whether the existing control methods are sufficient.

Risk Assessment

"Risk Assessment Form" is used during these studies.

Coordination Responsibility in Determining Risk Score is in the Representative. The evaluation forms are sent to the department's accountants and the Facility Manager Assistant and Manager and their opinions are received and published by the Management Representative in the system.

When assessed, the likelihood of occurrence of the event or exposure to the specified hazard shall determine the severity of the injury or health impairment that may be caused by the event or exposure. The following information is used in this determination. Then probability / exposure and intensity are multiplied.

At the same time, it is checked whether there is any legal requirement for the danger and risk involved.

Operational controls are determined for unacceptable risks. Action plans for very high and high risks are prepared and the CAPA Procedure is applied.

► Violence :

5 :	Fatal Accident Loss of facility more than 1 Month Situations Causing Legal Trial
4 :	Limb Loss, major fractures, severe Injuries Short or Long Term Occupational Disease Causes Causes of Occupational Disease
3	Accidents cause Work Loss (Brain concussion, Serious Buckles Or Muscle Injuries, Small Breaks), Temporary
2	Minor Injury, Simple First Aid Situation, Open Wounds, Waist Injury, Middle Degree Burns.
1	Small Cut and Injury, Hurt, Sprain

.

► **Possibility :**

5 :	VERY HIGH PROBABILITY (ENCOUNTERED DAILY)
4 :	HIGH PROBABILITY (ENCOUNTERED AT LEAST ONCE A MONTH)
3 :	MEDIUM PROBABILITY (ENCOUNTERED LESS THAN 3 MONTHS OR LESS)
2 :	LOW PROBABILITY (ENCOUNTERED LESS THAN 6 MONTHS OR LESS)
1 :	VERY LOW PROBABILITY (ENCOUNTERED LESS OR LESS ON THE EARTH)

Radiation and hazardous chemical exposure are independently assessed as 4, below legal limits, and 5 above legal limits.

► **Risk Score:**

According to the result from the risk assessment table, the Risk Control Plan:

Insignificant Risk: No need for work or documentation. Controls may be required if significant risks are completely eliminated in the future. (1-2)

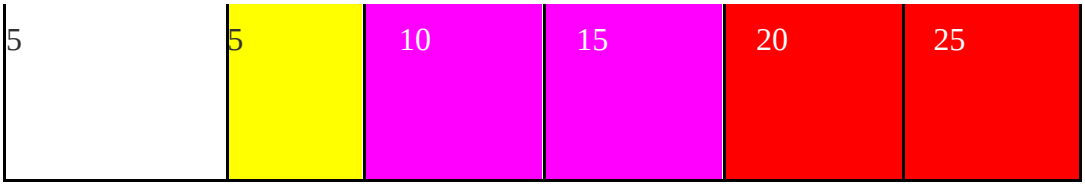
Low Risk: Additional controls are unnecessary. Problems may be solved with routine checks (3-4)

Medium Risk: Risk prevention studies should be done. When these are done, necessary arrangements should be made taking into consideration the costs. (5-9)

High Risk: Corrective / Preventive Action should be initiated within 1 week. The work should be continued under supervisor supervision, if necessary, with reduced risk. Control points should be identified and the importance of the situation should be monitored. (10-15)

Very High Risk: Immediate Corrective / Preventive Action should be initiated. It should not start to work, reduce risk, or be completely eliminated. Regular checks should be done. If found in the business process, the activity should be stopped. (16-25)

Impact Incident	1	2	3	4	5
1	1	2	3	4	5
2	2	4	6	8	10
3	3	6	9	12	15
4	4	8	12	16	20



Risk reduction should be considered in accordance with the following hierarchy when controls are being planned for unacceptable risks or if changes are planned for existing controls:

a) Removing,

b) Replacement,

c) Engineering controls,

d) Signs / warnings and / or other administrative controls,

e) Personal protective equipment

Review of Risk Analysis

The "Risk Assessment Form" is audited once a year by the HSE Representative. However, legal requirements may arise before and after the changes that may occur in the activities during the year, temporary works, the introduction or removal of new process / equipment, modification of used raw materials or chemicals, emergencies, work accidents, occupational diseases, changes in legal or legal requirements, organizational changes, etc. the situation requires a re-evaluation without anticipation of a one-year period.

9.1.1 Using PPE:

The use of PPE in the pier and the whole plant are the most important auxiliary tools in ensuring job security. Preventing the hazards arising from work, environment and social activities, ensuring a healthy and safe living and working environment, taking the necessary precautions to minimize the harmful effects of all people, reducing the number of people, protecting the psychological and physical health of workers against occupational accidents and occupational diseases, It is the purpose.

