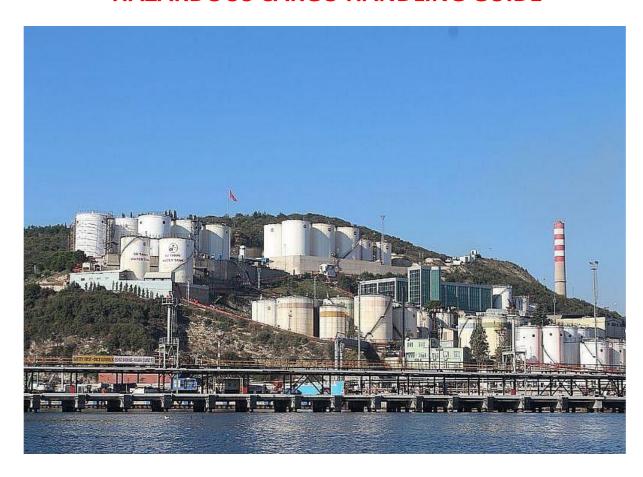


## ALTINTEL LİMAN VE TERMİNAL İŞLETMELERİ A.Ş.

## **HAZARDOUS CARGO HANDLING GUIDE**



DATE OF PREPARATION: 28.05.2022

SERDAR CINGÖZ

OPERATIONS MANAGER

### **REVISION PAGE;**

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### ABBREVIATIONS;

WPCR	Water Pollution Control Regulation			
DOIZ	Dilovasi Organized Industrial Zone			
IMO	International Maritime Organization			
ISPS Code	International Ship and Port Security Code			
PPE	Personal protective equipment			
SDS	Safety Data Sheet			
OC	Operation Coordinator			
OSC	C On-Scene Coordinator			
FRG	Field Response Group			
IMDG	International Maritime Dangerous Goods			
NFPA	National Fire Protection Association			
HSE-Q	Health, Safety, Environment - Quality			
RCM	Remote Control Monitor			
WWT	Waste-Water Tank			
LOA	Length Over All			
ISPS Code	International Ship and Port Security Code			
PPRO	Press and Public Relations Officer			

#### **DEFINITIONS**

**Packaging:** The transport container in which the hazardous cargo is placed, as defined in Section 6 of the IMDG Code,

Ministry: Ministry of Transportation and Infrastructure,

**Bulk cargo:** Solid, liquid, and gaseous substances that are a structural part of the vessel or which are contained in a tank or hold permanently fixed in or on the vessel and which are intended to be transported without direct containment,

**Fumigation:** The process of introducing a certain amount of a gaseous fumigant into a closed environment at a certain temperature and keeping it in the environment for a certain period of time in order to destroy harmful organisms,

**Vessel:** vessels covered by the legislation or international conventions to which we are a party, **Vessel owner:** The operator, charterer, captain or their agents and natural or legal persons authorized to represent the vessel owner,,

**IBC Code:** International Code for the Construction and Equipment of Ships Carrying Hazardous Chemicals in Bulk,

IMDG Code: International Code for Hazardous Cargoes Carried by Sea,

**IMO:** International Maritime Organization,

ISPS Code: International Ship and Port Facility Security Code,

Administration General Directorate of Maritime Affairs,

**Coastal facility:** Port, dock, pier, berth, oil, liquefied gas, or chemical pipeline buoy or platform, including storage areas, where vessels or marine vessels can safely load and unload cargo or seek shelter,

MARPOL: The International Convention for the Prevention of Pollution from Ships,

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

**Transporter:** The actual transporter who receives, bids, and accepts bids for the transportation of all kinds of hazardous cargo on its own behalf or on behalf of third parties, brokers, vessel owners, transportation organizers, freight forwarders, vessel agents, and natural and legal persons who carry out the transportation of hazardous cargo by road or rail as well as by sea within the scope of combined transport,

### Hazardous cargo;

1. Petroleum and petroleum products listed in the International Convention for the Prevention of Pollution from Ships (MARPOL) 73/78 Appendix I, Sheet 1,

- 2. Packaged substances and objects transported in packages given in IMDG Code Section 3,
- 3. Bulk cargoes with "B" and "A and B" in the group box in the characteristic table among the cargoes given in IMSBC Code Sheet 1,
- 4. Liquid substances with the designation "S" or "S/P" in column "d" titled "hazards" of the table given in IBC Code Section 17,
- 5. Gaseous substances given in IGC Code Chapter 19,

**DGSA:** Dangerous Goods safety advisers authorized by the Ministry,

**TMUB:** Coastal Facility Dangerous Goods Conformity Certificate issued by the Administration and required to be obtained by coastal facilities handling dangerous goods in packaged or bulk, **Loading safety:** Secure fastening and stowage of the cargo transport unit or cargo loaded in the vessel's hold or on the vessel's board and secure fastening and stowage of the cargo to be loaded into the cargo transport unit,

**Shipper:** The natural or legal person designated as the "shipper" in the bill of lading, maritime transport bill, or multimodal transport document, as well as the natural or legal person with whom or on whose behalf a carriage contract is concluded with a shipping company,

**Cargo handler:** The consignor, consignee, representative or transport organizer of the hazardous cargo,

### 1. INTRODUCTION

### 1.1. FACILITY INFORMATION FORM

	FACILITY IN	NFORMATION FORM
1	Name/Title of the facility operator	LEVEND KOKULUDAĞ
2	Contact details of the facility operator (Address, telephone, fax, e-mail and web site)	Istanbul / Türkiye Name: Arkem Kimya Address: Arkem Center Valide Sultan Cad. No:10 Bahcekoy - Sariyer Zip Code:34473 Tel:+90 212 366 41 00 Fax:+90 212 226 34 77-78 E-mail: arkem@arkem.com.tr Web: https://www.arkem.com.tr
3	Name of the Facility	ALTINTEL LİMAN VE TERMİNAL İŞLETMELERİ A.Ş.
4	Province where the facility is located	KOCAELi
5	Contact information of the facility (address, telephone, fax, e-mail and website)	Address: DOSB 1.Kısım Tuna Cad. No:12 Dilovası/Kocaeli Zip Code:41455 Tel:+90 262 648 23 00 Fax:+90 262 754 94 78 E-mail: altintel@altintel.com.tr Web: https://www.altintel.com.tr
6	Geographical region where the facility is located	MARMARA REGION
7	Port Authority and contact details of the facility	KOCAELI PORT AUTHORITY Telephone :+90 262 528 37 54/ 528 24 34 /528 46 37
8	Municipality to which the facility is affiliated and contact details	DILOVASI MUNICIPALITY Address: Cumhuriyet Mah. Bagdat Cad. No:94 Dilovası/Kocaeli Tel:+90 262 754 88 88 Fax+90 262 754 50 66
9	Free Zone or Organized Industrial Zone where the facility is located	Dilovasi Organized Industrial Zone
10	Validity date of coastal facility operation permit/temporary operation permit	07.05.2028
11	Operational status of the facility (X)	3rd party (X)
12	Name, surname, contact details of the facility manager	KIVANÇ BOZTEPE Tel:+90 262 648 23 00 - 2301 Fax:+90 262 754 94 78 E mail: kivanc.boztepe@altintel.com.tr
13	Name and surname, contact details (phone, fax, e-mail) of the facility's hazardous goods operations officer	SERDAR CİNGÖZ Tel:+90 262 648 23 00 - 2306 Fax:+90 262 754 94 78 E mail: serdar.cingoz@altintel.com.tr

14	Name and surname of the facility's Dangerous Goods Safety Advisor, contact details (phone, fax, e-mail)	GİZEM EREN Tel: +90 536 785 72 42 E posta: gizem.eren@yesilgrup.com.tr
15	Sea coordinates of the facility	40 46` 060 N - 29 32` 438 E
16	Types of hazardous cargo handled at the facility (MARPOL Appendix I, IMDG Code, IBC Code, IGC Code, IMSBC Code, Grain Code, TDC Code and asphalt/bitumen and scrap cargoes)	MARPOL Appendix I, IBC Code
17	Hazardous cargoes handled in the facility (cargoes other than IMDG Code from the cargo types in Article 16 shall be written separately. Additional cargo request will be submitted to the port authority with Appendix-1 form. Will be added to TYER when deemed appropriate)	Alcohols – Acetates – Ethers – Glycols – Monomers – Petroleum Products
18	Classes for cargoes handled, subject to IMDG Code	Class 3 - Class 6.1 - Class 8 - Class 9
19	Groups in the table of characteristics for cargoes handled, subject to IMSBC Code	-
20	Types of vessels that can berth at the facility	Chemical Tankers (up to 40,000 DWT)
21	Distance from the main road (kilometer)	1.1 Km
22	Distance of the facility to the railway (kilometers) or railway connection (Yes/No)	No railway connection
23	Name of the nearest airport and distance to the facility (kilometer)	Sabiha Gokcen Airport - 35 Km
24	The cargo handling capacity of the facility (Ton/Year; TEU/Year; Vehicle/Year)	1.000.000 tons/year
25	Whether scrap handling is performed at the facility	No
26	Is there a border gate? (Yes/No)	No
27	Is there a bonded area? (Yes/No)	Yes
28	Cargo handling equipment and capacities	Hose Crane - 1.5 Tons (2 Pieces Total 3 Tons)
29	Storage tank capacity (m³)	102.362,00
30	Open storage yard (m²)	NONE
31	Semi-covered storage yard (m <sup>2</sup> )	NONE
32	Covered storage yard (m <sup>2</sup> )	NONE

33	Designated area (m <sup>2</sup> )	fumigation and/or dega	ssing	No Fumigation					
34		, contact details of the nd towage services prov	ider	Towage :SANMAR DENİZCİLİK MAKİNA ve TİCARET A.Ş. Tel No: (0216) 458 59 00 Guidance: ANKAŞ KLAVUZLUK A.Ş. Tel No: (0262) 528 33 00					
35	Is a safety j	plan in place? (Yes/No)				YES			
				Тур	e of Waste		Capacity(m³)		
				MARPOL A	PPENDIX	II (X)	13		
36	section wil	ption facility capacity ('l be organized separatel	y	MARPOL AI	PPENDIX I	II (Y)	13		
30	according t facility)	o the wastes accepted by	y the	MARPOL	APPENDE	13			
37	Characteristics	of dock/piers etc. areas		l					
Dock/Piers Length No (Meters)									
1				Width (Meters)	Maximum water depth (Meters)	Minimum water depth (Meters)	Tonnage and length of the largest vessel to berth (DWT-GT/Meters)		
]	No	(Meters)		(Meters)	water depth (Meters)	water depth (Meters)	largest vessel to berth (DWT-GT/Meters)		
]	<b>No</b> 1		on facility	(Meters)	water depth	water depth	largest vessel to berth		
]	<b>No</b> 1	(Meters) 250	on facility	(Meters)	water depth (Meters)  13.5  Number	water depth (Meters)  6.5  Length	largest vessel to berth (DWT-GT/Meters)  170 meters / 40,000 DWT		
	<b>No</b> 1	(Meters)  250  me of the pipeline (if available of the pipeline)	on facility	(Meters)	water depth (Meters) 13.5 Number (pcs)	water depth (Meters) 6.5 Length (Meters)	largest vessel to berth (DWT-GT/Meters)  170 meters / 40,000 DWT  Diameter (Inch)		
	<b>No</b> 1	(Meters)  250  me of the pipeline (if available of LINE 1	on facility	(Meters)	water depth (Meters)  13.5  Number (pcs)  1	water depth (Meters) 6.5 Length (Meters) 350	largest vessel to berth (DWT-GT/Meters)  170 meters / 40,000 DWT  Diameter (Inch)		
	<b>No</b> 1	(Meters)  250  me of the pipeline (if available of LINE 1  LINE 2	on facility	(Meters)	water depth (Meters)  13.5  Number (pcs)  1	water depth (Meters) 6.5 Length (Meters) 350 350	largest vessel to berth (DWT-GT/Meters)  170 meters / 40,000 DWT  Diameter (Inch)  6  6		
	<b>No</b> 1	(Meters)  250  me of the pipeline (if available of the LINE 1  LINE 2  LINE 3	on facility	(Meters)	water depth (Meters)  13.5  Number (pcs)  1  1	water depth (Meters) 6.5 Length (Meters) 350 350 421	largest vessel to berth (DWT-GT/Meters)  170 meters / 40,000 DWT  Diameter (Inch)  6  6  6		
	<b>No</b> 1	(Meters)  250  me of the pipeline (if available of LINE 1  LINE 2  LINE 3  LINE 4	on facility	(Meters)	water depth (Meters)  13.5  Number (pcs)  1  1  1	water depth (Meters) 6.5 Length (Meters) 350 350 421 421	largest vessel to berth (DWT-GT/Meters)  170 meters / 40,000 DWT  Diameter (Inch)  6  6  6  6		
	<b>No</b> 1	(Meters)  250  me of the pipeline (if available of the pipeline (if available of the pipeline (if available of the pipeline (if available of the pipeline (if available of the pipeline of the	on facility	(Meters)	water depth (Meters)  13.5  Number (pcs)  1  1  1  1	water depth (Meters) 6.5 Length (Meters) 350 350 421 421 379	largest vessel to berth (DWT-GT/Meters)  170 meters / 40,000 DWT  Diameter (Inch)  6  6  6  6  6		
	<b>No</b> 1	(Meters)  250  me of the pipeline (if available of the pipeline)  LINE 1  LINE 2  LINE 3  LINE 4  LINE 5  LINE 6  LINE 7  LINE 8	on facility	(Meters)	water depth (Meters)  13.5  Number (pcs)  1  1  1  1  1  1	water depth (Meters)  6.5 Length (Meters)  350 350 421 421 379 387	largest vessel to berth (DWT-GT/Meters)  170 meters / 40,000 DWT  Diameter (Inch)  6  6  6  6  6  8		
	<b>No</b> 1	(Meters)  250  me of the pipeline (if available of the pipeline)  LINE 1  LINE 2  LINE 3  LINE 4  LINE 5  LINE 6  LINE 7  LINE 8  LINE 9	on facility	(Meters)	water depth (Meters)  13.5  Number (pcs)  1  1  1  1  1  1  1  1	water depth (Meters) 6.5 Length (Meters) 350 350 421 421 379 387 397 400 425	largest vessel to berth (DWT-GT/Meters)  170 meters / 40,000 DWT  Diameter (Inch)  6  6  6  6  8  8  8  8		
	<b>No</b> 1	(Meters)  250  me of the pipeline (if available of the pipeline)  LINE 1  LINE 2  LINE 3  LINE 4  LINE 5  LINE 6  LINE 7  LINE 8  LINE 9  LINE 10	on facility	(Meters)	water depth (Meters)  13.5  Number (pcs)  1  1  1  1  1  1  1  1	water depth (Meters)  6.5 Length (Meters)  350 350 421 421 379 387 397 400 425 340	largest vessel to berth (DWT-GT/Meters)  170 meters / 40,000 DWT  Diameter (Inch)  6  6  6  6  6  8  8  8		
	<b>No</b> 1	(Meters)  250  me of the pipeline (if available of the pipeline)  LINE 1  LINE 2  LINE 3  LINE 4  LINE 5  LINE 6  LINE 7  LINE 8  LINE 9  LINE 10  LINE 11	on facility	(Meters)	water depth (Meters)  13.5  Number (pcs)  1  1  1  1  1  1  1  1  1  1  1  1  1	water depth (Meters)  6.5 Length (Meters)  350 350 421 421 379 387 400 425 340 377	largest vessel to berth (DWT-GT/Meters)  170 meters / 40,000 DWT  Diameter (Inch)  6  6  6  6  8  8  8  8  6  6  6		
	<b>No</b> 1	(Meters)  250  me of the pipeline (if available of the pipeline)  LINE 1  LINE 2  LINE 3  LINE 4  LINE 5  LINE 6  LINE 7  LINE 8  LINE 9  LINE 10  LINE 11  LINE 12	on facility	(Meters)	water depth (Meters)  13.5  Number (pcs)  1  1  1  1  1  1  1  1  1  1  1  1  1	water depth (Meters)  6.5 Length (Meters)  350 350 421 421 379 387 397 400 425 340 377 380	largest vessel to berth (DWT-GT/Meters)  170 meters / 40,000 DWT  Diameter (Inch)  6  6  6  6  8  8  8  8  6  6  6  8  8		
	<b>No</b> 1	(Meters)  250  me of the pipeline (if available of the pipeline)  LINE 1  LINE 2  LINE 3  LINE 4  LINE 5  LINE 6  LINE 7  LINE 8  LINE 9  LINE 10  LINE 11  LINE 11  LINE 12  LEM 1	on facility	(Meters)	water depth (Meters)  13.5  Number (pcs)  1  1  1  1  1  1  1  1  1  1  1  1  1	water depth (Meters)  6.5 Length (Meters)  350 350 421 421 379 387 400 425 340 377 380 337	largest vessel to berth (DWT-GT/Meters)  170 meters / 40,000 DWT  Diameter (Inch)  6  6  6  6  8  8  8  8  6  6  6  8  8		
	<b>No</b> 1	(Meters)  250  me of the pipeline (if available of LINE 1  LINE 2  LINE 3  LINE 4  LINE 5  LINE 6  LINE 7  LINE 8  LINE 9  LINE 10  LINE 11  LINE 12  LEM 1  LEM 2	on facility	(Meters)	water depth (Meters)  13.5  Number (pcs)  1  1  1  1  1  1  1  1  1  1  1  1  1	water depth (Meters)  6.5 Length (Meters)  350 350 421 421 379 387 397 400 425 340 377 380 337 404	largest vessel to berth (DWT-GT/Meters)  170 meters / 40,000 DWT  Diameter (Inch)  6  6  6  6  6  8  8  8  8  6  6  6  6		
	<b>No</b> 1	(Meters)  250  me of the pipeline (if available of the pipeline)  LINE 1  LINE 2  LINE 3  LINE 4  LINE 5  LINE 6  LINE 7  LINE 8  LINE 9  LINE 10  LINE 11  LINE 11  LINE 12  LEM 1	on facility	(Meters)	water depth (Meters)  13.5  Number (pcs)  1  1  1  1  1  1  1  1  1  1  1  1  1	water depth (Meters)  6.5 Length (Meters)  350 350 421 421 379 387 400 425 340 377 380 337	largest vessel to berth (DWT-GT/Meters)  170 meters / 40,000 DWT  Diameter (Inch)  6  6  6  6  8  8  8  8  6  6  6  8  8		

## 1.2. Loading / Unloading, Handling, and Storage Procedures for Hazardous Cargoes Handled and Temporarily Stored in the Coastal Facility

Hazardous Liquid Bulk Cargoes (Petroleum and Petroleum Products, Chemical and Similar Liquid Dangerous Bulk Cargoes) Class 3, Class 6.1 and Class 9 are handled in our port facility and stored in the port area.

The list of loading/unloading, handling, and storage instructions, and procedures for hazardous cargoes is given below.

- OPR-T-01 VESSEL-TO-TANK GOODS RECEIPT INSTRUCTION
- OPR-T-02 LAND TANKERS ACCEPTANCE, FILLING, AND ENTRY-EXIT INSTRUCTIONS
- OPR-T-03 VESSEL-TO-TANK GOODS RECEIPT INSTRUCTION
- OPR-T-04 TANK CLEANING INSTRUCTIONS
- OPR-T-05 VESSEL EVACUATION AND ROAD TANKER CLEANING OF FLEXIBLE HOSES AFTER FILLING INSTRUCTION
- OPR-T-06 INSTRUCTIONS FOR CLEANING THE CARGO CIRCUITS WITH THE PING SYSTEM AFTER EVACUATION
- OPERATING INSTRUCTIONS FOR OPR-T-07 CODE 4 INTERMEDIATE CARGO PUMPS
- OPR-T-08 PRODUCT TRANSITIONS INSTRUCTION
- OPR-T-09 NITROGEN TAMPING OPERATION AND SETTING OF REGULATORS INSTRUCTION
- OPR-T-10 INSTRUCTIONS FOR SAMPLING COASTAL TANKS AND LINES
- OPR-T-15 TANK LEVEL MEASUREMENT INSTRUCTION
- OPR-T-17 DIESEL AND FUEL OIL LOADING AND DISCHARGE INSTRUCTION
- OPR-T-18 ATG (AUTOMATIC TANK GAUGING) SYSTEM MALFUNCTION IN CASE OF VESSEL'S LOADING AND DISCHARGE OPERATIONS INSTRUCTION
- OPR-T-19 PORT INFORMATION AND MARINE OPERATIONS ( JETTY REGULATION )
- OPR-T-21 LODING MASTER DUTIES AND AUTHORITIES' INSTRUCTION
- OPR-T-24 ETHYL ALCOHOL DENATURATION PROCEDURES INSTRUCTION
- OPR-P-01 VESSEL LOADING/DISCHARGE PROCEDURE
- OPR-P-02 ROAD TANKER LOADING/DISCHARGE PROCEDURE
- OPR-P-03 EXXON MOBILE BASE OIL STORAGE PROCEDURE
- OPR-P-04 BASE OIL OPERATIONS SEALING PROCEDURE

### 2. RESPONSIBILITIES

### 2.1. Responsibilities of the Cargo Handler

- **a.** Prepares or has prepared the mandatory documents, information and instruments related to hazardous cargoes and ensures that these documents are kept with the cargo during the transportation activity.
- **b.** Ensures that hazardous cargoes are classified, packaged, marked, labeled, and placarded in accordance with their type.
- c. Ensures that hazardous cargoes are loaded, stowed and securely fastened to approved packaging and cargo transport units in accordance with the rules and safely.

### 2.2. Responsibilities of the Coastal Facility Operator

- **a.** Vessels carrying hazardous cargoes shall not dock at the facility without the permission of the port authority.
- **b.** Provides written information to the vessel that will dock at the facility within the scope of facility rules, cargo handling rules, and relevant legislation.
- c. Does not handle hazardous cargoes for which it has not received a handling permit from the Administration and does not victimize the vessels that will dock by planning in this context.
- **d.** Requests the mandatory documents, information and instruments related to hazardous cargoes from the cargo authority and ensures that they are kept with the cargo. In the case that the relevant documents, information and instruments cannot be provided by the cargo operator, he/she is not obliged to accept or handle the hazardous cargo in his/her facility.
- e. Shares all the data that may be required according to the characteristics of the cargo with the shipper and performs the loading or unloading operation according to the agreement to be made. Does not make changes in the operation without the knowledge of the vessel owner.
- f. Determines the working limits by taking into account the safe working capacity of the facility and weather forecasts and takes the necessary measures to ensure that the vessel remains safely moored at the berth and handled.
- **g.** Checks the transport documents containing information that the hazardous cargoes arriving at the facility are properly classified, packaged, marked, labeled, marked, placarded and safely loaded into the cargo transport unit.