- Using and using personal safeguards protects against risks in the workplace.
- According to the legislation, personal protectors protect both employee and employee from financial and moral risks.
- Protective materials were made for the health and safety of employees.

- Ear protectors are regularly used where high (85 dB / A) is high.

- Without a glove, sharp pointed, heavy, hot, burning, abrasive materials may not be removed.
- Without seat belts, wells, tanks are not allowed. The scaffolding does not extend to places where there is a danger of falling, such as a roof and a high mast.
- No harmful gas, dust, smoke, or steam coming in without proper mask installation.
- In areas where heavy parts such as boilers and mills are likely to fall, work shall not be made.
- Use heavy-duty work shoes in places where heavy parts are lifted and transported.
- Use goggles where there is a splash like a mechanical workshop.

PROPERTIES OF PERSONAL PROTECTIVE EQUIPMENTS

- Usage is protected from risks.
- Must fit the employee's body and work.
- It should not bear risk, create risk, and should be in compliance with standards.
- It should not make it difficult to work and reduce the ability.
- Personal protectors are not provided for social assistance. It is not the property of the worker. The employer has it.
- Must be used at work.

PROPERTIES OF PERSONAL PROTECTIVE

HEAD PROTECTORS

Head protectors;

- Protective helmets used in industry (mines, construction sites and other industrial areas)
- The protection of the scalp (caps, bonnets, hair cords - with or without visor)
- Protective headgear (bonnets, mats, sailor headers etc made of normal fabric or impermeable fabric)

HELMET: It is a safety (hat) material that protects the people working in the facilities against the impacts in the event of an accident in the event of a collision, a falling object and a shock (low voltage) at the time of contact.

USAGE AREA:

- When entering warehouses
- When entering LPG tank area,
- When working in construction works,
- When operating in high places,
- In electrical works,

IF HELMET IS NOT USED:

- Accidents resulting in electrical shocks, shocks and injuries.
- Head impact; falling or jumping objects cause sprains, cracks and brain concussion.
- The splashes, spills, drips of the material; eyes and skin may irritate and burn.

Points to consider when using a helmet

- Protect the helmet to a certain degree against the objects that may hit the user.
- Before each use, helmet must be carefully examined and checked for cracks, cuts, or other defects. If such a situation is encountered, the helmet should not be used.
- Helmets exposed to any accidents must be removed from use, even if there have no visible faults.

- Before wearing, it must be checked to ensure that the head is properly fastened to the barrel and should be adhered to per-user so as not to impair the strength of the helmet.
- Helmets must be stored in a cool, dark place and should be used no later than five years from the date of manufacture and no later than three years after opening of the package.
- Protective clothing should be stored in a dry and clean place at normal room temperature unless exposed to contagious effects.
- Helmets must be kept clean.
- Care must be taken to ensure that there are no holes, no metal parts inside and no waterproofing channels or the like manufactured or purchased on the exterior surfaces of personnel used in electrical work.
- The retaining band should be adjusted to ensure that the helmet is fully adapted to the wearer's head.
- Helmet should be cleaned with a mild detergent (about once a month) to be placed in hot water below 50˚C.
- Any solution containing solvent or alcohol or direct contact with the spray shall weaken the durability of the helmet protective shield. For this reason, such practices should be avoided.

EYE PROTECTORS

Glasses

· Closed glasses (submersible glasses)

· • X-ray glasses, laser beam glasses, ultra-violet, infrared, visible radiation glasses

· • Face shields

· • Ark weld masks and helmets (hand-held masks, masks that may be attached to the head or protective caps)

GLASSES: Protective equipment used to protect your eyes from hazards, physical and chemical influences or protection from radiation.

USAGE AREA:

• When grinding,

• When a drill or hand percussion drill is used,

• When grinding in concrete, cement and work on benches,

• For spray and gun paint works,

• When cleaning with compressed air, cleaning boilers,

• When cutting with saw,

• When working on materials with coolant gas, any kind of chemical substance, naphtha, acid base and alkali content, When grounding, opening and closing circuit,

• When changing high voltage fuses,

• When using a blower (welding) for welding or cutting,

• When observing the boiler fire,

• When washing with high-pressure water or cleaning detergents,

• When replacing the mercury vapour or similar lamp while the line is energized,

• When working with molten metal,

• When operating in very windy conditions,

• While working in the garden with hand tools such as digging and shovelling,

When glasses are not used;

Eye-catching parts may hurt the eye, causing bones on the side of the eye to crack. Eye-catching chemicals, chemical vapours, etc. may cause blindness in the eyes of irritated eyes.