- **h.** Ensures that the personnel involved in the handling of hazardous cargoes and the planning of this handling are documented by receiving the necessary training and does not assign personnel without documents in these operations.
- i. Ensures that the hazardous cargo handling equipment in its facility is operational and that the relevant personnel are trained and certified for the use of this equipment.
- **j.** Ensures that the staff uses personal protective equipment suitable for the physical and chemical properties of the hazardous cargo by taking occupational safety measures at the coastal facility.
- **k.** Performs activities related to hazardous cargoes at docks, piers and warehouses established in accordance with these works.
- **l.** Equips the docks and piers reserved for vessels that will load or unload hazardous liquid bulk cargoes with installations and equipment suitable for this work.
- **m.** Maintains an up-to-date list of all hazardous cargoes on vessels docked at the facility and in closed and open areas in the facility and provides this information to the relevant parties upon request.
- **n.** Notifies the port authority of the instant risk posed by the hazardous cargoes handled or temporarily stored in the facility and the measures taken against them.
- **o.** Notifies the port authority of accidents related to hazardous cargoes, including accidents at the entrance to closed areas.
- **p.** Provides the necessary support and cooperation in the controls and inspections carried out by the administration and the port authority.
- **q.** Ensures that Class 1 (except Class 1 Compatibility Group 1.4 S), Class 6.2 and Class 7 hazardous cargoes, which are not allowed to be temporarily stored, are transferred out of the coastal facility as soon as possible immediately, and applies to the Administration for permission in cases where it is necessary to keep them waiting.
- r. Temporarily stores the cargo transport units in which hazardous cargoes are transported in accordance with the separation and stacking rules and takes fire, environmental and other safety measures appropriate to the class of hazardous cargo in the storage area. Keeps fire extinguishing systems and first aid units ready for use at all times in the areas where hazardous cargoes are handled and periodically performs the necessary checks.
- **s.** Obtains permission from the port authority before the hot work and operations to be carried out in the areas where hazardous cargoes are handled and temporarily stored.

- t. Prepares an emergency evacuation plan for the evacuation of vessels from coastal facilities in emergencies and submits it to the port authority and informs the relevant persons about the plan approved by the port authority.
- **u.** Ensures that the internal loading of cargo transport units is carried out in accordance with the loading safety rules in the facility.

### 2.3. Responsibilities of the Vessel Owner

- **a.** Ensures that the cargo to be carried by the vessel is certified as suitable for carriage and that the cargo holds, cargo tanks, and cargo handling equipment are suitable for cargo transportation.
- **b.** Requests all mandatory documents, information and instruments related to hazardous cargoes from the cargo and ensures that they are kept with the cargo during the transportation activity.
- **c.** Ensures that the documents, information and instruments required for hazardous cargoes on board within the scope of the legislation and international conventions are appropriate and up to date.
- **d.** Checks the transport documents containing information that the cargo transport units loaded on board are properly marked, placarded and loaded safely.
- **e.** Informs the relevant vessel personnel about the risks of hazardous cargoes, safety procedures, safety and emergency measures, intervention methods, and similar issues.
- **f.** Keeps up-to-date lists of all hazardous cargoes on board and declares them to the relevant parties upon request.
- **g.** Ensures that the loading program, if any on board, is approved and documented and kept operational.
- **h.** Notifies the port authority and the coastal facility of the instant risk posed by the hazardous cargoes on board the vessel docking at the coastal facility and the measures taken for this.
- i. Does not accept hazardous cargo for transportation in case of leakage of the hazardous cargo or if there is such a possibility.
- j. Notifies the port authority of hazardous cargo accidents that occur on board the vessel during navigation or while at the coastal facility.
- **k.** Provides the necessary support and cooperation in the controls and inspections carried out by the administration and the port authority.

- **l.** Does not accept carrying hazardous cargoes that are not included in the vessel certificates issued by the relevant institutions and organizations.
- **m.** Ensures that the vessel crew in charge of handling hazardous cargo use personal protective equipment suitable for the physical and chemical properties of the cargo during handling.
- **n.** Provides loading safety requirements for cargoes loaded on board their vessels.

### Responsibilities of the carrier

- a) Requests all mandatory documents, information and instruments related to hazardous cargoes from the cargo and ensures that they are kept with the cargo during the transportation activity.
- b. b) Checks the compliance of hazardous cargoes classified, packaged, marked, labeled and placarded by the cargo authority with the legislation.
- c. c) Checks that hazardous cargoes are packaged in accordance with the rules using approved packaging and cargo transport units, safely loaded and securely connected to the cargo transport unit.

## 3. RULES AND PRECAUTIONS TO BE FOLLOWED/OBEYED BY THE COASTAL FACILITY

According to Article 14, Article 15 and Article 17 of the Regulation on the Carriage of Dangerous Goods by Sea, the following measures are taken at Altıntel Port and Terminal Operations Facility, the details of which are given in other articles:

- a. The port authority stops the handling operation in the coastal facility when it sees any risk and does not start it until the risk is eliminated.
- b. In order to ensure the safe loading of cargoes on board, the provisions of the BLU Code and BLU Manual, The Code of Safe Practice for Cargo Stowage and Securing (CSS Code), the Code of Practice for the Packaging of Cargo Transport Units (CTU Code) and the Code of Safe Practice for Vessels Carrying Timber Deck Cargoes (TDC Code) are complied with according to the type of cargo.
- c. The stowage of cargoes is carried out in accordance with the relevant legislation and international conventions to which we are a party.

- d. The vessel cannot be loaded more than the loading limit, taking into account the loading limit mark. If such a situation is detected, the vessel is not allowed to sail and administrative action is taken against the vessel owner within the scope of Article 22.
- e. Before the handling operation, the loading-unloading plan, and before the departure of the vessel, the results of the draught survey or weighbridge survey to determine the amount of cargo loaded are submitted to the port presidency by the vessel owner. The administration or the port authority may request the draft survey or weighbridge survey report to be obtained from an authorized inspection company.
- f. Measures are taken to prevent the stability of the vessel from being adversely affected by ensuring that the cargo in bulk cargo vessels, especially single-hold bulk cargo vessels, is loaded in such a way as to spread to the bottom of the hold (by strapping).
- g. The load and ballast water arrangement are monitored throughout the loading or unloading operation to ensure that the vessel's structure is not subjected to excessive stress.
- h. Care is taken to ensure that the vessel is free of tilt, but if a tilt is required during loading, it is ensured that it is as short as possible. In order to avoid structural damage to the vessel, it is ensured that it is loaded and unloaded in a balanced manner in accordance with the approved stability boucle.
- i. In adverse meteorological and oceanographic conditions that may affect the cargo handling operation, the handling operation is stopped by the master until the conditions improve.
- j. In order to prevent situations such as placing heavy cargo on top of light cargo, placing liquid cargo on top of dry cargo, spreading the odor of malodorous cargoes to other cargoes, cargoes with characteristics that may damage other cargoes are loaded in accordance with the separation rules.
- k. In order to ensure that the safety measures related to the loading, stowage, segregation, handling, transportation and unloading of cargoes are fully implemented and maintained, in accordance with SOLAS Chapter VI Section A Rule 5.6, all cargoes, cargo units and cargo transport units, except solid and liquid bulk cargoes, are loaded, stowed and secured in compliance with the Cargo Securing Manual approved by the Administration or authorized classification societies on behalf of the Administration.
- 1. If it is not possible to store dangerous goods in the area where they are unloaded at the pier or dock, coastal facility operators shall ensure that these substances are transported outside the coastal facility as soon as possible without waiting in the port area.
- m. Dangerous goods are properly packaged and information identifying the dangerous goods and information on risk and safety measures are kept on the packaging.

- n. Coastal facility personnel, seafarers and other authorized persons involved in the handling of dangerous goods wear protective clothing suitable for the physical and chemical properties of the cargo during loading, unloading and storage.
- o. Persons who will fight fire in the dangerous goods handling area are equipped with firefighting equipment and fire extinguishers and first aid units and equipment are kept ready for use at any time.
- p. Coastal facility operators prepare an emergency evacuation plan for the evacuation of vessels and marine vessels from coastal facilities in emergencies and submit it for the approval of the port authority.
- q. Coastal facility operators are obliged to take fire, safety and security measures.
- r. Personnel who do not have the necessary training and certificates according to the Regulation on Training and Authorization within the Scope of the International Code on Hazardous Cargoes Carried by Sea published in the Official Gazette dated 11/2/2012 and numbered 28201 are not allowed to work and perform hazardous cargo handling operations and to enter the areas where these operations are carried out. The personnel working in the handling of dangerous goods in our facility are subjected to IMDG code "Awareness Training" and renewed every 2 years.

Altintel Port and Terminal facility personnel in charge of handling dangerous goods, and other authorized persons related to the cargo, wear protective clothing suitable for the physical and chemical properties of the cargo during loading, unloading, and storage and are constantly monitored by the facility with the PPE tracking chart. People who will fight fire in the dangerous goods handling area in our facility are equipped with firefighting equipment and fire extinguishers and first aid units and equipment are ready for use at any time.

# 4. CLASSIFICATIONS, TRANSPORTATION, SHIPPING, HANDLING, SEPARATION, STACKING, and STORAGE OF DANGEROUS GOODS

### 4.1. Classes of Hazardous Cargoes

Chemicals in the facility (UN codes and Hazard Classes)

NO	CHEMICAL NAME	DEPARTMENT USED	UN CODES	HAZARD CLASSES
1	METHYLENE CLORIDE	CHEMICALS STORED	1593	6.1
2	METHYL ISOBUTHYL KETONE	CHEMICALS STORED	1245	3
3	ACETONE	CHEMICALS STORED	1090	3
4	METHYLENE ETHYL KETONE	CHEMICALS STORED	1193	3
5	ETHANOL 99/5 IPATBA	CHEMICALS STORED	1170	3
6	ISOPROPYL ALCOHOL	CHEMICALS STORED	1219	3
7	ISOPROPYL ALCOHOL(SASOL)	CHEMICALS STORED	1219	3
8	N-BUTHYL ALCOHOL	CHEMICALS STORED	1120	3
9	ISOBUTHYL ALCOHOL	CHEMICALS STORED	1212	3
10	ISONONYL ALCOHOL	CHEMICALS STORED	1212	3
11	2-ETHYL-1 HEXANOL	CHEMICALS STORED	2282	3
12	HEXAN	CHEMICALS STORED	1208	3
13	HEPTAN	CHEMICALS STORED	1206	3
14	TOLUENE	CHEMICALS STORED	1294	3
15	WHITE SPIRIT	CHEMICALS STORED	1300	3
16	XYLENE	CHEMICALS STORED	1307	3
17	SOLVENT NAPHTA	CHEMICALS STORED	1268	3
18	DIETHYLENE GLYCOL	CHEMICALS STORED	-	-
19	MONO ETHYLENE GLYCOL	CHEMICALS STORED	-	-
20	BUTHYL DIGLCYOL ETHER	CHEMICALS STORED	-	-
21	BUTHTYL GLYCOL ETHER	CHEMICALS STORED	-	-
22	METHYL PROXITOL ACETATE	CHEMICALS STORED	1189	3
23	ETHYL ACETATE	CHEMICALS STORED	1173	3

24	ISO BUTHYL ACETATE	CHEMICALS STORED	1213	3
25	METHYL ACETATE	CHEMICALS STORED	1231	3
26	N-BUTHYL ACETATE	CHEMICALS STORED	1123	3
27	VINYL ACETATE MONOMER	CHEMICALS STORED	1301	3

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28	2-ETHYL HEXYL ACRYLATE	CHEMICALS STORED	3334	9
29	METHYL METHACRYLATE	CHEMICALS STORED	1247	3
30	BUTHYL ACRYLATE	CHEMICALS STORED	2348	3
31	STYRENE MONOMER	CHEMICALS STORED	2055	3
32	ETHYL ACRYLATE	CHEMICALS STORED	1917	3
33	GAS OIL	CHEMICALS STORED	1202	3
34	SULFURIC ACID	SUPALAN	1830	8
35	FUEL OIL	CHEMICALS STORED	3082	9
36	FUEL OIL / VLSFO	CHEMICALS STORED	3082	9
37	AP/E CORE 100	CHEMICALS STORED	-	-
38	AP/E CORE 150	CHEMICALS STORED	-	-
39	AP/E CORE 600	CHEMICALS STORED	-	-
40	AP/E CORE 2500	CHEMICALS STORED	-	-
41	EHC 45	CHEMICALS STORED	-	-
42	EHC 110	CHEMICALS STORED	-	-
43	YUBASE 4	CHEMICALS STORED	-	-
44	YUBASE 6	CHEMICALS STORED	-	-
45	EHC 50	CHEMICALS STORED	-	-
46	N-PROPANOL	CHEMICALS STORED	1274	3
47	LINEAR ALKYL BENZENE (LAB)	CHEMICALS STORED	-	-
48	SHELLSOL D 70	CHEMICALS STORED	-	-
49	1,4 BUTANEDIOL (BDO )	CHEMICALS STORED	-	-
50	EHC 120	CHEMICALS STORED	-	-
51	DIISONONYL PHTHALATE (DINP)	CHEMICALS STORED	-	-
52	METHYL PROXITOL ( 1-METOKSİ- 2-PROPANOL ) " PM "	CHEMICALS STORED	3092	3

### 4.2. Packages and Wrappings of Hazardous Cargoes

Dangerous goods packaging and wrapping are not performed in our facility.

### 4.3. Placards, Plates, Marks, and Labels for Hazardous Cargoes

NFPA signs are attached to the tanks where chemicals are stored at our facility, and SDSs are available in the tank areas-manifolds.

Altintel Port and Facilities do not have any packaged products that are delivered and shipped by sea. Mentioned in 4.2. Tanker and truck/trailer transportation within the scope of ADR is the important issue to be considered and controlled at Altintel Port and Facilities. The labeling of the vehicles carrying the products shipped from the facility must be as follows:

- There must be an orange plate showing the UN No and hazard properties of the product being shipped,
- Danger signs must be placed on 3 sides of the tank.

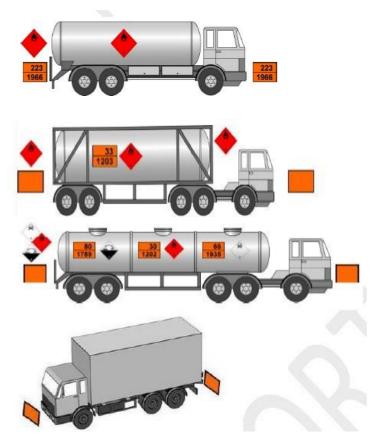


Figure 1 Tanker Placarding

In this context, products arrive at Altıntel Port and Terminal Operations by land and meet the above-mentioned marking criteria.

### 4.4. Hazardous Cargoes Markings and Packing Groups

Dangerous goods packaging and wrapping are not performed in our facility.

### 4.5. Segregation Tables According to Classes of Hazardous Cargoes in Vessel and Port

There is no stacking of dangerous goods in the port. However, each vessel arriving at the Terminal is asked for the following cargo plan, last load and cleaning information:

#### SEPARATION ON BOARD AND AT THE PORT

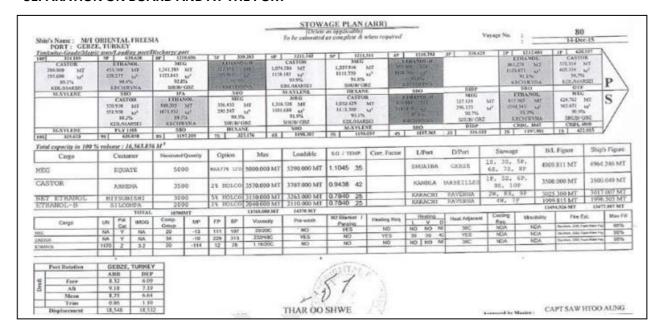


Table 1 Sample Vessel Storage Plan

CLA	SS			1.3	1.4	2.1	2.2	2.3	3	4.1	4.2	4.3	5.1	5.2	6.1	6.2	7	8	9
Explosives 1	.1, 1.2,	1.5	*	*	*	4	2	2	4	4	-4	48	4	4	2	4	2	4	×
Explosives	1.3,	1.6	*	*	*	4	2	2	4	3	3	4	4	4	4	2	2	2	×
Explosives		1.4	*	*	*	2	1	1	2	2	2	2	2	2	×	4	2	2	×
Flammable Gases		2.1	4	4	2	×	×	×	2	1	2	×	2	2	×	4	2	1	×
Non-flammable and no gases		2,2	2	2	1	×	×	×	1	×	100	×	×	1	×	2	1	×	×
Toxic Gases		2.3	2	2	1	×	×	X	2	X	2	×	×	2	×	2	7	×	×
Flammable Liquids		3	4	4	2	2		2	×	×	2	1	2	2	×	3	2	×	×
Flammable Solids		4.1	4	3	2	9	×	×	×	×	3	×	1	2	×	3	2	1	×
Self-flammable subs	stances	4.2	4	3	2	2	1	2	2	1	×	1	2	2	1	3	2	1	×
Hazardous in contact with water		4.3	4	4	2	×	×	×	1	×	9	×	2	2	×	2	2	1	×
Oxidizing substance		5,1	4	4	2	2	х	×	2	1	2	2	×	2	1	3	1	2	×
Organic peroxides		5.2	4	4	2	2	1	2	2	2	2	2	2	×	3	3	2	2	×
Toxic substances	9	6.1	2	2	×	×	×	×	×	×	33	х	1	1	x	1	×	×	×
Infectious substances	3	6.2	4	4	4	4	2	2	3	3	3	2	3	3	1	×	3	3	×
Radioactive substances	_	7	2	2	2	2	1	1	2	2	2	2	1	2	×	3	×	2	×
Abrasive		8	4	2	2	1	х	×	×	1	1	1	2	2	×	3	2	×	×
Diğer tehlikel maddeler ve		9	×	×	×	×	×	×	×	х	x	×	×	×	×	x	×	×	×

Tablodaki numara ve semboller aşağıdaki anlamlara gelir:

Table 2 Hazardous Cargo Segregation Table

<sup>1- &</sup>quot;Uzak tutulmalıdır";
2- "Ayrılmalıdır";
3- "Bütün bir kompartıman veya bölme vasıtasıyla ayrı tutulmalıdır";
4- "Aradan geçen bütün bir kompartıman veya bölme vasıtasıyla uzunlamasına ayrılmalıdır";
X- "Herhangi bir etkileşimi yoktur"

## **4.6.** Segregation Distances and Segregation Terms of Hazardous Cargoes in Warehouse Storage

There is no warehouse storage at the Liquid Cargo Terminal. However, the distances between the tanks are designed in accordance with the relevant regulations, and the cargoes stored in the tanks are planned in accordance with the hazard properties.

## 5. HANDBOOK ON HAZARDOUS CARGOES HANDLED AT THE COASTAL FACILITY

Hazardous Cargo Handbook is attached.

#### 6. OPERATIONAL ISSUES

## 6.1. Procedures for the safe berthing, mooring, loading/unloading, sheltering, or anchoring of vessels carrying hazardous cargo during the day and night.

At the At Altintel Port and Terminal Operations, the Hazardous Liquid Bulk cargoes are handled at the pier. A finger-type vessel carrying hazardous liquid bulk cargo with a length of 250 m and a width of 10 m for loading and unloading docks at the jetty and the draft of the pier is 13.5 m at the bow and 5 m at the stern.

The SDS form of the cargo is given to the HSE-Q unit before unloading by the vessel. HSE-Q department examines the data of the hazardous liquid bulk cargo and takes the necessary measures before the vessel is docked, observing the warnings in the SDS form. For instance, if there is a toxic warning in the incoming product, it provides the necessary and suitable personal protective equipment to all personnel who will work during the operation and ensures that all employees use the equipment.

After the vessel is safely tied to the dock with the help of the pilot and hawser, a safety inspection is carried out on the vessel. The safety inspection is carried out by the Loading Master on duty whose duty, authority, and responsibility are specified in the instruction and he/she fills out the form regarding the vessel ladder and the safe berthing of the vessels as defined in the Quality Management System. If there is an unsafe situation, the situation is reported to the vessel's owner, and measures are taken.

Unloading equipment and pipes suitable for the cargo are selected by the operation department. The operations department selects the suitable pipes and flexible hoses in accordance with the previously submitted SDS form. ISGOTT Vessel/Shore Safety Checklist is mutually signed. A communication network is established between the vessel and the port facility. Vessel/Shore Safety Checklist filled out mutually in accordance with the guidance in ISGOTT includes:

Description of the proper transport name, UN number (if any) and physical and chemical properties of the hazardous cargo,

Cargo transfer, slop transfer, degassing, inerting, ballasting, discharging and tank cleaning procedures

If there are cargoes that need to be handled with special equipment, information on loading/unloading and emergency response procedures, including:

Actions to be taken in case of spillage or leakage

Measures to be taken to prevent accidental personal contact with hazardous cargoes

Fire response procedures and suitable communication systems to be used in case of fire. The communication channels must be selected in the 2nd article of the checklist and checked at intervals.

Workers are present next to the flexible hoses that will be attached to the tanker and the vessel. Workers act together with the vessel's personnel in attaching liquid cargoes to the vessel's inlet and outlet manifolds.

If chemicals that are able to react with each other on the vessel are to be handled, these products are operated with separate lines and separate hoses.

Proper pressure adjustment is carried out with the vessel. Overflow of the tanks is prevented and the line is cut by informing the vessel personnel in case of danger.

Additionally in the Vessel/Shore Safety Checklist and related checklists:

It must be specified in detail that the controls, measuring systems, emergency shutdown, and alarm systems of cargo handling equipment, apparatus, and gears are tested and in good condition before the start of loading/unloading operations,

That the capacity and maximum permissible pressure values of the cargo circuits used for loading/unloading of the vessel and port facility are written down prior to the start of the unloading of hazardous liquid cargoes,

The condition of the arrangement and capacity of the cargo tank vapor evacuation system,

The actions to be taken in case of pressure increase due to emergency shutdown operation

The actions to be taken in case of a possible electrostatic charge unit,

Before the operation starts, it must be written in detail who will be the persons involved.

Actions to be taken in emergencies must be specified in these checklists and mutually agreed upon.

The inlet and outlet circuits of non-operational tanks must be closed during the vessel operation.

The open ends of the hoses not used for transfer must be blinded with a blind flange.

### Requirements

In order to detect gas leaks that may occur in the coastal facility, gas detectors shall be calibrated and ready for use.

During the loading / unloading operation at the coastal facility, all kinds of vehicles coming to the loading / unloading platform in the facility shall be completely free of static electricity, flame arrester apparatus shall be installed on the exhausts and grounding shall be done. Flame arresting apparatus shall be provided by the Land Tanker operator. Land Tankers without flame arresters shall not be allowed into the port facility. This feature shall not be required for tankers in ADR standards.

Necessary warnings and warning signs shall be placed around the Handling area. In hazardous places and situations, the relevant personnel shall wear personal protective clothing and equipment in accordance with occupational safety and occupational health criteria. Personnel who do not have personal protective clothing and equipment suitable for their job descriptions and work areas shall not be employed.

Periodic maintenance-repair and calibration of the devices used shall be carried out and the certificate, logbook, or record book documenting this situation shall be kept up-to-date.

In case of emergencies or accidents, first aid materials to be used for intervention shall be kept in places known to the personnel and easily accessible. There are first aid materials in the operator's mobo located at the end of the scaffold and controls are performed periodically.

Communication equipment used in the coastal facility shall be used in the loading/unloading operations of hazardous liquid bulk cargoes, radios that can be used safely in a flammable or explosive environment.

Flexible hoses used in the loading / unloading of hazardous liquid bulk cargoes shall be checked that they are approved and have a certificate showing the type of pipe, the maximum working pressure of the pipe, the month and year of manufacture. These pipes shall be tested, maintained and repaired in accordance with the criteria specified in ISGOTT and test reports and maintenance and repair records shall be kept. Hoses to be used in loading/unloading operations but not in service shall be stored in accordance with the criteria specified in ISGOTT.

A sufficient number of electrical insulation flanges shall be provided for flexible hoses and loading arms used in the loading/unloading of hazardous liquid bulk cargoes.

Hazardous liquid bulk cargoes shall be transported in such a way as to eliminate the possibility of interaction with other cargoes.

The operators of the coastal facilities where hazardous liquid bulk cargoes are handled are responsible for the issues regarding the additional safety and security measures to be taken in the coastal facilities loading master and HSE-Q department.

In our port facility, Loading Master, Operation Department and HSE-Q department are responsible for the handling of hazardous liquid bulk cargoes and their duties are defined in the quality management system and shall act within the framework of their responsibilities specified in article 10.8.

In case of cargo operations and emergencies, according to their areas of responsibility, the vessel captain and Loading Master shall provide the following information to the port authority and other relevant persons, if deemed necessary, regarding the hazardous liquid bulk cargoes loaded/unloaded or shipped.

During the loading and unloading operation, all pan and drain valves on the pier must be kept closed to prevent any spillage from reaching the sea.

All equipment to be used in operations must be used in a spark-free manner.

It is forbidden to provide electricity supply cables from the vessel to the land in Altıntel Port and Terminal Operations.

### By the vessel's captain;

Description of the proper transport name, UN number (if any) and physical and chemical properties (including reactivity) of the hazardous cargo,

Cargo transfer, slop transfer, degassing, inerting, ballasting, ballast discharging, and tank cleaning procedures.

### By Loading Master;

Information on special equipment required for the safe handling and loading/unloading of certain cargoes and emergency response procedures, including:

What to do in case of spillage or leakage specified in Emergency Plans,

Measures to be taken to prevent accidental contact of persons with hazardous cargoes in the Emergency Plan and within the scope of Occupational Health and Safety,

Fire fighting procedures specified in the Emergency Plan and appropriate communication systems to be used in case of fire.

It shall be checked that the required warning notices/signs are placed in written and pictograms at all entrances and approach points of the dock where the operation shall be carried out before and during the start of the handling and loading/unloading operations of hazardous liquid bulk cargoes.

During the handling and loading / unloading of hazardous liquid bulk cargoes, continuous communication shall be provided from Seaband channel 15 and the working channel specified in the protocol and the effectiveness of communication during cargo operations shall be ensured.

Piping systems for hazardous liquid bulk cargoes

### Flexible hose:

It shall not be used for cargoes other than those for which it is suitable, taking into account the temperature and suitability of such cargoes

If it is prone to impact damage, it shall be properly protected,

It shall be ensured that it is electrically continuous except when load handling involves an insulating flange or a non-conductive pulley part. The pipeline on the seaward side of the isolation section shall be electrically continuous to the vessel and the shoreside shall be electrically continuous to the grounding system. The isolating flange is tested in accordance with Section 17 of the International Safety Guide for Oil Tankers and Terminals (ISGOTT). These tests are performed annually by the maintenance department and the electrical resistance is required to be at least 1000 ohms. Isolated flanges that do not meet this requirement are not used.

By Loading Master;

Takes adequate measures to prevent short circuit in the insulation section,

Ensures that insulation and grounding systems are inspected and tested at appropriate intervals to ensure their effectiveness,

Ensures that other metallic connections between the interface and the shore are protected or arranged to ensure that there is no possibility of a spark igniting a flammable atmosphere,

Acts according to the appropriate checklists in the International Safety Guide for Oil Tankers and Terminals (ISGOTT),

### **Sources of ignition**

The liquid cargo foreman shall ensure that the vessel's captain is informed of conditions on board that may require measures to be taken with regard to sources of ignition, such as vessel's stoves or cooking appliances.

### **Containment of spills**

In case of an accident in the storage area, the Operations Officer shall ensure that all waste water pipe openings, pipes, and drains on the interface are closed before the start of transportation and kept closed during the transportation of all hazardous liquid bulk cargoes.

### Handling

#### Flexible hoses

The Vessel Captain and Loading Master, within their respective areas of responsibility:

- 1. Ensures that a Flexible hose is not used for loads other than those for which it is suitable or at any working pressure for which it is not suitable in relation to the temperature and suitability of such cargoes.
- **2.** Each type of Flexible hose with end fittings is checked to ensure that it has been tested and has a certificate showing the burst pressure.
- **3.** Before being placed in service, it is checked from documentation that each Flexible hose has been hydrostatically tested in accordance with the requirements of the Administration.
- **4.** Flexible hoses shall be visually inspected before being put into use. Flexible hoses are checked at frequent intervals during operation.
- **5.** Documents showing flexible hose, hose type, specified maximum working pressure, and month and year of manufacture must be available at the facility.
- **6.** The flexible hose must have sufficient electrical insulation and its length must be sufficient to operate satisfactorily within the specified operating range without overloading the terminal connections
- **7.** A Flexible hose equipped for the transport of hazardous liquid bulk cargoes is kept under proper supervision.
- **8.** In order to protect the environment, personal safety and equipment in the event of an emergency, procedures for leak-free disconnection of the flexible hose connection must be sufficiently performed.

### Starting measures

The Vessel Captain and Loading Master, within their respective areas of responsibility, shall test and ensure that the cargo handling controls, metering systems, emergency shutdown, and alarm systems are sufficient prior to the beginning of the cargo transfer operation. All cargo lines and hoses are pressure tested and recorded before starting the load.

Prior to the beginning of the hazardous liquid bulk cargo operation, the Vessel Captain and the Operations Officer shall agree in writing on the transportation times including the maximum loading or unloading speeds in consideration of the following points.

- Capacity and maximum permissible pressure of the vessel's load lines and flexible hose;
- Steam ventilation system layout and maximum loading or unloading speeds;
- Possible pressure increases in accordance with emergency shutdown procedures;
- Possible accumulation of electrostatic charge; and The presence of responsible persons on board and ashore during starting operations
- The appropriate security checklist outlining the main security measures to be taken before and during such transfer operations shall be completed and signed.
- The necessary steps to be taken and the signs to be used in case of an emergency that may occur during handling operations shall be accepted in writing.
- It must be ensured that appropriate safety measures are taken and the proper clothing is worn.
- The operations officer shall ensure that the start-up controls on bulk liquid transfer pumps are locked in the "off" position or located in a location that is accessible only to authorized personnel.
- The operations officer shall check that the loading/unloading connections of the flexible hose are safely and hermetically sealed when not in use or in standby service.
- The "Vssel/Shore Safety Checklist" in the International Safety Guide for Tankers and Terminals (ISGOTT) shall be completed and signed in accordance with the "Guide for Completion of the vessel/Shore Safety Checklist" also in ISGOTT.

### **Pumping**

The Vessel Captain and Loading Master, within their respective areas of responsibility:

- Shall ensure that controls are performed at agreed intervals to ensure that accepted back pressures and loading or unloading rates are not exceeded,
- That all due care is taken to prevent leakage of all associated piping, flexible hoses, and associated equipment on board and onshore and that adequate supervision is exercised during the transfer of hazardous liquid bulk cargoes,
- That effective communication is maintained between the vessel and shore equipment during transfer operations,

- That safety checklist is available for supervision during handling operations;
- That the necessary arrangements were made to measure the tankers to be discharged during the handling of hazardous liquid bulk cargoes in order to ensure that the tanker is not overfilled;
- That responsible persons are present during operations on board and ashore
- That appropriate safety equipment and clothing are used.

### **Completion of the operation**

The Vessel Captain and Loading Master, within their respective areas of responsibility:

- Shall ensure that there is no residual pressure in the unloading valves and flexible hoses after the transfer of hazardous bulk liquid cargoes is completed.
- Also; that the liquids were drained and depressurized before the flexible hose leaves the vessel;
- That all safety measures were taken, including sealing of vessel manifold connections and flexible hoses with blind flanges; and that Appropriate safety equipment and clothing were used.

The docking of the vessels coming out of the port to dock at the ALTINTEL pier is done within the responsibility, plan, and organization of the Izmit Port Management Directorate in accordance with the Izmit Port Management Instructions. Domestic vessels over 500 (including) gross tons and all foreign-flagged vessels without gross ton limitation are subject to pilotage. Vessels subject to pilotage dock at Izmit port with the help of pilot and mooring engines, and other vessels not subject to pilotage dock at the pier only with the help of mooring engines. Only Bunkers cannot benefit from these services. However, these vessels shall have a personnel ready to take the ropes during their berthing to the pier and to release the ropes during their departure from the pier by bringing them from the land beforehand. Berthing and disembarking from the pier is done only in daylight, and only Bunkers under 500 gross tons are allowed to berth and disembark at any time of the day. Transfers are available 24 hours a day as long as the vessel is at the pier.

#### **6.2.** Weather Alerts

The climate of Kocaeli region is typical of the Marmara Region. This climate is characterized by mild and rainy winters and hot and dry summers. The average annual temperature is 15 °C and the lowest daily average is 3 °C. The sea water temperature is around 12°C in winter and 20-23°C in summer. The average relative humidity is 76%.

All operations are stopped in case of lightning strikes, high speed winds and calm weather (winds below 2 knots) with the instruction of the vessel captain or port authority. Fixed ventilation systems will be turned off in lightning weather.

The wind speed limits for Altıntel Terminal are shown below;

Wind-meter/second	Identification	The Beaufort Wind 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

Table 3 Wind Speed Limits

Loading/unloading will be stopped when the wind speed reaches 13.5 meters/second and all hoses will be disconnected when it reaches 16.5 meters/second.

### **6.3.** Prevention of Sparking

In order to detect gas leaks that may occur in the coastal facility, gas detectors shall be calibrated and ready for use.

Carriage of packaged or other cargoes on the vessel may be carried with the written permission of the port authority, small packages or cargoes that can be carried by hand may be carried while the vessel continues its operation, the risk of sparking by rubbing each other for metal parts in packages or cargoes must be eliminated. Cargoes must not block the safe passage between the vessel and the shore.

During the loading / unloading operation at the coastal facility, all kinds of vehicles coming to the loading / unloading platform in the facility shall be completely free of static electricity, flame arrester apparatus shall be installed on the exhausts and grounding shall be done. Flame arresting apparatus shall be provided by the Land Tanker operator. Land Tankers without flame arresters shall not be allowed into the port facility. This feature shall not be required for tankers in ADR standards.

Necessary warnings and warning signs shall be placed around the Handling area. In hazardous places and situations, the relevant personnel shall wear personal protective clothing and equipment in accordance with occupational safety and occupational health criteria. Personnel who do not have personal protective clothing and equipment suitable for their job descriptions and work areas shall not be employed.

Periodic maintenance-repair and calibration of the devices used shall be carried out and the certificate, logbook, or record book documenting this situation shall be kept up-to-date.

In case of emergencies or accidents, first aid materials to be used for intervention shall be kept in places known to the personnel and easily accessible. There are first aid materials in the operator's mobo located at the end of the scaffold and controls are performed periodically.

Communication equipment used in the coastal facility shall be used in the loading/unloading operations of hazardous liquid bulk cargoes, radios that can be used safely in a flammable or explosive environment.

Flexible hoses used in the loading / unloading of hazardous liquid bulk cargoes shall be checked that they are approved and have a certificate showing the type of pipe, the maximum working pressure of the pipe, the month and year of manufacture. These pipes shall be tested, maintained and repaired in accordance with the criteria specified in ISGOTT and test reports and maintenance and repair records shall be kept. Hoses to be used in loading/unloading operations but not in service shall be stored in accordance with the criteria specified in ISGOTT.

A sufficient number of electrical insulation flanges shall be provided for flexible hoses and loading arms used in the loading/unloading of hazardous liquid bulk cargoes.

Hazardous liquid bulk cargoes shall be transported in such a way as to eliminate the possibility of interaction with other cargoes.

The operators of the coastal facilities where hazardous liquid bulk cargoes are handled are responsible for the issues regarding the additional safety and security measures to be taken in the coastal facilities loading master and HSE-Q department.

In our port facility, Loading Master, Operation Department and HSE-Q department are responsible for the handling of hazardous liquid bulk cargoes and their duties are defined in the

quality management system and shall act within the framework of their responsibilities

specified in article 10.8.

In case of cargo operations and emergencies, according to their areas of responsibility, the

vessel captain and Loading Master shall provide the following information to the port authority

and other relevant persons, if deemed necessary, regarding the hazardous liquid bulk cargoes

loaded/unloaded or shipped.

During the loading and unloading operation, all pan and drain valves on the pier must be kept

closed to prevent any spillage from reaching the sea.

All equipment to be used in operations must be used in a spark-free manner.

It is forbidden to provide electricity supply cables from the vessel to the land in Altıntel Port and

Terminal Operations.

7. **Documentation, Control and Recording** 

7.1. The "CHEMICAL MATERIALS MANAGEMENT PROCEDURE" will determine

all mandatory

documents, information, and instruments related to hazardous cargoes and the measures to be

taken to reduce and control the negative effects of all kinds of chemicals entering, stored, and

used in the Altintel facility on people and the environment.

"Chemical Material Management Procedure"

**SCOPE** 

Covers all chemicals received, stored and used in all facilities and port areas. Chemicals used by

subcontractors in the facility are managed in line with the contracts made with the

subcontractor.

<u>AUTHORITIES</u>

Senior Management, HSE-Q Department, Maintenance Department, Operations Department,

**Administrative Affairs** 

**DEFINITIONS** 

**SDS:** Material Safety Data Sheet

#### APPLICATION

### **Purchase and Storage of Chemicals**

- When there is a need for a new chemical product for any purpose in the facility, the
  Material Safety Data Sheet is requested from the supplier prior to the order for the
  chemical needed by the Purchasing Unit. The "CHEMICAL PRODUCT USE PERMIT FORM"
  is filled out with the incoming SDS and submitted to the HSE-Q Department for approval.
- The HSE-Q Department examines the content of the chemical, gives the necessary approval and submits it for the approval of the Facility General Manager. Upon approval, if any, the measures to be taken are completed by the HSE-Q Department before the material enters the facility. A copy of the approved "CHEMICAL PRODUCT USE PERMIT FORM" is forwarded to the Purchasing Unit.
- Each authorized chemical is added to the "List of Permitted Chemicals" by the HSE-Q

  Department and kept up to date.
- It is forbidden to take any chemical into the facility that is not approved by the HSE-Q

  Department and Facility Manager and is not on the "List of Permitted Chemical".

Furthermore, all internal and external documents in the facility are provided with the necessary storage conditions and information in accordance with KYS-P-01 "DOCUMENTS and RECORDS CONTROL PROCEDURE".

## 7.2. Procedures for keeping an up-to-date list of all hazardous cargoes on the coastal facility site and other relevant information regularly and completely.

Our facility keeps the chemical list and quantities up to date with the OPR-F-09 A STORAGE TANKS IDENTIFICATION FORM. Daily updates are communicated to the relevant departments. Moreover, SDSs of chemicals are taken from each incoming vessel and checked.

ALTINTEL LİMAN VE TERMİN AL İŞLETMELERİ AŞ.					FORM NO REV NO YAYIN TARİHİ REV TARİHİ	: OPR-F-007 : 2 : 25.01.2010 : 12.10.2023
TANK STOK FARKI GÜNLÜK RAPORU						
TARİH						
TANK	MAL CINSI	KAPASİTE (TON)	BOŞLUK (KG)	TANK FİİLİ (KG)	DEFTER (KG)	FARK
1						
2						
3						
4						
5						
6						
7						
8						
9 21						
22						
23						<del>                                     </del>
24						
25						
31						
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Figure 3 Storage Tanks Introduction Form

# **7.3.** Receiving and Storage of Chemicals to the Facility CUSTOMER'S CHEMICALS STORED IN TANKS:

SDS is required for customer chemicals coming into the facility and stored in tanks. If it is a new material, the risk and environmental aspects are evaluated by the HSE-Q Department, a Product Information Form is prepared and posted at the loading site. The hazard symbols of the chemicals stored in the tanks are hung on the tank top signs in accordance with international standards. When the chemical is changed in the tank, the HSE-Q Supervisor is notified and the marking is adjusted accordingly.

### 7.4. CHEMICALS USED IN THE FACILITY:

- Chemicals ordered by Purchasing Unit or brought by the subcontractor to be used in the activities in the facility are checked by Technical Safety Officers in accordance with the "Authorized Chemicals List" when entering the facility. The subcontractor is obliged to provide the SDSs of the chemical brought by the subcontractor and to keep them available during use.
- For all chemicals used in the facility, the "Product Safety Data Sheet" is prepared by the HSE-Q department in the main language and on a single page and kept at the points of use. Necessary trainings are given to employees on this subject.
- Chemicals that need to be stored are stored by the relevant unit by providing conditions in line with the information on the SDS forms. Absorbent and protective measures are taken against leaks and spills. Chemicals that turn into waste are disposed of in accordance with the "Waste Management Procedure".
- For emergencies, the "Emergency Situations Handbook" and "Emergency Response Procedure" are taken into consideration.

# 7.5. Keeping records and statistics of hazardous cargoes is provided by "SHIPMENT PROCEDURES INSTRUCTION".

**OBJECTIVE**: To explain the rules to be followed by the personnel who ensure that all kinds of liquid goods placed in the facility tanks and dry cargoes taken to the General Warehouse Storage reach the customers in accordance with the provisions of the Customs Law and Regulation and the Commercial Code.

**SCOPE:** Covers the personnel working in the Gebze Storage Facility Dispatch Service.

- To record the warehouse declarations of the incoming vessels in the necessary places and to follow up on the transferred warehouses and to deduct their entry declarations from the relevant places. (STOCK & DELIVERY PERSON) STS-F-01/STS-F-02 STS-F-04
- To keep the entry & exit of fuel products separate from chemicals and to make deductions from the Customs Warehouse Book. (STOCK & DELIVERY PERSON)
- To prepare reports of incoming vessels and notify the center. (STOCK & DELIVERY PERSON) STS-F-13
- To compare and record the values in the quantity certificate issued with the Surveillance Company and the values in the Inventory Control List with the recorded values during vessel arrivals and monthly stock issuance. (STOCK & DELIVERY PERSON)
- To ensure that written information is given to Customs in the transfer of goods from tank to tank. (STOCK & DELIVERY PERSON)
- Preparing month-end stock reports. Monthly outflows and inflows in tabular and graphical form. (STOCK & DELIVERY PERSON) STS- F – 11 / STS-F-09 / STS-F-08
- To prepare the letters to be submitted to the customs directorate. (STOCK & DELIVERY PERSON)
- Preparing the port letters of the incoming vessels. (STOCK & DELIVERY PERSON)
- To make notifications of diesel entries & exits on EMRA's website every month. (STOCK & DELIVERY PERSON)
- To issue and sign the dispatch notes in accordance with the records and deliver them to the tanker driver with analysis reports. (STOCK & DELIVERY PERSON)
- To check and sign the counting minutes prepared by Authorized Customs Broker to be submitted to the Customs Directorate. (STOCK & DELIVERY PERSON)

- Communicating with customers, providing information about stocks, and coordinating shipments. (STOCK & DELIVERY PERSON)
- To record incoming Customs Declarations in the Customs Warehouse Book. (STOCK & DELIVERY PERSON)
- To issue the S / Truck or Truck / IBC loading receipt in accordance with the records. (STOCK & DELIVERY PERSON) STS-F-07
- To make shipments from tanks in accordance with Customs Entry and Import Declarations.
   (STOCK & DELIVERY PERSON)
- To issue and sign the delivery notes in accordance with the records and give them to the tanker driver. (STOCK & DELIVERY PERSON)
- To prepare the forms that need to be processed by making the transactions related to the outputs of the goods on the system. (STOCK & DELIVERY PERSON) STS-F-10
- To process the information about the goods released every day to the Customer Cards according to the type and quantity of goods. (STOCK & DELIVERY PERSON) STS-F-03
- To check the availability of written customer confirmations for each level and the appropriateness of the confirmations. (STOCK & DELIVERY PERSON)
- Notifying the Körfez Petrochemical Customs Directorate, Kocaeli Security Intelligence Branch Directorate, Kocaeli Security Smuggling Branch Directorate and Kocaeli Security Financial Branch Directorate of the exit list of authorized materials until 17:00 every evening via e-mail and fax. (STOCK & DELIVERY PERSON)
- Reporting the daily shipments and the amount of nationalized goods and sending them to the relevant units. (STOCK & DELIVERY PERSON) STS-F-05 A / STS-F-05 B / STS-F-06

# 7.6. Information on Quality Management System

Integrated Management System Handbook has been attached to Other Annexes.



Figure 4 TSE ISO 9001: 2015 Certificate



Figure 5 TSE ISO 45001: 2018 Certificate



# 8. EMERGENCIES, EMERGENCY PREPAREDNESS AND RESPONSE

# 8.1. FACILITY, EQUIPMENT, FIELD, TANK and VESSEL FIRES / EXPLOSIONS - GAS LEAKAGE - ELECTRICITY OUTAGE

# If the fire/explosion is in the tank;

- 1. Press the closest emergency button and inform about the event via two-way radio and shouting.
- 2. Notify the Energy Service Department to cut the power to the facility.
- **3.** Call an ambulance, AFAD, Fire Brigade (112), Port Authority, and notify the nearby facilities.
- **4.** If the conditions are suitable, put on fire-fighting clothes and turn on the cooling of the surrounding tanks.
- **5.** After approval, open the foam chamber valve of the relevant tank and start the foam system.
- **6.** If the tank's roof is opened, apply foam using RCM monitors.
- 7. Except for emergency teams, restrict access to the area.
- **8.** Stop any tanker fillings and make sure the vehicles have left the facility.
- 9. Cease all other activities in the facility and direct the relevant personnel to their emergency duties. Direct guests and subcontracted workers to emergency assembly areas.
- **10.** Stop any loading processes between the vessel and the tank in both directions and prepare the vessels to leave the pier.

11. After the fire has been extinguished, begin the cooling process.

# If the fire/explosion is in the tanker;

- 1. Press the closest emergency button and inform about the event via two-way radio and shouting.
- 2. Notify the Energy Service Department to cut the power to the facility.
- 3. Call an ambulance, AFAD, Fire Brigade (112), Port Authority, and notify the nearby facilities.
- **4.** Stop the filling operation.
- **5.** Turn on the filling tower foam sprinkler system.
- **6.** Make the manual foam trolleys ready for use.
- 7. If filling is taking place in other towers, stop it and safely evacuate the vehicles.
- **8.** Stop any unloading that is taking place and prepare the vessels to leave
- 9. Except for emergency teams, restrict access to the area.
- 10. Cease all other activities in the facility and direct the relevant personnel to their emergency duties. Direct guests and subcontracted workers to emergency assembly areas.
- 11. After the fire has been extinguished, begin the cooling process.