When glasses are not used;

Eye-catching parts may hurt the eye, causing bones on the side of the eye to crack. Eye-catching chemicals, chemical vapours, etc. may cause blindness in the eyes of irritated eyes.

Things to be aware of when using glasses

Protects against specific hazards (s)

- Easy to wear,
- Do not limit sight or movement,
- Resistant to cleaning and purging (disinfecting)
- Do not obstruct the use of other PPE that may be needed ... etc. should be.
- Workers' eye protectors must be easy to clean when they become contaminated

WELDING MASK: It is a safety material that protects the employee's face and eyes from sparks and splattering from harmful rays that are turned on when welding.

USAGE AREA:

- When welding.

When the welding mask is not used; redness in swelling in the eyes and fragments of burnt fragments cause blindness.

HAND PROTECTION

Special protective gloves:

• From machines (punctures, cuts, vibrations, etc.)

• from chemical

• Electricity and heat

- One-finger gloves
- Finger covers

- Armlets
- Wrist guards for heavy work (wristband)
- Fingerless gloves
- Protective gloves

GLOVES: It is a security material that protects the hands in physical, chemical, electrical, mechanical, microbial situations.

Usage area:

- When opening or closing the breaker and separator by hand,
- When replacing the fuse,
- When checking for voltage,
- When grounding and short-circuiting,
- When working with chemical substances,
- When performing maintenance and repairs,
- When gardening and spraying,
- For storage of equipment such as metal materials,
- Gloves should always be used when supervisors need them or when they want to use the employee.
- Never contact the energized area with insulated gloves alone.
- Mechanical work (skin, fabric, rubber coating, etc.) against crushing and immersion must be used.
- Welding (leather, fabric reinforced leather, etc.) gloves should be used when working in welding jobs.
- Use gloves which are resistant to heat (glass fibre, aluminium foil, kevlar fabric, etc.) at high temperature (above 60 ° C).
- Acids (basic rubber, plastic, rubber, etc.) gloves should be used where acidic, basic and chemical substances are present.

When gloves are not used: In the hands, burning, cutting, splitting, bruising, irritation, finger or hand breakage, electric shock during electrical work may occur.

Things to be aware of when using gloves;

- Gloves; it should be cleaned regularly and in accordance with the company (on its package or package) where the gloves are taken.
- Prevent contact between oil and gloves.
- The presence of leaks in the hand should be checked by air testing. Any tire which is not considered suitable for use as a result of the tests shall be torn, cut or at least marked (not used for any other electrical service).

- Rubber gloves should not be in contact with cutting objects, leather protectors should be worn on rubber gloves for mechanical protection. These leather protectors may never be used for shock protection.
- Employees shall not wear rings that shall damage the glove when using gloves.
- Insulated gloves must be powdered and stored in cool, dry places where they are not exposed to direct sun exposure.
- Gloves should be stored in their natural shape (must be stored). Gloves, protectors; bags, boxes or specially made containers.
- Skin protectors shall be inspected before each use and be sure that there are no holes, tears or contamination.

FOOT PROTECTION

Normal shoes, , boots, long boots, safety boots

Quickly open ties with hooks and hooks

Finger guard shoes

Base heat-resistant shoes and shoe covers

Heat resistant shoes, boots, boots and leggings

Thermal footwear, boots and covers

Vibration resistant shoes, boots, boots and covers Anti-static footwear, boots, boots and covers Insulated footwear, boots, boots and jackets

Protective boots and drawers for chain saw operators

Wooden footwear

Attachable foot top protectors

shin guards

leggings

Removable insocks (heat resistant, puncture resistant, sweat proof)
Detachable nails (against ice, snow and slippery surfaces)

Shoe: It is a security material that protects the feet against chemical, physical, mechanical, electrical, thermal, etc. situations.

EN 345

İŞ EMNİYET AYAKKABILARI TEKNİK ÖZELLİKLERİ	S-1	S-1-P
ÇELİK BOMBE - 200 JOULE - 1500 N	✓	✓
ANTİSTATİK TABAN - MİN 100 KΩ - MAX 1000 KΩ	✓	✓
DARBE EMİCİ, ENERJİ VERİCİ TABAN MİN 20 JOULE	✓	✓
YAĞ VE PETROLE DAYALI TABAN	✓	✓
ISIYA DAYANIKLI TABAN	✓	✓
ÇELİK TABAN MİN 1100 N		✓

USAGE AREA:

- In electrical works,
- For storage, transportation,
- In all maintenance and repair work,
- For work on slippery ground,
- Work in wet, hot, cold and water
- Working with chemicals

When foot protectors are not used: Electric shock, standing injury, fracture, irritation, burning, frost, fracture, fracture, dislocation, breakage, rupture may occur.