# If the fire/explosion is in the vessel;

- 1. Press the closest emergency button and inform about the event via two-way radio and shouting.
- 2. Notify the Energy Service Department to cut the power to the facility.
- **3.** Call an ambulance, AFAD, Fire Brigade (112), Port Authority, and notify the nearby facilities. Cease the evacuation process.
- **4.** Intervene with foam using pier RCM monitors.
- 5. Cool the product lines with other RCM to prevent them from being affected by fire.
- **6.** Cease all other activities in the facility and direct the relevant personnel to their emergency duties. Direct guests and subcontracted workers to emergency assembly areas.
- 7. Cease the evacuation operations of other vessels docked at the pier and ensure that they leave the pier.
- **8.** After the fire has been extinguished, begin the cooling process.

#### If Fire/Explosion is in the Sites (Pump Zones);

- 1. Press the closest emergency button and inform about the event via two-way radio and shouting.
- 2. Notify the Energy Service Department to cut the power to the facility.

- **3.** Call an ambulance, AFAD, Fire Brigade (112), Port Authority, and notify the nearby facilities.
- **4.** Cease tanker filling and vessel operations.
- **5.** After receiving an alarm from the flame detector, start the medium expansion foam generators in the pump zones.
- **6.** If necessary, start foam intervention with RCM.
- **7.** Put on fire-fighting clothing and go to cover the tank bottoms to prevent the fire from growing.
- **8.** Operate the tank sprinklers close to the pump zone.
- **9.** If filling is taking place in other towers, stop it and safely evacuate the vehicles.
- 10. Stop any unloading that is taking place and prepare the vessels to leave
- **11.** Except for emergency teams, restrict access to the area.
- 12. Cease all other activities in the facility and direct the relevant personnel to their emergency duties. Direct guests and subcontracted workers to emergency assembly areas.
- **13.** After the fire has been extinguished, begin the cooling process.

#### Response to Class 3, Class 9 and Class 6.1 Fires;

- 1. Notify the Head of the Emergency (Crisis Desk) Center.
- 2. Notify the Energy Service Department to cut the power to the facility.
- According to the Emergency Organization Chart, personnel must go to their duty stations.
   Off-duty personnel must go to assembly areas.
- **4.** In the event of a tank fire, all operations must be stopped.
- 5. In tank fires, foam is released from the foam system in the foam rooms, and if the tank roof is deformed due to an explosion, foam intervention must be carried out with RCM.
- **6.** In tank fires, the cooling showers of the surrounding tanks must be opened simultaneously.
- 7. Call an ambulance, AFAD, Fire Brigade (112), Port Authority, and notify the nearby facilities.
- **8.** Response teams must wear protective equipment.
- **9.** In vessel fires, the fire area on the vessel must be determined first.
- **10.** If the fire is not large, such as in a living space or engine unit, there is no need to remove the hose. If the fire gets worse, the hose will be dismantled.
- 11. The operation must be stopped and communication must be fully restored.
- 12. If the fire on board is a small fire, it is tried to be extinguished with fire extinguishers.
- 13. If the fire on board is a major fire, it is intervened with RCMs (foam and water) on the pier and the hose is disconnected from the vessel by removing the emergency release coupling beforehand.
- **14.** The port authority is notified directly.

- **15.** Intervention possibilities according to the class of the chemical are consulted with the vessel captain and a decision is made.
- **16.** After the fire is extinguished, efforts are started to investigate the causes of the fire.

#### In case of Chemical Overflow during Tanker Filling;

- 1. Keep calm and turn off the pumps-filling valve to stop the filling. Stop the filling in other platforms as well.
- 2. Act in accordance with the HSE-Q department's instructions; do not panic.
- 3. Obtain the chemical bulk equipment from the nearest absorbent cabinet.
- **4.** In Closed-Fillings, ensure that the Scully adaptors are immediately removed from the vehicle.
- **5.** Check and verify that the vehicle's electrical equipment is turned off.
- **6.** Ensure that the tanker grounding is connected, and never remove the grounding.
- 7. Set up a barrier around the spilled chemical to prevent leakage.
- **8.** Clean up the spilled chemical with a chemical-absorbent pad and put the pads in the contaminated disposal box.
- **9.** Using the pool valve, drain the remaining chemical from the pool and empty it into the slop tank.
- **10.** Continue filling after ensuring that the tanker and the area are clean.

# In case of Chemical Overflow from the Tank during Vessel Evacuation;

- 1. Stay calm, cease vessel operation by contacting the vessel's captain, close the start valve. Close the tank bottom valve after the vessel operation stops.
- 2. Act in accordance with the HSE-Q department's instructions; do not panic.
- **3.** According to the Emergency Organization Chart, personnel must go to their duty stations. Off-duty personnel must go to assembly areas.
- **4.** Teams going to the intervention must wear protective equipment (firefighter suit, chemical mask)
- **5.** Make sure that the tank basin valve is closed and take precautions to prevent spillage.
- **6.** Transfer the chemical kept in the pool to IBCs safely with the help of ATEX pump.
- **7.** Keep RCMs ready to dispense foam as a precaution against fire.
- **8.** Obtain the chemical bulk equipment from the nearest absorbent cabinet.

# Flammable Chemical Gas Leak;

When gas leakage occurs in the facility, actions will be taken according to the following items.

- Ensure that all fiery work in the facility is stopped as soon as the alarm is triggered.
- Evacuate the area of gas accumulation calmly.
- Identify the leakage area and cut the leakage.
- It is mandatory to go to the leakage area with PPE equipment.
- 1. For each detector, 2 alarm levels are defined in the system. These are;
  - a. A1: First alarm level (Medium-Level Alarm)
  - b. A2 : Second alarm level (High Level Alarm)

A1:20% LEL

A2:40% LEL

- **2.** At A1 alarm, the light notification opposite tank 9 will be activated. At A2 alarm level, an audible alarm will be activated in the entire facility.
- **3.** Additionally, when the gas concentration falls below the A2 alarm level automatically, the audible alarm is set to be disabled.
- 4. In the security room and operation shift room, there is a "Siren" to warn those in the security room and operation shift room audibly in case of specified alarm situations.
- **5.** The main control and the display screen of the gas detection and alarm system are located in the Technical Safety room.

# **Gas Detection and Alarm System Instructions**

- 1. The facility has 33 gas detectors in the relevant areas.
- 2. In case the siren is activated during working hours on weekdays, the relevant personnel will notify the HSE-Q Department.
- 3. When the alarm sounds and the HSE-Q department is notified, the Technical Safety Personnel determines which detector is alarming by looking at the display screen and gives the information to the first supervisor. The HSE-Q Chief investigates the cause of the alarm and takes action.
- 4. If the siren in the Security Room is activated outside of working hours on weekdays and on weekends, the Main gate security personnel will notify the Operation Shift employees.

- **5.** After Security notifies Operations staff, Operations staff look at the display screen to determine which detector is alarming and investigate the cause.
- **6.** Gas Detectors will be calibrated once a year.
- 7. It is forbidden to enter the System Main Module and Measurement Modules except for authorized persons.
- **8.** In case of system failures, the Technical Safety Chief will be informed.

# **Power Outage**

When there is a power outage in the facility, the following instructions will be followed.

- 1. Wait for the generator to be activated at the facility (Will be activated automatically.)
- 2. Just in case, go to the generator area and supervise the operation of the generator.
- 3. Contact DOIZ about the power outage and supply diesel oil according to the information (1000 liters of diesel oil is kept in the facility as a reserve).
- **4.** Make sure that only the necessary electrical equipment is working and turn off the unnecessary ones.
- **5.** Contact Teksan if necessary.

#### **Marine Pollution Response Procedures**

In the event of a chemical spill at sea, depending on the threat posed by the spill, the spill will need to be stopped, containment and collection from the sea will be required. In particular, the measures to be taken can be listed as follows:

- Stopping, controlling and completely preventing the dumping of chemicals from the source to the sea,
- Monitoring the movement and behavior of pollutants, vapors, plumes or residues if coastal or marine resources are threatened or at risk of being threatened,
- Conducting response operations to protect sensitive areas at sea or on the coast if coastal
  or marine resources are threatened,
- If possible, stopping or minimizing the spread of the chemical substance, confining it in the compartment with barriers,
- Protection of sensitive areas and, where possible, collection of chemicals from the sea by pumps or skimmers,

 Assessment of appropriate monitoring, cleanup and other response alternatives for chemical pollution if marine intervention or protection of sensitive areas is not possible due to weather and sea conditions, or if coastal areas are already polluted.

This section of the plan will provide an overview of how to respond to chemical spills, examine the various techniques for containment and collection, and discuss the design features, advantages, disadvantages and uses of different methods. In the light of the principles and information provided in this section, the Operation Coordinator will select the most appropriate response methods, taking into account all other available data on chemical pollution

The protection priorities to be considered in chemical spill response operations will be as follows, ranking from most important to least important:

- Human health and safety,
- Habitats and cultural values,
- Endangered or scarce wildlife (flora and fauna)
- Commercial resources,
- Facilities and areas for entertainment.

In assessing the above conservation priorities, the likely success of the intervention method to be applied must also be taken into account and priority selection must be based on this assessment.

Due to the wide range of chemical substances, each with its own characteristics and hazards, it is of great importance to access detailed technical information as quickly as possible in order to make decisions on control, intervention, handling, cleaning, storage and disposal in the event of any pollution. In order to access this information, a database of all products handled at the port facility will be kept as detailed as possible, and arrangements will be made in advance on how to contact and access information from all specialized organizations and authorities that may be a source of information outside the port facility.

The 5 main phases of response strategies to be applied in chemical spills are given below:

- 1. Detection of a chemical spill, notification of all authorities and relevant units
- 2. Obtaining information about the spill and chemical substance, assessing the situation, analyzing the information obtained and making an operational plan
- **3.** Spill response, collection, cleaning, storage activities
- 4. Cleaning and final disposal of chemical wastes in approved facilities in accordance with environmental legislation

Rehabilitation and long-term monitoring of the spill site. Recovering the costs from the polluter or the insured In case of chemical substances washed ashore in barrels, containers, drums,, etc., the first persons who see them must report immediately. The response to be realized will be decided by the environmental authorities after determining the source and characteristics of the pollution, and if necessary, the port authority will provide response assistance and support. The adverse effects of chemical substances can be prevented by establishing ways to identify sensitive areas, identifying high-risk areas that are vulnerable to pollution, and then developing a strategy in the form of national emergency planning. Once sensitive areas have been fully identified, plans must be developed at the local level, in parallel with national emergency planning. The national/regional emergency response plan and sensitive area maps must be checked before the intervention for the list of sensitive areas nearby the terminal site. In cases of pollution on the water surface and where the pollutant remains on the surface / floats, monitoring the vapor/smoke plume from the shore can provide information on the direction of movement of the spill. Therefore, the point of contact with the coast/sensitive areas can be predicted in advance and personnel and equipment can be deployed in advance for intervention or protection of sensitive areas. Since most chemicals are colorless, they are difficult to see and difficult to track in water. Depending on the chemical properties of the substance, it is also possible to monitor it with modern equipment such as cameras or other remote sensing equipment sensitive to ultraviolet, infrared or temperature changes. For some chemical spills, especially those in gaseous and vaporous form, or chemicals that dissolve in the atmosphere, the only response option may be to observe the gas plume and evacuate people from the area, and to prevent the entry of marine and aircraft into the affected area. Depending on the type of chemical spilled and the location of the spill, in some cases where the environment and sensitive areas are not threatened or the chemical does not affect the coast, it is best to wait and observe the situation without any intervention and wait for biological and physical conditions to neutralize the pollutant within a certain period of time. In such cases, where no active intervention is taken, it will be necessary to explain to public authorities, the public and the media, with the support of technical environmental and chemistry information, why waiting without intervention is the best approach. Chemicals can also pose greater and more widespread hazards to those involved in response

5.

operations than oil pollution. Those exposed to chemicals are also more likely to suffer from long-term diseases. The health threats posed by chemical substances to individuals depend on;

- The type of chemical spilled,
- The amount of the spill,
- The place of the spill,
- The conditions under which the spill occurred, and
- Weather conditions

. Therefore, in particular, all response personnel must pay maximum attention to the safety and employee protection measures in this plan and other sources. The main factors in the choice of methods to respond to a hazardous chemical spill are based on the physical behavior of the substances released from the hazardous agents involved. Chemicals released in the marine environment can pass into the air (gas clouds), remain on the water surface (floatables), diffuse into the water table (solutes), accumulate on the seabed (sinkables) or exhibit a combination of these. Each of these has its own different hazard factors.

For example, air toxicity and explosiveness are typical hazard factors of substances that become airborne after a spill. This situation is explained in the figure given below. This tool, which can be used to support decision-making in selecting and implementing the most appropriate pollution response action, was developed based on part of the diagnostic model and the ability to categorize chemicals into groups that require similar response approaches. The identification model also includes other relevant hazard factors of a spilled substance and the behavior of the group. Based on behavior and hazard factors, chemicals can be divided into six groups. Each group of chemicals may require a separate decision and implementation strategy.

The aim of a pollution response is to reduce or eliminate the harmful effects of the spill. For this purpose, there are six decision mechanisms for six different pollutant types. Which of these to choose depends on the hazard factors in spillage accidents and the behavior of the spilled materials. The choice of the most appropriate anti-pollution response depends on the behavior of the spill and the hazard factors. Depending on the spilled product, the Operations Coordinator, with the help of the response strategy guide

(flow diagram), will determine the most appropriate response strategy, in line with safe working procedures and net environmental gain.

# **Response Strategies and Scenarios**

**0-5 mins:** In the event of a spill, the alarm and first response to the incident must be initiated by the person closest to the incident and immediately notify the Shift Supervisor and Altintel Dilovasi Terminal Manager.

**5-10 mins:** The Incident Management System must be activated under the chairmanship of the Operation Coordinator and facility activities must be ceased immediately afterwards for security purposes. Furthermore, the source of the oil spill must be identified and controlled through

valves.

- **10-15 mins:** Coastal and Marine Operations must be established for the use of marine pollution materials kept ready for use at the facility.
- **15-20 mins:** Coastal and Maritime Operation teams prepared for response must move to the scene without wasting time.
- **20-30 mins:** After the safety precautions are taken by the Safety Officer, the appropriate response operation must be started by the Operation Group from a point close to the oil pollution.
- **30-60 mins:** The first stage of the response is to prevent the dispersion of the product deposited on the surface. For this purpose, the Marine Operation Team must ensure that the pollutant is collected from the sea surface by using sorbents.
- **1-2 hours:** After the collection process, the wastes must be transferred to land and necessary arrangements and precautions must be taken on the shore by the Waste Management Officer for this purpose. In the same way on shore, pollution control operations must be programmed by the Coastal Operations Officer.
- **2-3 hours:** Liquid and solid wastes generated after the response must be collected in temporary storage areas as detailed in " Section 10: Waste Management", then appropriate disposal methods must be applied.
- **3-4 hours:** After the situation returns to normal in terms of pollution, the Operation Coordinator must prepare a report summarizing the incident with all details and developments to be given to the relevant units.

# **Human Resources and Equipment Required During Response:**

- s. Sufficient sorbent material (2 personnel),
- t. 2 personnel with sorbent training.

# **Logistical Needs for Response:**

- 1. Mobile communication equipment,
- 2. 1 marine vehicle for collecting sorbent material from the sea,
- **3.** 1 x 10 m3 floating storage tank,

# Waste Types to be collected:

Contaminated sorbent material.

# **LEVEL 1 MOTORINE SPILLS (1-50 m3)**

# **Response Strategies and Scenarios**

**0-5 mins:** In the event of a spill, the alarm and first response to the incident is initiated by the person closest to the incident and immediately notify the Shift Supervisor and Altintel Dilovasi Terminal Manager.

**5-10 mins:** The Incident Management System must be activated under the chairmanship of the Operation Coordinator and facility activities must be ceased immediately afterwards for security purposes. Furthermore, the source of the oil spill must be identified and controlled through valves.

The Support Group must obtain basic information on the source, location, quantity and type of the spilled or leaked product and observe its movement in wind and current conditions.

The Support Group must also obtain meteorological information about the sea and weather conditions at the incident location.

**15-20 mins:** Coastal and Marine Operations must be established for the use of marine pollution materials kept ready for use at the terminal.

**20-30 mins:** Coastal and Maritime Operation teams prepared for response must move to the scene without wasting time.

**30-60 mins:** After the safety precautions are taken by the Safety Officer, the appropriate response operation must be started by the Operation Group from a point close to the oil pollution. The first stage of the response is to prevent the dispersion of the product deposited on the surface. For this purpose, barriers must be laid on the sea surface as required by the

Marine Operations Team and then the collection of the enclosed product must be carried out using a skimmer.

**1-2 hours:** After the collection process, the wastes must be transferred to land and necessary arrangements and precautions must be taken on the shore by the Waste Management Officer for this purpose. In the same way on shore, pollution control operations must be programmed by the Coastal Operations Officer.

Liquid and solid wastes generated after the response must be collected in temporary storage areas as detailed in "Waste Management", then appropriate disposal methods must be applied.

**2-4 hours:** After the situation returns to normal in terms of pollution, the Operation Coordinator must prepare a report summarizing the incident with all details and developments to be given to the relevant units.

# **Human Resources and Equipment Required During Response:**

- 1. Sufficient amount of blocking barriers (550 m barriers) to collect pollution (6 personnel),
- 2. 1 scraper (4 personnel),

# **Logistical Needs for Response:**

- 1. Mobile communication equipment,
- 2. 2 marine vehicles for barrier laying and scraper use at sea,
- 3. 1 truck with vacuum tank for the transportation of waste to land,
- 4. 1 x 10 m3 floating storage tank,

# **Waste Types to be collected:**

Diesel-water mixture collected from the sea

# LEVEL 2 MOTORINE SPILLS (50-750 m3)

# **Response Strategies and Scenarios**

**0-5 mins:** In the event of a spill, the alarm and first response to the incident must be initiated by the person closest to the incident and immediately notify the Shift Supervisor and Altıntel Dilovası Terminal Manager.

**5-10 mins:** All operations related to vessel operation inside Altintel Dilovasi Terminal must be stopped immediately. Hoses must be discarded and all valves on the vessel and shore must be closed. An Incident Management Team must be established under the chairmanship of the Operation Coordinator.

After terminal operations are stopped, the source of the oil spill must be identified and controlled through valves.

**15-20 mins:** Once the source of the spill has been contained, possible areas where the spill could accumulate and sensitive areas that could be affected by pollution must be identified. The basic information must be obtained on the source, location, quantity and type of the spilled or leaked product and observe its movement in wind and current conditions. Meteorological information must also be obtained about the sea and weather conditions at the incident location.

**20-25 mins:** Coastal and Marine Operation Teams must be formed for the use of marine pollution materials kept ready for use at the terminal.

**20-30 mins:** Coastal and Maritime Operation teams prepared for response must move to the scene without wasting time under the leadership of the Operation Group Leader.

**30-120 mins:** After security measures are taken by the Incident Safety Unit, an appropriate response operation must be initiated from a location close to the oil pollution. The first stage of the response is to prevent the dispersion of the product deposited on the surface. For this purpose, barriers must be laid on the sea surface as required by the Marine Operations Team and then the collection of the enclosed product must be carried out using a skimmer.

**2-5 hours:** After the collection process, the wastes must be transferred to land and necessary arrangements and precautions must be taken on the shore by the Waste Management Officer for this purpose. In the same way on shore, pollution control operations must be programmed by the Coastal Operations Officer.

Liquid and solid wastes generated after the response must be collected in temporary storage areas as detailed in "Waste Management". Then appropriate disposal methods must be applied.

**5-7 hours:** After the situation returns to normal in terms of pollution, the Operation Coordinator must prepare a report summarizing the incident with all details and developments to be given to the relevant units.

# **Human Resources and Equipment Required During Response:**

- 1. Sufficient blocking and beach protection barriers (1100 m blocking barriers and 100 m beach protection barriers) to collect pollution (10 personnel),
- 2. 2 scrapers (8 personnel),

#### **Logistical Needs for Response:**

- 1. Mobile communication equipment,
- 2. 6 marine vehicles for barrier laying and scraper use at sea,
- 3. 3 trucks with vacuum tank for the transportation of waste to land,
- 4. 4 x 15 m3 floating storage tanks,

#### **Waste Types to be collected:**

- Diesel-water mixture collected from the sea
- Solid waste contaminated with diesel fuel.

#### LEVEL 3 MOTORINE SPILLS (>750 m3)

# **Response Strategies and Scenarios**

**0-5 mins:** In the event of a spill, the alarm and first response to the incident must be initiated by the person closest to the incident and immediately notify the Shift Supervisor and Altintel Dilovasi Terminal Manager.

**5-10 mins:** All operations related to vessel operation at Altintel Dilovasi Terminal must be stopped immediately, hoses must be discarded, all valves on the vessel and land must be closed. For Level 3 incidents, assistance is requested from relevant institutions and organizations. All operations related to vessel operation inside Altintel Dilovasi Terminal must be stopped immediately. Hoses must be discarded and all valves on the vessel and shore must be closed. An Incident Management Team must be established under the chairmanship of the Operation Coordinator. Vessels moored or anchored in the vicinity must be warned to take their own precautions and, if necessary, they must be allowed to sail by releasing the mooring.

**10-15 mins:** Once the source of the spill has been contained, possible areas where the spill could accumulate

and sensitive areas that could be affected by pollution must be identified.

The basic information must be obtained on the source, location, quantity and type of the spilled or leaked product and observe its movement in wind and current conditions. The information obtained must be communicated to Sea and Land Fire Services, Police, Gendarmerie, Port Authority, Local Authorities, Civilian Authorities, Health Institutions or other relevant institutions or organizations depending on the scope of the incident. Meteorological information must also be obtained about the sea and weather conditions at the incident location.

- **15-20 mins:** Coastal and Marine Operation teams must be established for the use of marine pollution materials kept ready for use at the terminal.
- **20-25 mins:** Coastal and Maritime Operation teams prepared for response must move to the scene without wasting time under the leadership of the Operation Group Leader.
- **30-120 mins:** After security measures are taken by the Incident Safety Unit, an appropriate response operation must be initiated from a location close to the oil pollution. The first stage of the response is to prevent the dispersion of the product deposited on the surface. For this purpose, barriers must be laid on the sea surface as required by the Marine Operations Team and then the collection of the enclosed product must be carried out using a skimmer.
- **2-5 hours:** After the collection process, the wastes must be transferred to land and necessary arrangements and precautions must be taken on the shore by the Waste Management Officer for this purpose. In the same way on shore, pollution control operations must be programmed by the Coastal Operations Officer.
- **5-7 hours:** Liquid and solid wastes generated after the response is collected in temporary storage areas as detailed in "Waste Management". Then appropriate disposal methods must be applied.
- **7-10 hours:** After the situation returns to normal in terms of pollution, the Operation Coordinator must prepare a report summarizing the incident with all details and developments to be given to the relevant units.

# **Human Resources and Equipment Required During Response:**

- 1. Sufficient blocking and beach protection barriers (1100 m blocking barriers and 200 m beach protection barriers) to collect pollution (12 personnel),
- 2. 2 scrapers (8 personnel),

# **Logistical Needs for Response:**

- 1. Mobile communication equipment,
- 2. 10 marine vehicles for barrier laying and scraper use at sea,
- 3. 5 trucks with vacuum tank for the transportation of waste to land,
- 4. 4 x 15 m3 floating storage tanks,

# Waste Types to be collected:

- Diesel-water mixture collected from the sea,
- Solid waste contaminated with diesel fuel.

# LEVEL 1 FUEL OIL SPILLS (<1 m3)

# **Response Strategies and Scenarios**

**0-5 mins:** In the event of a spill, the alarm and first response to the incident must be initiated by the person closest to the incident and immediately notify the Shift Supervisor and Altintel Dilovasi Terminal Manager.

**5-10 mins:** Coastal and Marine Operation teams must be established for the use of marine pollution materials kept ready for use at the facility.

**10-20 mins:** Coastal and Maritime Operation teams prepared for response must move to the scene without wasting time under the leadership of the Operation Group Leader.

**20-40 mins:** After security measures are taken by the Incident Safety Unit, an appropriate response operation must be initiated from a location close to the oil pollution. The first stage of the response is to prevent the dispersion of the product deposited on the surface. For this purpose, the Marine Operation Team must ensure that the pollutant is collected from the sea surface by using sorbents.

**40-60 mins:** After the collection process, the wastes must be transferred to land and necessary arrangements and precautions must be taken on the shore by the Waste Management Officer for this purpose. In the same way on shore, pollution control operations must be programmed by the Coastal Operations Officer.

**1-2 hours:** Liquid and solid wastes generated after the response is collected in temporary storage areas as detailed in "Waste Management". Then appropriate disposal methods must be applied.

**2-3 hours:** After the situation returns to normal in terms of pollution, the Operation Coordinator must prepare a report summarizing the incident with all details and developments to be given to the relevant units.

#### **Human Resources and Equipment Required During Response:**

- 1. Sufficient sorbent material (2 personnel),
- 2. 2 personnel with sorbent training.

#### **Logistical Needs for Response:**

- 1. Mobile communication equipment,
- 2.1 marine vehicle for collecting sorbent material from the sea,
- 3.1 x 10 m3 floating storage tank,

#### Waste Types to be collected:

Contaminated sorbent material.

# LEVEL 1 FUEL OIL SPILLS (1-50 m3)

# **Response Strategies and Scenarios**

**0-5 mins:** In the event of a spill, the alarm and first response to the incident must be initiated by the person closest to the incident and immediately notify the Shift Supervisor and Altintel Dilovasi Terminal Manager.

**5-10 mins:** All operations related to vessel operation inside Altintel Dilovasi Terminal must be stopped immediately. Hoses must be discarded and all valves on the vessel and shore must be closed. An Incident Management Team must be established under the chairmanship of the Operation Coordinator.

**10-15 mins:** Once the source of the spill has been contained, possible areas where the spill could accumulate and sensitive areas that could be affected by pollution must be identified.

Meteorological information must also be obtained about the sea and weather conditions at the incident location.

**15-20 mins:** Coastal and Marine Operation teams must be established for the use of marine pollution materials kept ready for use at the facility.

**20-30 mins:** Coastal and Maritime Operation teams prepared for response must move to the scene without wasting time under the leadership of the Operation Group Leader.

**30-120 mins:** After security measures are taken by the Incident Safety Unit, an appropriate response operation must be initiated from a location close to the oil pollution. The first stage of the response is to prevent the dispersion of the product deposited on the surface. For this purpose, barriers must be laid on the sea surface as required by the Marine Operations Team and then the collection of the enclosed product must be carried out using a skimmer.

**2-5 hours:** After the collection process, the wastes must be transferred to land and necessary arrangements and precautions must be taken on the shore by the Waste Management Officer for this purpose. In the same way on shore, pollution control operations must be programmed by the Coastal Operations Officer.

Liquid and solid wastes generated after the response is collected in temporary storage areas as detailed in "Waste Management". Then appropriate disposal methods must be applied.

**5-7 hours:** After the situation returns to normal in terms of pollution, the Operation Coordinator must prepare a report summarizing the incident with all details and developments to be given to the relevant units.

# **Human Resources and Equipment Required During Response:**

- 1. Sufficient amount of blocking barriers (550 m barriers) to collect pollution (6 personnel),
- 2. 1 scraper (4 personnel),
- 3.2 portable gas detectors, (2 personnel)

#### **Logistical Needs for Response:**

- 1. Mobile communication equipment,
- 2. 2 marine vehicles for offshore gas measurement, barrier laying, and scraper use,
- 3. 1 x 10 m3 floating storage tank,

# **Waste Types to be collected:**

• Fuel oil-water mixture collected from the sea

# LEVEL 2 FUEL OIL SPILLS (50-750 m3)

#### **Response Strategies and Scenarios**

**0-5 mins:** In the event of a spill, the alarm and first response to the incident must be initiated by the person closest to the incident and immediately notify the Shift Supervisor and Altıntel Dilovası Terminal Manager.

**5-10 mins:** All operations related to vessel operation inside Altintel Dilovasi Terminal must be stopped immediately. Hoses must be discarded and all valves on the vessel and shore must be closed. An Incident Management Team must be established under the chairmanship of the Operation Coordinator.

**10-15 mins:** Once the source of the spill has been contained, possible areas where the spill could accumulate and sensitive areas that could be affected by pollution must be identified. Meteorological information must also be obtained about the sea and weather conditions at the incident location.

**15-20 mins:** Coastal and Marine Operation teams must be established for the use of marine pollution materials kept ready for use at the terminal.

**20-30 mins:** Coastal and Maritime Operation teams prepared for response must move to the scene without wasting time under the leadership of the Operation Group Leader.

**30-120 mins:** After security measures are taken by the Incident Safety Unit, an appropriate response operation must be initiated from a location close to the oil pollution. The first stage of the response is to prevent the dispersion of the product deposited on the surface. For this purpose, barriers must be laid on the sea surface as required by the Marine Operations Team and then the collection of the enclosed product must be carried out using a skimmer.

**2-5 hours:** After the collection process, the wastes must be transferred to land and necessary arrangements and precautions must be taken on the shore by the Waste Management Officer for this purpose. In the same way on shore, pollution control operations must be programmed by the Coastal Operations Officer.

Liquid and solid wastes generated after the response is collected in temporary storage areas as detailed in "Waste Management". Then appropriate disposal methods are applied.

**5-7 hours:** After the situation returns to normal in terms of pollution, the Operation Coordinator must prepare a report summarizing the incident with all details and developments to be given to the relevant units.

# **Human Resources and Equipment Required During Response:**

- 1. Sufficient blocking and beach protection barriers (1100 m blocking barriers and 100 m beach protection barriers) to collect pollution (10 personnel),
- 2. 2 scrapers (8 personnel),

# **Logistical Needs for Response:**

- 1. Mobile communication equipment,
- 2. 6 marine vehicles for barrier laying and scraper use at sea,
- 3. 3 trucks with vacuum tank for the transportation of waste to land,
- 4. 4 x 15 m3 floating storage tanks,

# Waste Types to be collected:

- Fuel oil-water mixture collected from the sea
- Solid waste contaminated with fuel oil.

# LEVEL 3 FUEL OIL SPILLS (>750 m3)

# **Response Strategies and Scenarios**

**0-5 mins:** In the event of a spill, the alarm and first response to the incident must be initiated by the person closest to the incident and immediately notify the Shift Supervisor and Altıntel Dilovası Terminal Manager.

**5-10 mins:** For Level 3 incidents, assistance must be requested from relevant institutions and organizations.

All operations related to vessel operation inside Altintel Dilovasi Terminal must be stopped immediately. Hoses must be discarded and all valves on the vessel and shore must be closed. An Incident Management Team must be established under the chairmanship of the Operation Coordinator.

Vessels moored or anchored in the vicinity must be warned to take their own precautions and, if necessary, they must be allowed to sail by releasing the mooring.

**10-15 mins:** Once the source of the spill has been contained, possible areas where the spill could accumulate and sensitive areas that could be affected by pollution must be identified. The basic information must be obtained on the source, location, quantity and type of the spilled or leaked product and observe its movement in wind and current conditions. The information obtained must be communicated to Sea and Land Fire Services, Police, Gendarmerie, Port Authority, Local Authorities, Civilian Authorities, Health Institutions or other relevant institutions or organizations depending on the scope of the incident. Meteorological information must also be obtained about the sea and weather conditions at the incident location.

**15-20 mins:** Coastal and Marine Operation teams must be established for the use of marine pollution materials kept ready for use at the terminal. Coastal and Maritime Operation teams prepared for response must move to the scene without wasting time under the leadership of the Operation Group Leader.

- **30-120 mins:** After security measures are taken by the Incident Safety Unit, an appropriate response operation must be initiated from a location close to the oil pollution. The first stage of the response is to prevent the dispersion of the product deposited on the surface. For this purpose, barriers must be laid on the sea surface as required by the Marine Operations Team and then the collection of the enclosed product must be carried out using a skimmer.
- **2-5 hours:** After the collection process, the wastes must be transferred to land and necessary arrangements and precautions must be taken on the shore by the Waste Management Officer for this purpose. In the same way on shore, pollution control operations must be programmed by the Coastal Operations Officer.
- **5-7 hours:** Liquid and solid wastes generated after the response must be collected in temporary storage areas as detailed in "Waste Management". Then appropriate disposal methods must be applied.

**7-10 hours:** After the situation returns to normal in terms of pollution, the Operation Coordinator must prepare a report summarizing the incident with all details and developments to be given to the relevant units.

# **Human Resources and Equipment Required During Response:**

- 1. Sufficient blocking and beach protection barriers (1100 m blocking barriers and 200 m beach protection barriers) to collect pollution (12 personnel),
- 2. 2 scrapers (8 personnel),

# **Logistical Needs for Response:**

- 1. Mobile communication equipment,
- 2. 10 marine vehicles for barrier laying and scraper use at sea,
- 3. 5 trucks with vacuum tank for the transportation of waste to land,
- 4. 4 x 15 m3 floating storage tanks,

# **Waste Types to be collected:**

- Fuel oil-water mixture collected from the sea
- Solid waste contaminated with fuel oil.

#### LEVEL 1, D1 LEVEL 1, D2 LEVEL 2, D3 LEVEL 3 CLASS E CHEMICAL SPILLS

All Class E chemicals evaporate within the first 1 hour for spills up to 900 m3 and 98% for spills after 900 m3. For this reason, even if level 2 and 3 spills occur, no intervention different from the intervention applied at level 1 shall be applied and the damage to the environment shall be at a minimum level.

#### **Response Strategies and Scenarios**

**0-5 mins:** In case of Class E chemical spills, personnel at the scene must first remove flammable sources from the surrounding area against possible fire, flash and explosion hazards.

**5-10 mins:** In the event of a spill, the alarm and first response to the incident must be initiated by the personnel closest to the incident and immediately notify the Shift Supervisor and Altintel Dilovasi Terminal Manager. The source of the chemical spill must be identified and controlled through valves,

Incident Management System must be put in place under the chairmanship of the Operation Coordinator.

The fire department must be notified in case of fire hazard.

**10-15 mins:** The Support Group must obtain basic information on the source, location, quantity, and type of the spilled or leaked product and observe its movement in the wind and current conditions.

**15-75 mins:** Due to the vaporization feature of the E class chemical, the risk of fire and explosion is high as the entire spill will evaporate. For this reason, the gas concentration in the air should be measured for the safety of the people who will intervene. Since almost all of the spillage will evaporate within 1 hour, the spillage must not be collected and its movement must be observed until it evaporates. During this time, fire hoses must be used to prevent spillage from reaching combustible materials.

**75-90 mins:** After the situation returns to normal in terms of pollution, the Operation Coordinator must prepare a report summarizing the incident with all details and developments to be given to the relevant units.

# **Human Resources and Equipment Required During Response:**

1. 2 portable gas detectors, (2 personnel)

# **Logistical Needs for Response:**

- 1. Mobile communication equipment,
- 2.1 marine vehicle for gas measurement,

# **Waste Types to be collected:**

None

# LEVEL 1, D1 LEVEL 1, D2 LEVEL 2, D3 LEVEL 3 D3 LEVEL 3 D CLASS CHEMICAL SPILLS

ED class chemicals evaporate and dissolve quickly. For the mentioned chemicals, spills up to 100 m3 evaporate within 1 hour and form a gas cloud. Therefore, the intervention must be related to the gas cloud. It was observed that 900 m3 of ED class chemicals were completely dispersed within 2 hours under critical conditions. It is not possible to interfere with such chemicals, which dissolve and evaporate quickly, with a barrier.

# **Response Strategies and Scenarios**

**0-5 mins:** In case of chemical spills, personnel at the scene must first remove flammable sources from the surrounding area against possible fire, flash and explosion hazards.

**5-10 mins:** In the event of a spill, the alarm and first response to the incident must be initiated by the personnel closest to the incident and immediately notify the Shift Supervisor and Altintel

Dilovasi Terminal Manager. The source of the chemical spill must be identified and controlled through valves,

Incident Management System must be put in place under the chairmanship of the Operation Coordinator. The fire department must be notified in case of fire hazard.

**10-15 mins:** The Support Group must obtain basic information on the source, location, quantity, and type of the spilled or leaked product and observe its movement in the wind and current conditions.

**15-135 mins:** Due to the vaporization feature of the ED class chemical, the risk of fire and explosion is high as the entire spill will evaporate. For this reason, the gas concentration in the air must be measured for the safety of the people who will intervene. Samples of the water column must also be taken for the necessary investigations. Since almost all of the spillage will evaporate within 1 hour (2 hours for spills of 750 m3 and above), the spillage must not be collected and its movement must be observed until it evaporates. During this time, fire hoses must be used to prevent spillage from reaching combustible materials.

# **Human Resources and Equipment Required During Response:**

1. 2 portable gas detectors, (4 personnel)

# **Logistical Needs for Response:**

- 1. Mobile communication equipment,
- 2. 2 marine vehicles for gas measurement in the sea,

# **Waste Types to be collected:**

None

# LEVEL 1, D1 LEVEL 1, D2 LEVEL 2, D3 LEVEL 3, CLASS FE CHEMICAL

# **SPILLS**

All Class FE chemicals evaporate within the first 1 hour for spills up to 900 m3 and 97% for spills after 900 m3. For this reason, even if level 2 and 3 spills occur, no intervention different from the intervention applied at level 1 shall be applied.

# **Response Strategies and Scenarios**

**0-5 mins:** In case of Class FE chemical spills, personnel at the scene must first remove flammable sources from the surrounding area against possible fire, flash and explosion hazards.

**5-10 mins:** In the event of a spill, the alarm and first response to the incident must be initiated by the personnel closest to the incident and immediately notify the Shift Supervisor and Altintel

Dilovasi Terminal Manager. The source of the chemical spill must be identified and controlled through valves,

Incident Management System must be put in place under the chairmanship of the Operation Coordinator.

The fire department must be notified in case of fire hazard.

**10-15 mins:** The Support Group must obtain basic information on the source, location, quantity, and type of the spilled or leaked product and observe its movement in the wind and current conditions.

**15-75 mins:** Due to the vaporization feature of the FE class chemical, the risk of fire and explosion is high as the entire spill will evaporate. For this reason, the gas concentration in the air must be measured for the safety of the people who will intervene. Since almost all of the spill will evaporate within 1 hour, it must not be tried to collect the spill, and its movement must be observed until it evaporates. During this time, fire hoses must be used to prevent spillage from reaching combustible materials.

**75-90 mins:** After the situation returns to normal in terms of pollution, the Operation Coordinator must prepare a report summarizing the incident with all details and developments to be given to the relevant units.

# **Human Resources and Equipment Required During Response:**

1. 2 portable gas detectors, (2 personnel)

# **Logistical Needs for Response:**

- 1. Mobile communication equipment,
- 2.1 marine vehicle for gas measurement,

# **Waste Types to be collected:**

None

#### LEVEL 1, D1 LEVEL 1, D2 LEVEL 2, D3 LEVEL 3 CLASS FED CHEMICAL

#### **SPILLS**

FED class chemicals evaporate, dissolve and disperse quickly. For the mentioned chemicals, spills up to 100 m3 evaporate within 1 hour and form a gas cloud. Therefore, the intervention must be related to the gas cloud. It was observed that 900 m3 of FED class chemicals were completely dispersed within 2 hours under critical conditions. It is not possible to interfere with such chemicals, which dissolve and evaporate quickly, with a barrier.

# **Response Strategies and Scenarios**

**0-5 mins:** In case of chemical spills, personnel at the scene must first remove flammable sources from the surrounding area against possible fire, flash and explosion hazards.

**5-10 mins:** In the event of a spill, the alarm and first response to the incident must be initiated by the personnel closest to the incident and immediately notify the Shift Supervisor and Altintel Dilovasi Terminal Manager. The source of the chemical spill must be identified and controlled through valves,

Incident Management System must be put in place under the chairmanship of the Operation Coordinator. The fire department must be notified in case of fire hazard.

**10-15 mins:** The Support Group must obtain basic information on the source, location, quantity, and type of the spilled or leaked product and observe its movement in the wind and current conditions.

**15-135 mins:** Due to the vaporization feature of the FED class chemical, the risk of fire and explosion is high as the entire spill will evaporate. For this reason, the gas concentration in the air must be measured for the safety of the people who will intervene. Samples of the water column must also be taken for the necessary investigations. Since almost all of the spillage will evaporate within 1 hour (2 hours for spills of 750 m3 and above), the spillage must not be collected and its movement must be observed until it evaporates. During this time, fire hoses must be used to prevent spillage from reaching combustible materials.

**135-150 mins:** After the situation returns to normal in terms of pollution, the Operation Coordinator must prepare a report summarizing the incident with all details and developments to be given to the relevant units.

#### **Human Resources and Equipment Required During Response:**

1. 2 portable gas detectors, (2 personnel)

#### **Logistical Needs for Response:**

- 1. Mobile communication equipment,
- 2. 2 marine vehicles for gas measurement in the sea,

# Waste Types to be collected:

None

# LEVEL 1 CLASS F AND CLASS FD CHEMICAL SPILLS (<1 m3)

Class F (floating) chemicals do not undergo changes such as evaporation and dissolution after a spill, so they remain on the water surface and continue to spread. Class FD (floating, soluble) chemicals dissolve in the water column as well as spreading on the water surface after a spill. As the amount of spillage and the time it spends on the water surface increases, the concentration in the water column increases and intervention must be started as quickly as possible.

# **Response Strategies and Scenarios**

**0-5 mins:** In the event of a spill, the alarm and first response to the incident must be initiated by the person closest to the incident and immediately notify the Shift Supervisor and Altintel Dilovasi Terminal Manager.

**5-10 mins:** Coastal and Marine Operation teams must be established for the use of marine pollution materials kept ready for use at the terminal.

**10-20 mins:** Coastal and Maritime Operation teams prepared for response must move to the scene without wasting time under the leadership of the Operation Group Leader.

**20-40 mins:** After security measures are taken by the Incident Safety Unit, an appropriate response operation must be initiated from a location close to the chemical pollution. The first stage of the response is to prevent the dispersion of the product deposited on the surface. For this purpose, the Marine Operation Team must ensure that the pollutant is collected from the sea surface by using sorbents.

**40-60 mins:** After the collection process, the wastes must be transferred to land and necessary arrangements and precautions must be taken on the shore by the Waste Management Officer for this purpose. In the same way on shore, pollution control operations must be programmed by the Coastal Operations Officer.

- **1-2 hours:** Liquid and solid wastes generated after the response must be collected in temporary storage areas as detailed in "Waste Management". Then appropriate disposal methods must be applied.
- **2-3 hours:** After the situation returns to normal in terms of pollution, the Operation Coordinator must prepare a report summarizing the incident with all details and developments to be given to the relevant units.

# **Human Resources and Equipment Required During Response:**

- 1. Sufficient sorbent material (2 personnel),
- 2. 2 personnel with sorbent training.

# **Logistical Needs for Response:**

- 1. Mobile communication equipment,
- 2.1 marine vehicle for collecting sorbent material from the sea,

# **Waste Types to be collected:**

• Contaminated sorbent material.

# LEVEL 1 CLASS F AND CLASS FD CHEMICAL SPILLS (1-50 m3)

Class F (floating) chemicals do not undergo changes such as evaporation and dissolution after a spill, so they remain on the water surface and continue to spread. Class FD (floating, soluble) chemicals dissolve in the water column as well as spreading on the water surface after a spill. As the amount of spillage and the time it spends on the water surface increases, the concentration in the water column increases and intervention must be started as quickly as possible.

# **Response Strategies and Scenarios**

**0-5 mins:** In the event of a spill, the alarm and first response to the incident must be initiated by the person closest to the incident and immediately notify the Shift Supervisor and Altıntel Dilovası Terminal Manager.

**5-10 mins:** All operations related to vessel operation inside Altintel Dilovasi Terminal must be stopped immediately. Hoses must be discarded and all valves on the vessel and shore must be closed. An Incident Management Team must be established under the chairmanship of the Operation Coordinator.

**10-15 mins:** Once the source of the spill has been contained, possible areas where the spill could accumulate and sensitive areas that could be affected by pollution must be identified. Meteorological information must also be obtained about the sea and weather conditions at the incident location.

**15-20 mins:** Coastal and Marine Operation teams must be established for the use of marine pollution materials kept ready for use at the terminal.

**20-30 mins:** Coastal and Maritime Operation teams prepared for response must move to the scene without wasting time under the leadership of the Operation Group Leader.

**30-120 mins:** After security measures are taken by the Incident Safety Unit, an appropriate response operation must be initiated from a location close to the chemical pollution. The first stage of the response is to prevent the dispersion of the product deposited on the surface. For this purpose, barriers must be laid on the sea surface as required by the Marine Operations Team and then the collection of the enclosed product must be carried out using sufficient sorbent material.

**2-5 hours:** After the collection process, the wastes must be transferred to land and necessary arrangements and precautions must be taken on the shore by the Waste Management Officer for this purpose. In the same way on shore, pollution control operations must be programmed by the Coastal Operations Officer.

Liquid and solid wastes after the intervention are collected in

temporary storage areas as detailed in Waste Management. Then appropriate disposal methods are applied.

**5-7 hours:** After the situation returns to normal in terms of pollution, the Operation Coordinator must prepare a report summarizing the incident with all details and developments to be given to the relevant units.

#### **Human Resources and Equipment Required During Response:**

- 1. Sufficient amount of blocking barriers (550 m barriers) to collect pollution (6 personnel),
- 2. Sufficient sorbent material (4 personnel),

#### **Logistical Needs for Response:**

- 1. Mobile communication equipment,
- 2. 2 marine vehicles for sorbent use at sea,

#### Waste Types to be collected:

Chemical-water mixture collected from the sea,

# LEVEL 2 CLASS F AND FD CHEMICAL SPILLS (50-750 m3)

Class F (floating) chemicals do not undergo changes such as evaporation and dissolution after a spill, so they remain on the water surface and continue to spread. Class FD (floating, soluble) chemicals dissolve in the water column as well as spreading on the water surface after a spill. As the amount of spillage and the time it spends on the water surface increases, the

concentration in the water column increases and intervention must be started as quickly as possible.