Things to Watch Out While Using Foot Protectors:

- When using work shoes, dirt and other contaminants (oil, chemicals, etc.), which get to the bottom of the base, should be cleaned regularly by wiping with a damp cloth.

Sharp tools / materials should not be used to clean shoes.

When the shoes are dry and / or they are to be painted with appropriate shoe paint and lacquer at certain intervals.

When the shoes are too wet for any reason, they should be allowed to dry in the open, cool and well-ventilated place. Drying should not be attempted from any heat source (direct or radiant heat source).

Work shoes may be stored for up to 5 years under appropriate conditions.

Work shoes should be moved in original boxes while moving.

Work shoes should be protected from water and extremes. Heavy objects should not be left on the shoes.

The shoe should be worn in the tied and inserted.

Shoes should not be used by pressing on the heel - like a normal shoe.

Work shoes should not be used with deteriorated original shape (steel finger protector removed)

FACE PROTECTION

Masks with gas, dust and radioactive dust filters

- Breathing apparatus with air supply
- Breathing apparatus with a removable welding mask
- Diving equipment
- Diving suit

Mask: dust, smoke, chemical vapour, and so on.

USAGE AREA:

- When working on chemicals,
- In welding work,
- In pesticide works,
- In mowing,
- In painting work,
- In works in wells, in other underground areas connected with sewerage
- Work that is done in the cold air depot where the danger of the refrigerant leaking is working,

Things to Watch Out While Using masks:

The mask and respiratory devices to be used must be selected according to the face dimensions of the workers and the work to be done and their pressure regulating valves must be available.

Filters or strains which make breathing difficult or that run out of storage and use must be checked and replaced immediately.

Filtered masks should not be used where they are closed or oxygen is scarce.

Air or oxygen to the mask or respiratory device must be adjustable so that the pressure does not disturb the occupant at all times.

Breathing apparatus and masks must be disinfected after each use and properly stored in a clean, cool, dry and easily accessible place when not in use.

BODY PROTECTION

Hardware used against fall:

Fall arrest equipment (with all necessary accessories)

Braking equipment that absorbs kinetic energy (with all necessary accessories) Equipment that may hold the body in the space (parachute belt)

Protective clothing:

- Protective working garment (two-piece and overalls)
- Protective clothing (punctures, cuts, etc.)
- Clothing to protect from chemicals
- Clothing that provides protection against infrared radiation and molten metal spatter Heat resistant clothing
- Thermal clothing
- Clothing protecting from radioactive contamination
- Dustproof clothing
- Gas-proof clothing
- Fluorescent material, reflective clothing and accessories (arm bands, gloves and the like) Protective covering.

Protective Clothing; It is a safety equipment that protects body from external factors.

Usage Area:

- When working on chemicals,
- When working in cold areas,
- When working in hot areas,
- When working in environments where rain and water exist,
- When working with refrigerants

When Protective Garment is Not Used

Electric shocks, skin irritation when poured over chemical substances, injury may occur, burns may occur due to extreme hot and cold environments, heat may be caused by hot and cold environments, irritation to working with gases may occur.

Things to be aware of when using protective clothing:

- Clothing must be clean, not torn
- Appropriate clothing should be selected
- Select comfortable protective clothing that does not squeeze your body

EAR PROTECTION

In a workplace, when the severity of a noise exceeds 80 dB (A), workers should use ear protection not to suffer job accidents and to avoid losing their hearing. As sources of noise in the workplace; we may show the voices produced by machines and compressors used in weaving, such as riveting, hammers and saws, which are produced by a gas or vapour under high pressure.

A good ear protector should both reduce the noise intensity to the necessary and safe level and be comfortable to use. Because earphones that are not comfortable to use may be permanently unusable, they may cause work accidents and hearing loss.

EAR PROTECTIVE USE

- Choose an ear protection suitable for work and standards.
- Workers who have in their ear canal flix, sore throat, pain or previous surgery should not wear earplugs.
- Ear plugs must be inspected by the workplace physician before wearing them and tested for compliance.
- There is no significant difference in terms of protection between earphones and earplugs; ear plugs provide better protection if fitted properly.
- Ear plugs should be worn cleanly, in absolutely silent conditions, with the earlobe pulled backwards with another hand and removed in a quiet environment.
- Headphones or ear plugs should begin to wear with a weekly training program, starting at half an hour on the first day and increasing by one time every day.
- When the material is out of order, it should be replaced with the new one if its structure deteriorates.

The standards that earplug-related products must have are:

- EN 352-1: Protective Headphones
- EN 352-2: Ear Plugs
- EN 352-3: Protective Earphones
- EN 458: Selection, Use and Maintenance of Noise Protection Devices