# **Response Strategies and Scenarios**

**0-5 mins:** In the event of a spill, the alarm and first response to the incident must be initiated by the person closest to the incident and immediately notify the Shift Supervisor and Altintel Dilovasi Terminal Manager.

**5-10 mins:** All operations related to vessel operation inside Altintel Dilovasi Terminal must be stopped immediately. Hoses must be discarded and all valves on the vessel and shore must be closed. An Incident Management Team must be established under the chairmanship of the Operation Coordinator.

**10-15 mins:** Once the source of the spill has been contained, possible areas where the spill could accumulate and sensitive areas that could be affected by pollution must be identified. Meteorological information must also be obtained about the sea and weather conditions at the incident location.

**15-20 mins:** Coastal and Marine Operation teams must be established for the use of marine pollution materials kept ready for use at the terminal.

**20-30 mins:** Coastal and Maritime Operation teams prepared for response must move to the scene without wasting time under the leadership of the Operation Group Leader.

**30-120 mins:** After security measures are taken by the Incident Safety Unit, an appropriate response operation must be initiated from a location close to the chemical pollution. The first stage of the response is to prevent the dispersion of the product deposited on the surface. For this purpose, barriers must be laid on the sea surface as required by the Marine Operations Team and then the collection of the enclosed product must be carried out using a skimmer.

**2-5 hours:** After the collection process, the wastes must be transferred to land and necessary arrangements and precautions must be taken on the shore by the Waste Management Officer for this purpose. In the same way on shore, pollution control operations must be programmed by the Coastal Operations Officer.

Liquid and solid wastes generated after the response is collected in temporary storage areas as detailed in "Waste Management". Then appropriate disposal methods are applied.

**5-7 hours:** After the situation returns to normal in terms of pollution, the Operation Coordinator must prepare a report summarizing the incident with all details and developments to be given to the relevant units.

# **Human Resources and Equipment Required During Response:**

- 1. Sufficient blocking and beach protection barriers (1100 m blocking barriers and 100 m beach protection barriers) to collect pollution (10 personnel),
- 2. 2 scrapers (8 personnel),

# **Logistical Needs for Response:**

- 1. Mobile communication equipment,
- 2. 6 marine vehicles for barrier laying and scraper use at sea,
- 3. 3 trucks with vacuum tank for the transportation of waste to land,
- 4. 4 x 15 m3 floating storage tanks,

# **Waste Types to be collected:**

Chemical-water mixture collected from the sea,

Solid waste contaminated with chemical

# LEVEL 3 CLASS F AND CLASS FD CHEMICAL SPILLS (>750 m3)

Class F (floating) chemicals do not undergo changes such as evaporation and dissolution after a spill, so they remain on the water surface and continue to spread. Class FD (floating, soluble) chemicals dissolve in the water column as well as spreading on the water surface after a spill. As the amount of spillage and the time it spends on the water surface increases, the concentration in the water column increases and intervention must be started as quickly as possible.

# **Response Strategies and Scenarios**

**0-5 mins:** In the event of a spill, the alarm and first response to the incident must be initiated by the person closest to the incident and immediately notify the Shift Supervisor and Altintel Dilovasi Terminal Manager.

**5-10 mins:** For Level 3 incidents, assistance is requested from relevant institutions and organizations.

All operations related to vessel operation inside Altintel Dilovasi Terminal must be stopped immediately. Hoses must be discarded and all valves on the vessel and shore must be closed. An Incident Management Team must be established under the chairmanship of the Operation Coordinator. Vessels moored or anchored in the vicinity must be warned to take their own precautions and, if necessary, they must be allowed to sail by releasing the mooring.

**10-15 mins:** Once the source of the spill has been contained, possible areas where the spill could accumulate and sensitive areas that could be affected by pollution must be identified.

The basic information must be obtained on the source, location, quantity and type of the spilled or leaked product and observe its movement in wind and current conditions. The information obtained must be communicated to Sea and Land Fire Services, Police, Gendarmerie, Port Authority, Local Authorities, Civilian Authorities, Health Institutions or other relevant institutions or organizations depending on the scope of the incident. Meteorological information must also be obtained about the sea and weather conditions at the incident location.

- **15-20 mins:** Coastal and Marine Operation teams must be established for the use of marine pollution materials kept ready for use at the terminal. Coastal and Maritime Operation teams prepared for response must move to the scene without wasting time under the leadership of the Operation Group Leader.
- **30-120 mins:** After security measures are taken by the Incident Safety Unit, an appropriate response operation must be initiated from a location close to the oil pollution. The first stage of the response is to prevent the dispersion of the product deposited on the surface. For this purpose, barriers must be laid on the sea surface as required by the Marine Operations Team and then the collection of the enclosed product must be carried out using a skimmer.
- **2-5 hours:** After the collection process, the wastes must be transferred to land and necessary arrangements and precautions must be taken on the shore by the Waste Management Officer for this purpose. In the same way on shore, pollution control operations must be programmed by the Coastal Operations Officer.
- **5-7 hours:** Liquid and solid wastes generated after the response must be collected in temporary storage areas as detailed in "Waste Management". Then appropriate disposal methods must be applied.
- **7-10 hours:** After the situation returns to normal in terms of pollution, the Operation Coordinator must prepare a report summarizing the incident with all details and developments to be given to the relevant units.

# **Human Resources and Equipment Required During Response:**

- 1. Sufficient blocking and beach protection barriers (1100 m blocking barriers and 200 m beach protection barriers) to collect pollution (12 personnel),
- 2. 2 scrapers (8 personnel),

# **Logistical Needs for Response:**

- 1. Mobile communication equipment,
- 2. 10 marine vehicles for barrier laying and scraper use at sea,
- 3. 5 trucks with vacuum tank for the transportation of waste to land,
- 4. 4 x 15 m3 floating storage tanks,

# Waste Types to be collected:

Chemical-water mixture collected from the sea,

Solid waste contaminated with chemical

# LEVEL 1, D1 LEVEL 1, D2 LEVEL 2, D3 LEVEL 3 CLASS DE CHEMICAL

#### **SPILLS**

DE class chemicals evaporate, dissolve and disperse quickly. For the mentioned chemicals, spills up to 100 m3 evaporate within 1 hour and form a gas cloud. Therefore, the intervention must be related to the gas cloud. When 900 m3 of DE class chemicals were examined, it was observed that 82% of this amount evaporated, dispersed and dissolved after 1 hour under critical conditions. It is not possible to interfere with such chemicals, which dissolve and evaporate quickly, with a barrier.

# **Response Strategies and Scenarios**

**0-5 mins:** In case of chemical spills, personnel at the scene must first remove flammable sources from the surrounding area against possible fire, flash and explosion hazards.

**5-10 mins:** In the event of a spill, the alarm and first response to the incident must be initiated by the personnel closest to the incident and immediately notify the Shift Supervisor and Altintel Dilovasi Terminal Manager. The source of the chemical spill must be identified and controlled through valves,

Incident Management System must be put in place under the chairmanship of the Operation Coordinator.

The fire department must be notified in case of fire hazard.

**10-15 mins:** The Support Group must obtain basic information on the source, location, quantity, and type of the spilled or leaked product and observe its movement in the wind and current conditions.

**15-105 mins:** Due to the vaporization feature of the DE class chemical, the risk of fire and explosion is high as the entire spill will evaporate. For this reason, the gas concentration in the

air must be measured for the safety of the people who will intervene. Samples of the water column must also be taken for the necessary investigations. Since almost all of the spillage will evaporate within 1 hour (1.5 hours for spills of 750 m3 and above), the spillage must not be collected and its movement must be observed until it evaporates. During this time, fire hoses must be used to prevent spillage from reaching combustible materials.

**105-120 mins:** After the situation returns to normal in terms of pollution, the Operation Coordinator must prepare a report summarizing the incident with all details and developments to be given to the relevant units.

# **Human Resources and Equipment Required During Response:**

1. 2 portable gas detectors, (2 personnel)

# **Logistical Needs for Response:**

- 1. Mobile communication equipment,
- 2. 2 marine vehicles for gas measurement in the sea,

# Waste Types to be collected:

None

# LEVEL 1, D1 LEVEL 1, D2 LEVEL 2, D3 LEVEL 3 CLASS D CHEMICAL

#### **SPILLS**

Class D (fast soluble) chemicals dissolve into the water after the spill. The dispersed chemical will continue to dissolve in the water column. Such chemicals, which dissolve and rapidly disperse in the water column, cannot be collected by physical intervention. It is not recommended to mix a precipitating or diluting chemical into the marine environment while intervening in such spills, and it is essential to obtain the appropriate opinion of the Ministry in case of such a spill.

# **Response Strategies and Scenarios**

**0-5 mins:** In case of chemical spills, personnel at the scene must first remove flammable sources from the surrounding area against possible fire, flash and explosion hazards.

**5-10 mins:** In the event of a spill, the alarm and first response to the incident must be initiated by the personnel closest to the incident and immediately notify the Shift Supervisor and Altintel Dilovasi Terminal Manager. The source of the chemical spill must be identified and controlled through valves,

Incident Management System must be put in place under the chairmanship of the Operation Coordinator.

The fire department must be notified in case of fire hazard.

**10-15 mins:** The Support Group must obtain basic information on the source, location, quantity, and type of the spilled or leaked product and observe its movement in the wind and current conditions.

**15-75 mins:** Since Class D chemicals dissolve rapidly in water, samples must be taken from the water column for necessary investigations and the spillage must be monitored under control. With natural dilution, the pH of the water environment will return to normal. However, the pH of the water, the concentration of Class D chemicals in the water, and the temperature of the water must be monitored until the contamination has subsided.

**75-100 mins:** After the situation returns to normal in terms of pollution, the Operation Coordinator must prepare a report summarizing the incident with all details and developments to be given to the relevant units.

#### **Human Resources and Equipment Required During Response:**

1. Sampling equipment (2 personnel)

#### **Logistical Needs for Response:**

- 1. Mobile communication equipment,
- 2. 2 sea vehicles for sampling from the sea,

#### Waste Types to be collected:

None

# LEVEL 1, D1 LEVEL 1, D2 LEVEL 2, D3 LEVEL 3 D3 LEVEL 3 SD CLASS CHEMICAL SPILLS

Spills of SD class (sinking, soluble) chemicals sink to the seabed and spread from there by currents, while they continue to dissolve in the water column. The dispersed chemical will continue to dissolve in the water column. Such chemicals, which dissolve and rapidly disperse in the water column, cannot be collected by physical intervention. Only if possible can sediments be collected from the seabed. It is not recommended to mix a precipitating or diluting chemical into the marine environment while intervening in such spills, and it is essential to obtain the appropriate opinion of the Ministry in case of such a spill.

#### **Response Strategies and Scenarios**

**0-5 mins:** In case of chemical spills, personnel at the scene must first remove flammable sources from the surrounding area against possible fire, flash and explosion hazards.

**5-10 mins:** In the event of a spill, the alarm and first response to the incident must be initiated by the personnel closest to the incident and immediately notify the Shift Supervisor and Altıntel Dilovası Terminal Manager. The source of the chemical spill must be identified and controlled through valves, and the Incident Management System must be activated under the chairmanship of the Operation Coordinator.

The fire department must be notified in case of fire hazard.

**10-15 mins:** The Support Group must obtain basic information on the source, location, quantity, and type of the spilled or leaked product and observe its movement in the wind and current conditions.

**15-105 mins:** Since class SD chemicals dissolve quickly in water and sink, samples must be taken from the water column for necessary investigations, and the spillage must be monitored under control. With natural dilution, the pH of the water environment will return to normal. However, the pH of the water, the concentration of Class SD chemicals in the water, and the temperature of the water must be monitored until the contamination has subsided. Sediment samples of the seabed must be taken for sinking chemicals and ecological changes must be monitored. Sediments formed on the seabed must be collected if possible, if not, relevant techniques must be examined.

**105-120 mins:** After the situation returns to normal in terms of pollution, the Operation Coordinator must prepare a report summarizing the incident with all details and developments to be given to the relevant units.

#### Human Resources and Equipment Required During Response:

1. Sampling equipment (2 personnel)

#### **Logistical Needs for Response:**

- 1. Mobile communication equipment,
- 2. 2 sea vehicles for sampling from the sea,

#### Waste Types to be collected:

None

#### LEVEL 1, D1 LEVEL 1, D2 LEVEL 2, D3 LEVEL 3 D3 LEVEL 3 S CLASS CHEMICAL

#### **SPILLS**

Spills of Class S chemicals sink to the seabed and continue to spread downstream. Such chemicals can only be dealt with by collecting their sediments from the seabed, if possible.

#### **Response Strategies and Scenarios**

**0-5 mins:** In case of chemical spills, personnel at the scene must first remove flammable sources from the surrounding area against possible fire, flash and explosion hazards.

**5-10 mins:** In the event of a spill, the alarm and first response to the incident must be initiated by the personnel closest to the incident and immediately notify the Shift Supervisor and Altıntel Dilovası Terminal Manager. The source of the chemical spill must be identified and controlled through valves, and the Incident Management System must be activated under the chairmanship of the Operation Coordinator. The fire department must be notified in case of fire hazard.

**10-15 mins:** The Support Group must obtain basic information on the source, location, quantity, and type of the spilled or leaked product and observe its movement in the wind and current conditions.

**15-105 mins:** Since class S chemicals react with water and sink, samples must be taken from the water column for necessary investigations, and the spillage must be monitored under control. The pH of the water, the concentration of Class D chemicals in the water, and the temperature of the water must be monitored until the contamination has subsided. Sediment samples of the seabed must be taken for sinking chemicals and ecological changes must be monitored. Sediments formed on the seabed must be collected if possible, if not, relevant techniques must be examined.

**105-120 mins:** After the situation returns to normal in terms of pollution, the Operation Coordinator must prepare a report summarizing the incident with all details and developments to be given to the relevant units.

#### **Human Resources and Equipment Required During Response:**

1. Sampling and sediment collection equipment (2 personnel)

#### **Logistical Needs for Response:**

- 1. Mobile communication equipment,
- 2. 2 sea vehicles for sampling from the sea,

#### **Waste Types to be collected:**

None

8.2. Information on the possibility, capability and capacity of the coastal facility to respond to emergencies.

#### **FACILITY EMERGENCY EQUIPMENT**

#### **Mobile fire extinguishers**

- 6kg 85 pcs, 12kg 46 pcs, 25kg 3 pcs, 50kg 22 pcs automatic DCP;
- 5kg 32 pcs, 30kg 2pcs CO2
- There are 271 YSCs, including

115 DLP in-panel YSCs.



#### Fire towers

• There are 24 fire towers, including 9 manual and 15 RCM (Remote Control Monitor).



#### Fire station

1 Facility entrances

#### Water nozzles

65 pcs

#### **Springler system**

- Sprinkler system is available on all 4 platforms of the downstream filling area
- Sprinkler system is available on all 6 platforms of the upper filling area
- Sprinkler system is available on 2 platforms sousplan the port area

- There is a sprinkler system in the waste site.
- Sprinkler system is available in Slop Tanks.
- There are sprinkler systems in 5 scrubber facilities.

# Fire cabinets

• 65 pcs



# Fire hydrants

• There are 103 water and foam hydrants in total.



## Foam stock

• 15.000 kg foam is available.





#### **Fire hoses**

• There are 130 20-meter fire hoses.

#### Fire water stores

- 1 1550-ton water tank (58)
- 1 1070-ton water tank (59)
- Fire lines connection with neighboring facility (Solventas)

#### Fire pumps

- 3 main diesel pumps (450 cubic meters/hour)
- 1 pier diesel pump (700 cubic meters/hour)
- 1 pier diesel pump (565 cubic meters/hour)



#### Water pumps

2 Joker pumps (100 cubic meters/hour and 25 cubic meters/hour)

## Fire Suit (NOMEX) and Firefighter suit

• Available in 15 safety cabinets



#### **Rechargeable EX Flashlight**

• 8 ex flashlights are available.

#### **Knitted Hood**

• 13 knitted heads are available.

#### Portable water and foam cart

- 2 monitors with trailer are available.
- 4 trolley monitors are available.



## **Complete Breathing Apparatus with Back Tube**

Complete breathing apparatus with 7 back tubes

- Next to the administrative building
- Next to 6th Kot Foreman's room
- 1st Level RCM region
- Port area area
- Porch Zone
- 9. Level container area



#### **Full Facepiece**

• 50 full facepieces (in safety locker)

#### **Half Facepiece and Dust Masks**

Various quantities of dust and half facepieces

#### **Face Shield**

• 12 face shields (in safety locker)

#### Helmet

• There is a helmet distributed to each employee in exchange for their signature. It is mandatory to use a helmet in the field in our facility.



#### **Safety Shoes**

• There is a safety shoes distributed to each employee in exchange for their signature.

#### Automatic fire extinguishing systems equipped with nitrogen gas

 Each tank has automatic fire extinguishing systems and is also equipped with a nitrogen circuit



Fire Alarm System (52 pcs)

## **Grounding Systems**

• All tanks and pipelines are equipped with grounding systems.

## **Lightning Rods**

There are 5 lightning rods in the facility

- Port Area
- 6th Pit Filling Platform
- Porch Zone
- 10th Pit Zone
- 9th Pit Zone

#### **APEL Device**

- Our facility is included in the emergency frequency (APEL).
- Security guards office at the main entrance of the facility

#### **Stretcher**

Port Area Pier Entrance	1 piece
1st Pit Foreman Room	1 piece
6th Pit Foreman Room	1 piece
Administrative Building	
Infirmary	1 piece
4th Pit	1 piece
7th Pit	1 piece
9 <sup>th</sup> pit container area	2 piece
TOTAL:	8 PCS



# **Emergency Cabinet against Chemical and Oil Spills and Contents**

1	Emergency Cabinet Against Chemical Leaks ( ABSORBENT)	19 pieces
2	Emergency Cabinet Against Chemical Leak (CHEST)	4 pieces
3	Emergency Cabinet Against Chemical Leaks (SPILL KIT)	7 pieces

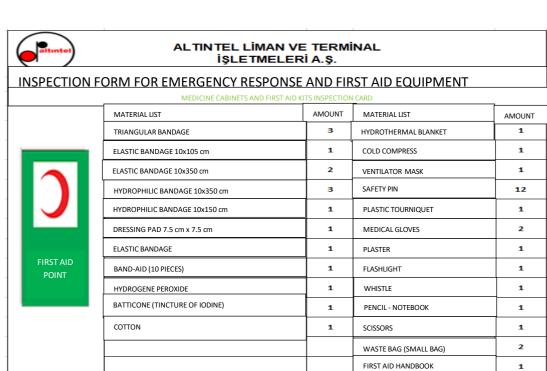


Oil and chemical spills can be treated with pads, sausages and barriers in absorbent cabinets.

#### **Eye Lotion**

Eye-Height Shower	37 piece
Eye Shower (Wall Type)	10 piece
Medicine Cabinets	18 piece





#### **EQUIPMENT FOR COMBATING MARINE POLLUTION**

DRUM	5 PIECES
BARRIER (FENCE TYPE)	750 MT
ABSORBENT PAD	1000 PCS +1200 PCS
SAUSAGE BARRIER	400 MT X 125 PIECES
WATER VEHICLE	2 PIECES





#### Separators - Tank Pools and List of Things to do in case of a spill

- 1. In case of any leakage in the filling area, HSE and Quality Department employees shall be notified immediately. Environmental accident Form "HSE-F-06" is filled out and evaluated.
- **2.** Leaks and leakages are intervened by using anti-static absorbent pads in "Chemical Leak Cabinets". Waste must be disposed of in "Contaminated Waste" bins.
- 3. In case of fire in the facility, chemical-free fire water is given to the receiving environment by opening tank pool valves and separators.
- **4.** Before opening the valves and separator valves of this tank pool, it is ensured that the separators are clean and there is no leakage in the tank area.
- **5.** Chemically contaminated fire water is held in tank pools and separators. A septic tanker is called and sent to the contracted treatment facility for treatment.
- 6. If the chemical contaminated fire water cannot be kept in the tank pool and separators as well as reaching the sea, our marine cleaning company MARE will be called and help will be obtained for cleaning. (Applicable for 1st level Exxon Mobile Filling Island, the separator has no connection with the sea)
- **7.** A barrier is laid by the facility in the polluted area until the MARE arrives.
- **8.** When the fire water and foam mixture accumulates in the tank pools, the tank pool valves are opened in a controlled manner and the water at the bottom is allowed to pass to the separator. The remaining foam concentrate is sent to the contracted treatment facility for treatment
- **9.** As a result of the analysis of the fire water and foam mixture remaining in the separator, if there is no chemical pollution in the water, the bottom valve is opened and clean water is supplied to the receiving environment.
- **10.** The remaining foam is sent to the contracted treatment facility for treatment
- **11.** For the foam concentrate reaching the sea, the contracted marine cleaning company MARE is called and help is obtained for cleaning.

CODE	TANK POOL AREA(m²)	POOL WALL HEIGHT(m)	TANK POOL VOLUME (m³)	LARGEST TANK VOLUME IN THE TANK POOL (m³)	CONTRO L
1ST CODE	1703	0.85	1447.55	1248	٧
2ND CODE	632	1.6	1011.2	553	٧
3RD CODE	556	1.05	583.8	554	٧
4TH CODE	3031	1	3031	1562	٧
6TH CODE	1987	1.25	2483.75	1548	٧
7TH CODE	3676	1.32	4852.32	1540	٧
8TH CODE	5060	MIN. 1.10	5566	2940	٧
9TH CODE-1	2172	1,25	2715	2110	٧
9TH CODE-2	716	3,75	2685	2110	٧

1st pit separator capacity = 30 cubic meters

Port Area separator = 5.61 cubic meters

 $6^{th}$  pit separator capacity = 35 cubic meters

 $9^{TH}$  pit separator capacity = 49,5 cubic meters

#### 8.3. First Response

An example intervention scenario is given below.

In all emergencies, the first point to be notified is 112 EMERGENCY HELPLINE. When reporting an Emergency, the type of emergency, the place where it took place, whether there are any injured people, the substance that caused the Emergency, whether there is a risk of growth/spread, and first aid information, if any, are given. The Communication Officer provides the necessary information to the Emergency Teams and ensures immediate intervention. When necessary, external institutions and organizations are contacted. It is the duty of the security personnel to call the necessary institution,

organization and facility employees.

If situations requiring first aid are detected, intervention is carried out by teams determined by the Emergency Organization Chart, within the scope of the issues specified in the Emergency Manual. Information regarding the first aid equipment of the facility is given in article 8.2 of the guide, and the Emergency Organization chart is given as an annex to the guide.

#### 8.4. Reporting of Accidents and Incidents

Accidents and incidents occurring in the facility are immediately reported to the HSE-Q Department.

The following information should be included when reporting accidents and incidents:

#### **Occupational Accident**

- a. Place and time of the accident and incident
- b. If known, how the accident and incident occurred and its cause
- c. If any, the number of injured, dead and missing, and their identities
- d. Extent of the Damage/Pollution

#### **Environmental Accident**

- a. Place and time of the spill
- b. If known, how the environmental accident occurred and the cause
- c. The amount of the spill and the area of spread
- d. Which chemical is the spill
- e. Information on the tanker involved in the environmental accident
- f. Whether the spill persists or not
- g. Impact on vehicle and pedestrian traffic

#### **Process Accident**

- a. Place and time of the process accident
- b. If known, how the process accident occurred and the cause
- c. Condition and operability of affected equipment
- d. The possibility of moving to a situation that will affect human health in the near future
- e. Less than 1 liter spill is likely to increase
- f. Whether the spill persists or not

#### **Notification to Official Institutions**

The HSE-Q department will make the necessary notifications to official institutions such as Fire Brigade, Police, Port Authority, Provincial Directorate of Environment, Urbanization and Climate Change within the first 1 hour after the incident.

#### 8.5. ACCIDENT REPORTING PROCEDURE

#### 1-PURPOSE

The purpose of this procedure is to notify the competent authorities (Port Authority, Municipality, Provincial Directorate of Environment, etc.) of emergencies occurring in Altıntel.

#### 2-SCOPE

Altintel covers all emergencies within the boundaries of the workplace.

#### **3-AUTHORITIES**

Senior Management, HSE-Q Manager, HSE-Q Chief

#### **4- DEFINITIONS**

Emergency Situation : An unexpected and serious event or situation that requires immediate response or reaction

#### **5- IMPLEMENTATION**

#### **5.1. Incident Reporting**

Emergencies occurring at the port facility are first notified to the Port Authority by the Communication Team Leader via telephone within the first 1 hour. Subsequently, TEM -F- 031

Incident Notification Form is filled out and notified by e-mail and fax. The form to be submitted must contain the following information.

The notification of incidents must include the following information.

- a) The time of the accident,
- b) How the accident occurred and the cause
- c) Location of the accident (Coastal Facility and/or Vessel) Position, Impact Area:
- d) If any, the number of injured, dead and missing, and their identities:
- e) Extent of the Damage/Pollution:
- f) If there is a vessel involved in the accident, information (name, flag, IMO no, owner, operator, cargo and quantity, name of the captain, and similar information):
- g) Meteorological conditions;
- h) UN number, appropriate transportation name (based on the legislation specified in the definition of dangerous goods) and quantity of dangerous goods:
  - Hazard class of the dangerous goods or, if any, sub-hazard section;
  - If any, the packaging group of the dangerous goods;
  - If any, additional risks of the dangerous goods, such as marine pollutants;
  - > Sign and label details of the dangerous goods;
  - If any, the characteristics and number of the package, cargo transport unit and container in which the dangerous goods is transported;
- i) Dangerous Good's;
  - Manufacturer company information;

- > Sender information;
- > Transporter information;
- > Recipient information;
- j) Actions Taken to Control Measurement Damages and the Emergency Situation:
- k) If Any, Amount of Damage to the Facility/Equipment:
- 1) If Any, Product Loss, and / or Amount of Product Recovered,
- m) Impact of the accident on the facility's routine operations:
- n) Equipment and/or product quality checks carried out:
- o) Actions taken/to be taken to prevent recurrence of the emergency:
- p) The authorities affected by the emergency and to whom the emergency has been reported:
- q) Reaction/expected reaction in the press:

#### 5.2. Major Industrial Accident Notification Criteria

#### 5.2.1 Arising from Dangerous Goods;

Any fire, explosion, or emission (leakage, accidental spillage, etc.) involving at least 5% or more of the threshold value in Annex-1 Column 3 of the Regulation on Prevention of Major Industrial Accidents. This value corresponds to 2,500 kg for our facility.

#### 5.2.2 Harm to people and property;

An accident involving a hazardous chemical that causes any of the following events;

- a) The death of a person,
- b) Injury to six people within the organization and hospitalization of each for at least 24 hours,
- c) At least one person is injured outside the boundaries of the organization and each person is kept in the hospital for at least 24 hours,
  - d) Damage and unusability of dwellings outside the boundaries of the organization,
  - e) Evacuation of the population for more than two hours or the imposition of an eviction law (persons x hours must be at least 500),
- f) Disruption of drinking water, electricity, gas or telephone for more than two hours (person x hour must be at least 1000).

#### 5.2.3 Environmental damage;

Long-term or permanent damage to terrestrial habitat;

- a) 0.5 ha or more of habitat or an area protected by law,
- b) An area of 10 or more hectares of habitat, including agricultural land,

Long-term or significant damage to freshwater and marine habitats;

- a) Damage of 10 km or more along a river or canal,
- b) Damage of 1 hectare or more to a lake or pond,
- c) Damage of 2 hectares or more to the delta,
- d) Damage of 2 hectares or more to open seas or coasts,

Significant damage to aquifer or groundwater over 1 hectare or more

#### 5.2.4 Damage to property;

- a) Damage to property in the organization of TRY 5 million or more,
- b) Damage to property outside the boundaries of the organization of TRY 2 Million or more.

Following the identification of the emergency, it is decided who is likely to be harmed and how. Employees, subcontractors and visitors are taken into account. All activities are examined for daily operating conditions as well as for non-routine situations. At this stage, it is also considered whether existing control methods are adequate.

#### 5.3 Notification for Hazardous Cargo Conformity Certificate

The coastal facility operator is responsible for ensuring that all relevant equipment for the issuance of the HCCC for the coastal facility is suitable and operational, that the necessary maintenance, care and repairs are carried out and that it is kept in a safe and continuously operable condition and in the event that they lose their operational capability for any reason, they are obliged to notify the regional port authority and the vessel and cargo authorities they serve if the equipment failures prevent the operation in the facility.

#### 1. RELEVANT DOCUMENTS

TEM -F-031 Incident Notification Form

#### **BASIS:**

- a. "Regulation on Prevention and Mitigation of Major Industrial Accidents" published in the Official Gazette dated 2/3/2019 and numbered 30702 (Repeated) Appendix-3
- **b.** "Communiqué on Safety Report to be Prepared for Major Industrial Accidents" published in the Official Gazette dated 19/4/2019 and numbered 30750 (Repeated) Appendix-2

#### 8.6. Method of coordination, support, and cooperation with authorities.

In case of fire, if it could not be brought under control, the Fire Department is notified.

In case of work accidents, the Ministry of Labor is notified in accordance with all legal requirements.

In case of suspicious situations and traffic accidents, the relevant units (Gendarmerie, police, fire brigade) must be notified immediately.

In case of chemical spillage, the Port Authority and MARE sea cleaning company, Provincial Directorate of Environment are informed due to the neighboring facilities and vessel traffic against fire hazard.

#### Communication to coordinate the involvement of external resources in response operations,

Employees of the HSE-Q Department are responsible for taking the necessary protection measures against fire, keeping fire equipment and devices in working condition, forming fire teams and determining the tasks, and ensuring internal organization until the fire department arrives.

#### By the response team;

Participation of the fire department in the response operations is ensured by providing the hydrant sketch, tank information, information on the chemical substance causing the emergency to the fire department teams.

#### By the health service group;

If first aid response is required, he/she immediately calls 112 and ensures that an ambulance arrives. After first aid is given to the casualties, they are sent to the nearest health center.

#### Communication through national and local media,

After an emergency or disaster, the head of the Crisis Center shares the situation with the press and the public and informs the necessary places. Also, the necessary news is published on the company's website.

Communication with decision makers outside the emergency management system,

In case of emergency, if necessary, official authorities such as AFAD, DOIZ (Dilovası Organized Industrial Zone), Municipality are contacted by the Head of the Crisis Center or interviews are provided by the person authorized by him/her. The instructions received from the competent authorities are transferred by the chairman to the people in emergency management and necessary actions are taken.

# **8.7.** Emergency evacuation plan for the removal of vessels and marine vessels from the coastal facility in case of emergency.

#### 1. Purpose

The purpose of this procedure for the evacuation of vessels from Marine Systems is to describe the sequence of actions and responsibilities required for the most appropriate separation of vessels from Marine Systems in the following emergency situations.

#### 2. Emergency Conditions;

The conditions requiring urgent departure of the vessels connected to the Port Facility Marine systems are stated below.

- Adverse weather conditions
- Conditions requiring the declaration of fire or emergency at the vessel
- Conditions requiring the declaration of fire or emergency at the Port Facility site
- Other conditions
  - Fire on a vessel in other facilities or directly in the facility
  - > Terrorist acts
  - > State of War
  - Natural Disasters
  - Conditions deemed necessary by Official Institutions
  - Pollution
  - > Breach of the vessel's position
  - Vessel malfunction
  - Medical issues

#### 3. Adverse Weather Conditions

Weather Conditions	Operation	Action to be taken	Explanations
Wind >> 20 knots	Docking	The vessel is not allowed to dock	
Wind >> 15 knots	Evacuation	Evacuation is Stopped	The Port Facility reserves the right not to restart the evacuation until the wind speed drops below < 15 Knot .
Wind >> 20 knots	Evacuation	Flexbile hose connections are separated	Necessary measures will be taken for the safe disconnection of flexible hoses, taking into account the rate of increase in wind speed and the availability of sufficient port facility personnel.
Wind >> 30 knots	Evacuation	From the pier	The decision will be made by the Vessel Captain and the Port Facility Representative in consultation with the Pilot.
Any Wind Speed	Docking Evacuation		The Port Facility may decide on any action during docking, departure, and evacuation to ensure its own safety and request the vessel to comply with this decision.
Lightning Strike	Evacuation	Evacuation is stopped, all valves and vents of the vessel are closed, cargo tank pressures are closely monitored and uncontrolled venting is prevented.	If the lightning struck in the immediate vicinity of the Port Facility site
Careen Bow Stern Slope 2.0 m	Evacuation	Evacuation is stopped, and all discharge valves are closed.	The vessel is instructed to implement necessary measures.

The specified values in the table above are the values calculated and given in order to maintain the safe operation of the vessels in the Port Facility Marine Systems. When the wind speed exceeds 40 kts, the vessel is kept away from the Marine Systems for the safety of the vessel and the facility.

#### 4. Conditions Requiring the Declaration of Fire or Emergency at the Vessel

The fire that may occur on the Vessels connected to the Marine Systems and that may grow out of control even if it is fought, is a situation that requires the Emergency stop of the Operation and the departure of the Vessel. Additionally, in cases where there is a leakage / spillage that cannot be prevented to the atmosphere as a result of cases such as breakage, or rupture that may occur in any vessel tank or pipeline, the vessel connected to the Marine Systems must be immediately removed from the Marine Systems in order to prevent damage to the Port Facility and its vicinity.

#### 5. Conditions Requiring the Declaration of Fire or Emergency at the Port Facility Site

In cases such as fire, uncontrollable leakages, and conditions requiring Emergency Situations that may occur similarly at the Port Facility, the vessel is immediately removed from the Marine Systems for the safety of the vessel and the vicinity. The fires and leakages that will not affect the operation within the Port Facility and can be easily extinguished will be evaluated by the Emergency Crisis Center and the decision to depart the Vessel located in the Marine Systems will be taken.

#### **6.** Other Conditions:

Conditions that are not directly caused by the vessel and the Port Facility, but where there is a possibility of damage to the vessel indirectly

- Fire or explosion on a vessel in other facilities or directly in the facility
- Terrorist acts
- State of War
- Natural Disasters
- Conditions deemed necessary by the State.
- Pollution
- Breach of the vessel's position
- Mechanical malfunction on the vessel
- Medical problems affecting the Vessel and Port Facility

In such cases, the Vessels shall be immediately detached from the Maritime Systems to which they are attached.

#### **7.** Communication:

Fast, secure, uninterrupted communication between the Port Facility and the Vessel or between the Port Facility, the Vessel, and the responsible Authorities when the above-mentioned emergencies occur will be provided by the following communication means.

**UHF** Radio

VHF Radio

Mobile Phone

Landline

Messenger/ Communication personnel

ALARM SOURCE	ALARM DEVICE	AUDIBLE WARNING
Fire Outbreak in the Facility	Radio / Phone	Fire in the Facility
Fire Outbreak in the Pier	Radio / Phone	Fire in the Pier
Power Outage	Radio / Phone	Attention Power Outage
Emergency	Radio / Phone	Attention Emergency

#### **8.** Emergency Departure System Preparations:

All emergencies must be reported to the Port Authority If the emergency departure of the vessel is decided, the safe places where the vessel can be transported under controlled conditions should be specified by the Port Authority.

The Vessel Captain and the Port Facility will initiate the emergency departure process by mutual agreement in cases requiring emergency departure and will inform the Port Authority as soon as possible. Urgent

Depending on the severity of the situation and the time, the Port Authority, the General Director of the Port Terminal, the Captain of the Vessel, and the Pilot will agree on the time and method of departure before the emergency departure is carried out.

The vessel's machinery, steering gear, and Sea System stopover equipment will be made ready for immediate use.

All cargo unloading and ballasting operations will be stopped and the vessel will be ready for departure.

The vessel's fire circuit will be pumped with water and water mist will be used for strategic compartments.

If venting to the atmosphere is required, engine room personnel must be available, all non-essential receiver inlets must be closed, all safety measures for normal operations must be in place and a warning notice must be issued.

If the response required for the emergency in question exceeds the capabilities of the terminal, local security forces and/or fire department will be informed immediately.

The decision to detach the vessel under control will be based on the principle of life safety but will also include the following conditions;

- 1. The capability of the tugboat
- 2. The vessel's capability to depart autonomously
- 3. The availability of safe places for a Vessel in an emergency to sail or be towed
- 4. Fire-fighting competence
- 5. Proximity of other vessels
- 6. Fire Lines

While the vessel is in the port facility, the fire lines will be kept on the bow and shoulder sections of the vessel from the seaward. In bulk liquid cargo vessels, the eye of the ropes must be lowered to sea level and the part on the top of the board must be appropriately connected to the emergency release hook. The part of the rope on the board will be taut starting from the emergency release hook. A string capable of carrying the rope will be tied right next to the eye of the rope and the eye of the rope will be positioned so that it is three meters above sea level. The eye of the rope will be kept at this level at all times while the vessel is in the port facility.

#### **9.** Emergency Departure Process:

If all the above preparations are reviewed and deemed appropriate, the vessel will be detached immediately.

Emergency departure procedures will be carried out by fulfilling the following procedures in order.

Each stage requires strict coordination and cooperation between the Port Facility, the Vessel, and the Port Authority.

#### **Emergency Departure Procedures**

1	Sounding the alarm
2	Conveying information regarding the emergency via VHF or phone
3	Initial emergency assessment between the vessel captain and the Port Facility Official
4	Suspending of the operation
5	Implementation of Port Facility and vessel emergency measures
6	The worsening of the existing emergency and the existence of the above-mentioned emergency departure conditions.
7	Assessment of the emergency by the Vessel Captain, Port Facility Offical or Port Authority, and the Pilot
8	The decision to emergency departure
9	Notification of the emergency to neighboring facilities and other vessels
10	Deployment of tugboats around the vessel for emergency departure, completion of preparations, and notification that everything is ready
11	The Vessel captain's completing the preparations for the vessel and notifying that the vessel is ready.
12	Authorization of the authorized person to open the release hooks

#### **ATTENTION!**

EMERGENCY DEPARTURE OF THE VESSEL MUST BE CONSIDERED TO BE IMPLEMENTED AS A VERY LAST OPTION, AND THE RELEASE HOOKS MUST NOT BE SET FREE UNTIL ALL MEASURES HAVE BEEN TAKEN AND THE ABOVE CONDITIONS HAVE BEEN FULFILLED.

#### **10.** After Emergency Departure

Towing of the vessel after the emergency departure procedures and the decision and notification of the location where the vessel will be transferred,

Transfer / mooring of the Vessel to the allocated area accompanied by tugboats or with its own machinery,

Inspection of the port facility and detection of any possible damage or deficiency,

Evaluation of the time when the vessel and port facility will be ready to handle cargo again,

Exchanging information regarding any negative experiences during the emergency departure,

Agreement between the pilotage and towage organization and port facility authorities for fire, explosion and similar emergencies that may occur during loading / unloading,

Quick towing of the vessel away from the facility and towing it to a safe point by a tugboat with sufficient towing power and number equipped to fight the fire according to the weather and sea conditions.

- 8.8. Procedures for handling and disposal of damaged dangerous cargoes and wastes contaminated with dangerous cargoes.
- a. Waste Management Procedure

#### **PURPOSE**

The purpose of this procedure is to set out the methods to be applied for the reduction, collection, storage, transportation, recycling, and disposal of all waste generated within the Altintel site.

#### **SCOPE**

It is for all wastes produced in the entire facility and port sites. Subcontractor waste is managed in accordance with the contracts made with the subcontractor.

#### **AUTHORITIES**

Senior Management, HSE-Q department, Maintenance department, Operations department, Administrative Affairs

#### **DEFINITIONS**

- Solid (uncontaminated) Waste: Solid waste that is not contaminated with chemicals, is intended to be disposed of by the producer and must be disposed of in an orderly manner to protect the environment. Domestic waste (food waste, garbage), industrial domestic waste, and packaging waste (wood, nylon, cardboard, etc.) are included in this category.
- Hazardous (contaminated) Waste: Solid or liquid wastes that are flammable, explosive, toxic, corrosive, emit toxic gases in contact with water and air and are specified in the Regulation on Control of Hazardous Wastes (batteries, tires, batteries, electronic waste, chemical waste,...etc.).
- **Medical Waste:** Waste contaminated with disease-carrying substances.

- **Transport License:** This is the license that the transporter company used to transport hazardous wastes outside the factory must obtain from the Ministry of Environment, Urbanization and Climate Change and must be renewed every 3 years.
- **Disposal License:** It is the license that the disposal company must obtain from the Ministry of Environment, Urbanization and Climate Change and must be renewed every 3 years in order to ensure the disposal of hazardous wastes by incineration or in surface landfills.
- Waste Site: Sites where wastes are stored and labeled based on their class.

#### **APPLICATION**

#### 4.1. Waste Collection

**HAZARDOUS WASTES** 

Glass Waste □ GREEN

Metal Waste □ GRAY

Waste generated throughout the facility is classified in accordance with legal requirements and collected separately at the source in waste containers of the color and type specified below. The type of waste collected is identified on the waste containers.

# Contaminated Waste In collection bins with a RED "Contaminated Waste" label Contaminated Packaging In collection boxes with ORANGE "Contaminated Packaging" label DOMESTIC AND INDUSTRIAL WASTES Domestic/Domestic Industrial Wastes In collection boxes with the GREEN "Domestic Waste" label RECYCLABLE WASTES Paper and cardboard waste BLUE Plastic Waste YELLOW

Organic Waste (Composted Waste)  $\square$  BROWN

Non-Recyclable Domestic Waste □ DARK GRAY

Waste papers are collected in the "PAPER WASTE" boxes in the offices and in the "BLUE" colored waste containers in the field / waste area and are recycled through licensed companies.

Waste plastics are collected in "PLASTIC WASTE" boxes in offices, in "YELLOW" colored waste containers on the field / waste site, and are recycled through licensed companies.

Waste glass is collected in "GLASS WASTE" boxes in the offices, in "GREEN" colored waste containers on the field / waste site and recycled through licensed companies. Waste metals are

collected in "METAL WASTE" boxes in the offices, in "GREY" colored waste containers in the field / waste site. It is collected in colored waste containers and recycled through licensed companies.

Waste organic waste is stored in "BROWN" colored waste containers inside the "ORGANIC WASTE" boxes in the cafeteria. (Fruit peels, tea pulp, leaves.)

Food and bread wastes are given to the facility animals and are not considered as waste.

Domestic solid waste and industrial waste are collected in "DARK GRAY" colored waste containers and periodically poured into large garbage containers within the facility and taken to regular landfills in return for a waste receipt to the contracted company within the scope of the Dilovasi Organized Industrial Zone Solid Waste Management Agreement.

Waste "Batteries" are collected in the "WASTE BATTERY" container kept in the units and taken by the TAP association when full.

Waste "Batteries" are collected at the hazardous waste site and given to the licensed recycling facility.

The chemicals coming out of the units are collected separately in special containers without mixing them together.

Waste "Fluorescent and Mercury Bulbs" are cardboardized in a way that they cannot be broken and collected in barrels in the Hazardous waste area and given to the licensed disposal facility.

Electronic waste is collected in the "ELECTRONIC WASTE" box within the facility and given to the licensed recycling facility.

Waste "Cartridges" and "Toners" are placed in leak-proof thick plastic bags and collected at the Hazardous Waste site and sent to a licensed disposal company.

Empty oil, paint and chemical barrels are collected and collected in the "Contaminated Packaging" section in the Hazardous waste area.

The glass sample bottles produced during the operation are collected in the "ORANGE" colored waste containers at the facility and taken to the Hazardous waste site in thick plastic bags. Wastes known or suspected to contain asbestos and out-of-use stock material wastes are collected in sealed, thick plastic bags. The phrase "CAUTION CONTAINS ASBESTOS" is written in white capital letters on a red background, indicating that it contains asbestos.

Petroleum-derived, oily and chemical-containing liquid wastes are kept in slop tanks within the facility. It is taken into barrels or IBC tanks at certain periods and sent to the Hazardous waste area. It is given to the licensed disposal facility after receiving Customs approval.

Waste oils are collected in their original sealed containers at the Hazardous waste site. It is sent to the relevant disposal or recycling facility according to its category.

Medical waste; It is collected in red bags in the infirmary and kept in the medical waste collection box during the collection period. There is a phrase "Attention Medical Waste" and a "Biohazard sign" on the Medical Waste collection box. Sharps waste is collected in special boxes marked "Attention Sharps Medical Waste" and "Biohazard sign". When it accumulates, it is delivered to the company with which an agreement has been made within the scope of the "Medical Waste Protocol", by preparing a MOTAT Registration and Transport Document.

End-of-life tires considered as waste are taken to the Hazardous Waste Site and sent to a licensed recycling facility.

In line with the agreement made with the contractor, the excavation wastes are sent to the storage areas permitted by the municipality with the Excavation Soil, Construction and Demolition Waste Transportation and Acceptance certificate.

Domestic wastewater is discharged through DOSB's domestic wastewater channel connection. Samples are taken by DOSB management and the results are monitored. Industrial wastewater (water accumulated in the separator) is disposed of by sending it to the central wastewater treatment plant with sewage trucks equipped with vehicle tracking devices, within the scope of the Convention on the Treatment of Wastewater. During these processes, wastewater treatment plugs obtained from the company are used. Industrial treatment receipts are kept by the HSE-K Department.

Separator sludge, tank bottom sludge and other sludge-like materials are collected in sealed containers at the waste site and transported and disposed of by licensed companies. Metal wastes are managed by filling out delivery notes through companies licensed by the Ministry of Environment, Urbanization and Climate Change.

Ship waste is received by Izaydaş waste ships in line with the contract made with Izaydaş. Ship wastes within the scope of Marpol 73/78 Annex I, slop and all Marpol Annex II and Marpol Annex VI wastes are taken to the waste reception facility established in the facility via the waste line and are collected after commission control and approval.

**8.9. Drills**The periods of the drills and the variety of trainings are given in the tables below.

Name of the Drill	Period	Scope
Evacuation Drill	Twice a Year	Whole Facility
Chemical Spillage Drill	Twice a Year	Whole Facility
Fire Drill	Three a Year	Whole Facility
Response/Protection/Rescue/First Aid Drill	Annually	Whole Facility
Fight Against Marine Pollution Drill	Twice a Year	Mare - Neighboring Facilities
Internal Emergency Drill (SEVESO Requirement)	Once Every Three Years	In collaboration with Official Institutions
Types of Drills	Period	Scope
Fire Fighting	Annually	Whole Facility
Working with Chemicals	Annually	Whole Facility
First Aid	Annually	Whole Facility
Emergency and Response Methods	Annually	Whole Facility

# 8.10. Information on fire protection systems. FIRE PROTECTION SYSTEMS

#### **FACILITY FIRE SAFETY**



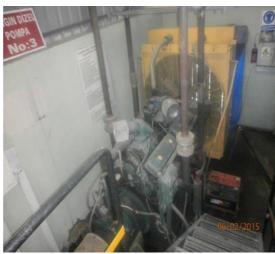
Fire safety at the facility is provided by;

- 3 units of 450 cubic meter diesel fire pumps
- 1 unit of 100 cubic meter jockey pump
- 1 unit of 25 cubic meter jockey pump.
- The pumps are subject to regular maintenance and testing procedures. Each Diesel pump is operated for at least half an hour per week. Engine oils, oil filters, air filters, fuel filters are changed once a year. Additionally, Line adjustment is carried out once a year, and packing, coupling, and shaft checks are performed.



- 8 cubic meters and 5 cubic meters of foam is supplied to the lines from a redundant foam tank.
- 8 cubic meters and 5 cubic meters of foam is supplied to the lines from a back-up foam tank
- The foam is analyzed once a year to ensure its performance.
- The foam is tested once a month to ensure that it is operational.

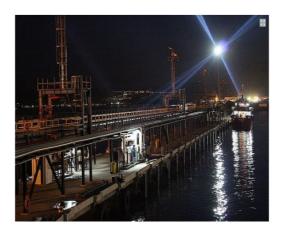




Also as a backup at the Port Area;

- 1 unit of 750 and 1 unit of 565 cubic meter diesel fire pumps are provided.
- By drawing water from the sea, it provides a kind of infinite water supply.
- Additionally, with the protocol signed with Solventas, there is a line connection between 2 companies.





- There is a sprinkler system that provides foam solution and cooling water in the loading platforms.
- There are 15 RCMs, 3 of which are on the pier.
- RCM can also be controlled by 2 remote controllers allowing remote response
- Additionally, there are 9 fire towers.





- There are showering lines surrounding all tanks.
- Tank showers can be operated manually from the shower areas.

#### Furthermore;

• Foam chambers are available in all tanks and provide response in case of a possible fire.

#### **8.11. Fire Systems Controls**

- Fire systems in the facility are under constant control to keep them available.
- Pressure performance test of fire pumps is performed once a month.
- Additionally, every 6 months, fire pumps are tested for performance on a cubic meter basis.
- Fire pumps are run every other day and fuel levels are checked.
- The foam system is operated 1 day a month and the results are recorded.

# **8.13.** Measures to be taken in cases where fire protection systems do not work. Instructions for the Continuity of Operations

Problems in the fire system are solved by acting in accordance with the following instructions to ensure safety at the facility.

#### **PURPOSE**

This plan outlines how Altıntel Liman ve Terminal İşletmeleri A.Ş. will ensure the continuity of the service.

#### **DRILL**

One of the scenarios in the "CONTINUITY OF OPERATIONS PLAN" is selected and a drill is held once a year and a report is prepared. The test period is monitored with the "MONITORING MEASUREMENT TRACKING FORM".

Scenario Sub Scenario		First Action to be Taken	Actions to be Taken After the First Action
If the hose is not usable	If the hose is damaged	a) Spare hoses kept ready in the warehouse are used.	a) New hoses are ordered. b) It is ensured that backup hose is available
Valve	Inability to open	a) Necessary lubrication is applied.	a) New valves are ordered.
malfunction	the valve handle	b) If the handle still does not open, it is replaced with a backup.	b) It is ensured that there is a backup valve available
		a) If the valve is a tank bottom valve, a blind plate is placed between the valve and the flange as soon as possible.	a) Damaged valves are replaced.
Valve malfunction	Damage (formation of body cracks)	b) If the valve is the outlet valve, tanker filling is performed with the drain valve.	a) New valves are ordered.
		c) If the valve is the valve used in the filling platform, it is replaced with a backup valve.	b) It is ensured that there is a backup valve available
Scenario	Sub Scenario	Actions to be taken until the malfunction is eliminated	Actions to be taken if the malfunction is not eliminated
		a) At least two of the measuring lids are opened.	a) If it is not usable, it is replaced with a backup.
PV valve malfunction	Inability to fulfill its function	b) It is ensured that the tank receives the necessary amount of air during filling.	b) Backup P.V valves are ordered.
		c) The PV valve is put into maintenance.	
		a) A backup weighbridge with 1-year calibration is used.	a) The weighbridge is recalibrated.

Weighbridge malfunction	When the weighbridge does not weigh correctly	b) The malfunctioning weighbridge is put into maintenance.	
Weighbridge malfunction	Weighbridge No. 1 malfunctioning	<ul> <li>a) Depending on the fullness of the tanker, the filling is continued from weighbridge No. 2.</li> <li>b) If there is excessive filling, weighing is performed from the backup weighbridge.</li> <li>c) Weighbridge No. 1 is put into maintenance</li> </ul>	a) The weighbridge malfunction is eliminated. b) If necessary, recalibration is performed.
Weighbridge malfunction	Weighbridge No. 2 malfunctioning	a) Depending on the fullness of the tanker, the filling is continued from weighbridge No. 1.  b) If there is excessive filling, weighing is performed from the backup weighbridge.  c) Weighbridge No. 2 is put into maintenance	a) The weighbridge malfunction is eliminated. b) If necessary, recalibration is performed.
Power outage		a) The generator is activated.  b) Critical devices in the facility are not affected by power outages as they are supported by UPS.	
Boiler Malfunction	Boiler No. 1 malfunctioning	a) The malfunction in the Boiler No. 1 is attempted to be eliminated.  b) The boiler No. 2 is activated.	a) The service is called for repair.
Boiler Malfunction	Boiler No. 2 malfunctioning	<ul><li>a) The malfunction in the Boiler No. 2 is attempted to be eliminated.</li><li>b) The boiler No. 1 is activated.</li></ul>	a) The service is called for repair.
Scenario	Sub Scenario	Actions to be Taken Until the Fuel Problem is Eleminated	Actions to be Taken If the Fuel Problem is Not Eliminated
	If the fuel supplier is unable to deliver fuel	a) A different supplier is contracted.  b) Fuel delivery is ensured.	b) The reserve fuel tank is used.
Scenario	Sub Scenario	Actions to be Taken	
Decrease in the number of employees	A large-scale epidemic	a) In the case of OPR-T-14 Widespread Epidemic Disease, the Instruction for the Continuation of Operations is followed.	
Decrease in the number of employees	Decrease in the number of employees as a result of leave or etc.	a) Employees in the reserve personnel schedule in OPR-T-14 are assigned for the continuity of operations	
If computers or the system is down	Deletion of data	a) Actions will be taken according to the Backup of Data in Article 5.11.1 of the QMS-P-01 Control of Documents and Records procedure.	

Scenario	Sub Scenario	Actions to be Taken Until Problems Are Eliminated	Actions to be Taken If Problems Are Not Eliminated
	If there is no Internet Line and e-mails cannot be sent	<ul><li>a) Independent mobile networks are used for the Internet connection.</li><li>b) The internet failure is attempted to be eliminated (responsible authorities are called)</li></ul>	a) In case mobile networks are insufficient, data transfer is carried out via fax.
	If printers do not work	<ul><li>a) If the waybill is printed, the waybill is cut by hand.</li><li>b) The malfunction is attempted to be eliminated.</li></ul>	a) The malfunctioning printer is replaced by a less important printer at the facility.
	If the phones do not work	a) Communication is provided by mobile phones.	a) The responsible authorities are called. b) The problem is attempted to be eliminated.
Malfunction of Fire Pumps	If the Small Joker Pump is Disabled	a) Big Joker Pump is activated. b) Fire System remains active c) Small Joker pump is put into malfunction process	
	If the Big Joker Pump is Disabled	<ul> <li>a) The small joker pump remains permanently activated.</li> <li>b) In case the small joker is not sufficient, Diesel Fire Pump No.</li> <li>1 is activated.</li> <li>c)Big Joker pump is put into malfunction process</li> </ul>	
Scenario	Sub Scenario	Actions to be Taken Until Problems Are Eliminated	Actions to be Taken If Problems Are Not Eliminated
	If Diesel Fire Pump No. 1 is Disabled	<ul> <li>a) The Small Joker Pump is activated and if it is not sufficient, the Big Joker Pump is activated; if the water consumption continues, the Fire Diesel Pump No. 2 is activated.</li> <li>b) Diesel Pump No. 1 is put into malfunction process</li> </ul>	a) If problems cannot be eliminated during the Diesel Pump maintenance process;      b) New diesel pump is ordered
	If Diesel Fire Pump No. 2 is Disabled	<ul> <li>a) The Small Joker Pump is activated and if it is not sufficient, the Big Joker Pump is activated; if the water consumption continues, the Fire Diesel Pump No. 1 is activated.</li> <li>b) Diesel Pump No. 2 is put into malfunction process</li> </ul>	a) If problems cannot be eliminated during the Diesel     Pump maintenance process;      b) New diesel pump is ordered
	If Diesel Fire Pump No. 1 and 2 is Disabled	a) The Small Joker Pump is activated and if it is not sufficient, the Big Joker Pump is activated; if water consumption continues, the Port Area Fire Diesel Pump No. 1 from the diesel fire pumps in the port area is activated and water is supplied from the sea and the fire lines are feeded.  b) Diesel Fire Pumps No. 1 and 2 are put into malfunction process.	a) If problems cannot be eliminated during the Diesel Pumps maintenance process;  b) New diesel pump is ordered
	If Diesel Fire Pump No. 1 and 2 and the Port Area Diesel Pump No. 1 Disabled	a) The Small Joker Pump is activated and if it is not sufficient, the Big Joker Pump is activated; if water consumption continues, the Port Area Fire Diesel Pump No. 2 from the diesel fire pumps in the port area is activated and water is supplied from the sea and the fire lines are feeded.	a) If problems cannot be eliminated during the Diesel Pumps maintenance process;

		Diesel Fire Pump No. 1 and 2 and the Port Area Diesel Pump No. 1 are put into malfunction process.	b) New diesel pump is ordered
		a) Solventas is contacted.	a) If problems cannot be eliminated during the Diesel Pumps maintenance process;
	If all of the fire	b) The valves of the fire line which is shared with Solventas are opened.	b) New diesel pump is ordered
	diesel pumps in the facility have malfunctioned and do not work	c) Fire lines are supplied by Solventas	
		d) Water is supplied to the Fire Department from the fire lines.	
		e) Fire lines are fed with sea water by a connection from the tugboat to the fire line from the sea on the pier.	
		f) Diesel pumps are put into malfunction process.	
		a) Currently, 8 cubic meters of foam is available at the facility.	
Foam Requirement		b) Additionally, 6 cubic meters of foam stored in IBCs is kept as a precautionary measure.	a) The foam may be requested from neighboring facilities in case of need.
		c) The foam lines are filled with solution.	
Pier RCM malfunctions	RCM No. 1 malfunction	a) The response is performed with RCM No. 2.	
		b) The response is continued with mobile carts.	a) Foam carts are placed in that area.
		c) RCM No. 1 is put into malfunction process.	
		a) The response is performed with RCM No. 1 and 3.	
	RCM No. 2 malfunction	b) The response is continued with mobile carts.	a) Foam carts are placed in that area.
		c) RCM No. 2 is put into malfunction process.	
		a) The response is performed with RCM No. 2.	
	RCM No. 3 malfunction	b) The response is continued with mobile carts.	a) Foam carts are placed in that area.
		c) RCM No. 3 is put into malfunction process.	
Tank Cooling	Tanks No. 31-32- 33-34 cooling malfunction (valve-flange- gasket)	a) Cooling response is performed with Foam Cannons No. 4 and 16. If it is insufficient;	a) The cooling system is de-assembled and the new
		b) Remote cooling is performed with fire hoses.	system is installed.
	Tanks No. 41-44-	a) The response is performed with RCM at the 5th pit.	
	47-53-57 cooling malfunction (valve-flange-	a) Cooling response is performed with Foam Cannons No. 4 and 14. If it is insufficient;	a) The cooling system is de-assembled and the new system is installed.
	gasket)	b) Remote cooling is performed with fire hoses.	
Burst in the fire line		a) The burst line is closed with valves on both sides and disabled.	a) Welding is performed on fire lines.
		b) The line is fed from the 6th and 7th pits.	a) welding is performed on the lines.

		c) It is ensured that water is available in the fire lines.	
Sprinkler System Malfunction at Filling Platform		a) The response is performed with mobile foam and fire carts.     b) System malfunction is attempted to be eliminated immediately.	a) The system at the filling platform is renewed.
Spill Equipment Malfunction Barrier Rupture		a) A backup barrier is used. b) Mare is called.	a) Solventas is requested for help. b) Mare is requested for a new barrier.
Radar Malfunction	If tank radars do not measure	a) In case of a malfunction in the Opr-T-19 Atg (Automatic Tank Gauging) System, the procedure shall be carried out in accordance with the Vessel Loading and Unloading Operations Instruction.	a) Radar is put into malfunction process.
Tank Level Alarm Device Malfunction	If the Alarm Does Not Sound at High Levels	If the green light on the device does not flash continuously, this means that the device is not working correctly. In such cases, High-level monitoring is performed continuously from the ATG device. The tank is replaced before reaching the set level or the discharge is stopped if there is no available tank for this purpose.	The company providing the software for the repair of the device is contacted and the repair is ensured.
Fire Pump Malfunction	If Diesel Pump No. 1 does not work	Diesel Pumps No. 2 and 3 are activated with the pressure drop in the fire circuit.	Diesel Pump No. 1 is put into maintenance by contacting AKSA company.
	If Diesel Pump No. 2 does not work	Diesel Pumps No. 1 and 3 are activated with the pressure drop in the fire circuit.	Diesel Pump No. 2 is put into maintenance by contacting AKSA company.
	If Diesel Pump No. 3 does not work	Diesel Pumps No. 1 and 2 are activated with the pressure drop in the fire circuit.	Diesel Pump No. 3 is put into maintenance by contacting AKSA company.
Fire Alarm Button Malfunction	If the fire alarm button in the Fire Area does not work	It is notified by radio.	a) The alarm button is replaced with a new one. b) The fire alarm button is repaired by maintenance personnel.
	If the fire alarm button in the Fire Area does not work	Different fire alarm buttons are pressed.	a) The alarm button is replaced with a new one.  b) The fire alarm button is repaired by maintenance personnel.
Malfunction of the Sound Alarm (Siren)	If the alarm siren for emergency does not work	It is notified by radio.	a) The alarm button is replaced with a new one. b) The fire alarm button is repaired by maintenance personnel.
Intermediate Transfer Pump Stop Button Malfunction	If Intermediate Transfer Pump No. 1's stop button does not work	The stop button in the operation room is used	a) The button is replaced with a new one.  b) The button is repaired by maintenance personnel.
	If Intermediate Transfer Pump No. 2's stop	The stop button in the operation room is used	a) The button is replaced with a new one.

	button does not work		b) The button is repaired by maintenance personnel.
	If Intermediate Transfer Pump No. 3's stop button does not work	The stop button in the operation room is used	a) The button is replaced with a new one.  b) The button is repaired by maintenance personnel.
	If Intermediate Transfer Pump No. 4's stop button does not work	The stop button in the operation room is used	a) The button is replaced with a new one.  b) The button is repaired by maintenance personnel.
Overflow Sensor	If the overflow sensor used	a) If 2 vehicles are filling at the same time in the port area, the other platform is used.	a) If there is filling on 2 platforms, a backup overflow sensor is available in the storage for 2 platforms at the port area and the sensor can be replaced by stopping the filling for only 15 minutes.
Malfunction	during filling does not work	b) If the filling is performed at 1st pit and there is no filling on other platforms, the overflow sensor there is used.	a) If there is filling on other platforms, a backup fork switch overflow sensor is available in the warehouse for the fork switch overflow sensor used at the 1st pit and the sensor can be replaced by stopping the filling for only 20 minutes.

## PROVIDING OPERATION CONTINUITY WITH THE MAXIMUM PERSONNEL IN CASES OF AN OUTBREAK OF DISEASE, etc., and PROVIDING THE POSSIBILITY TO RESPOND TO MAJOR ACCIDENTS;

The strategic purpose is to make necessary/critical operations functional as soon as possible at a minimum, but at a level that is acceptable for the client. It is also aimed to provide the capability to respond to major industrial accidents.

- ✓ Protection of personnel and providing for their needs;
- ✓ Assessing the scale of the incident;
- ✓ Containment of the threat;
- ✓ Evaluation of the problems and their consequences;
- ✓ Activation of the operations as fast as possible;
- ✓ Management of internal and external communication, management of media relations

## a. Maximum Work Plan in case there are 15 employees at the facility;

- ✓ Continuation of Tanker Filling,
- ✓ Continuation of Vessel Operations,
- ✓ Continuation of Bunkering Operations,
- ✓ Continuation of Shipment Operations
- ✓ Maintenance and supply of fire fighting systems and equipment and keeping them ready; response to emergencies,
- ✓ Continuation of Critical Equipment Malfunction Maintenance,
- ✓ Continuation of Periodic Maintenance,

## b. Maximum Work Plan in case there are 10 employees at the facility;

- ✓ Continuation of Tanker Filling,
- ✓ Continuation of Vessel Operations,
- ✓ Continuation of Bunkering Operations,
- ✓ Continuation of Shipment Operations
- ✓ Maintenance and supply of fire fighting systems and equipment and keeping them ready; response to emergencies,
- ✓ Continuation of Critical Equipment Malfunction Maintenance,

## c. Maximum Work Plan in case there are 5 employees at the facility;

- ✓ Continuation of Tanker Filling and ensuring that Filling is performed at a single filling island,
- ✓ Continuation of Vessel Operations,
- ✓ Continuation of Bunkering Operations,
- ✓ Continuation of Shipment Operations
- ✓ Maintenance and supply of fire fighting systems and equipment and keeping them ready; response to emergencies,

## 8.13. Other risk control equipment.

There are fixed gas detectors at the necessary locations of the facility corresponding to the chemicals in the region.

## DRAGER FIXED GAS DETECTORS





There are a total of 33 fixed gas detectors within the Altintel facility; the locations and intended uses of these detectors are as follo

#### DRAGER GAS DETECTION and ALARM SYSTEM

When gas leakage occurs in the facility, actions will be taken according to the following items.

- Ensure that all fiery work in the facility is stopped as soon as the alarm is triggered.
- Evacuate the area of gas accumulation calmly.
- Detect the area of gas accumulation and stop the gas leakage.
- It is mandatory to enter the gas accumulation area with PPE equipment.
- For each detector, 2 alarm levels are specified in the system. These are;
  - c. A1 : First alarm level (Medium-Level Alarm)
  - d. A2 : Second alarm level (High Level Alarm)

A1:20% LEL

A2:40% LEL

- At the A1 alarm level, the light notification on the lighting pole opposite tank 9 will be activated. At the A2 alarm level, the sound alarm on the pole will be activated.
- Additionally, the system is set up so that the sound alarm is automatically deactivated when the

There is 1 red siren and 1 red lamp on the lighting pole on the administrative building road.

gas concentration falls below the A2 alarm level.

- The main control and the display screen of the gas detection and alarm system is located in the 2nd-floor electrical panel room next to the administrative building. The display screen is also available as a program on the computers of the responsible units and individuals.
- Each detector is calibrated once a year by an authorized company.

## COMMUNICATION IN CASE OF GAS DETECTION and ALARM SYSTEM ACTIVATION

The gas detectors in our facility are located in critical locations. Their location provides us with great convenience in detecting the gas settling on the ground as a result of its density.

- 1. In case the siren is activated <u>during working hours on weekdays</u>, the responsible personnel will notify the HSE-Q Department.
- 2. After the alarm sounds and the HSE-Q Department is notified, the HSE-Q personnel detects which detector is alarming by looking at the display screen and informs his/her supervisor first. The HSE-Q Chief investigates the cause of the alarm and takes action.
- 3. In case the siren on the lighting pole opposite tank no. 9 is activated <u>outside of working hours</u> <u>on weekdays and on weekends</u>, the main gate security personnel will notify the Operation Shift personnel.

- **4.** After Security informs Operation Shift personnel, Operation Shift personnel immediately inform the HSE-Q Department. The HSE-Q Department takes immediate action.
- 5. It is forbidden to enter the System Main Module and Measurement Modules except for authorized persons.
- **6.** System malfunctions will be notified by the HSE-Q Chief.

## If the Gas Detector is activated during Vessel/Barge Operation

- The vessel operation is safely stopped.
- The vessel personnel is informed by radio that the operation will be stopped.
- If the intermediate pump is running, it is switched off
- The valve of the corresponding line or lines on the pier is closed.
- The bottom of the tank is closed in case of fire due to gas accumulation.
- Authorities are notified (Operation and HSE-Q Department).
- The area where the gas accumulates is safely left and the problematic area ise detected with the gas mask on.

### If the Gas Detector is activated during Tanker Operation

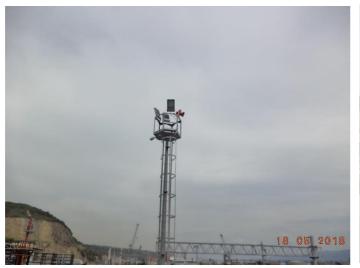
- All tanker operations are safely stopped when the gas detector alarms.
- The pump is switched off by pressing the emergency stop button.
- The valve of the corresponding line or lines in the filling platform is closed.
- The bottom of the tank is closed in case of fire due to gas accumulation.
- Authorities are notified (Operation and HSE-Q Department).
- The area where the gas accumulates is safely left and the problematic area ise detected with the gas mask on.
- All tankers on the filling platform are moved away from the filling platform.

# FIRST DETECTION/RESPONSE IN CASE OF GAS DETECTION and ALARM SYSTEM ACTIVATION

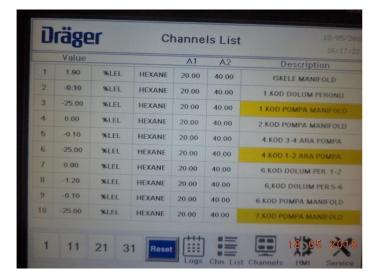
- If the gas accumulation is detected on the panel or the siren sounds, the responsible persons are called, informed, and directed.
- If shift work is involved, a full face mask must be worn in the area of gas accumulation before going for control.
- A second person is informed before going to the area of gas accumulation.
- Gas is measured again in the gas accumulation area.

When the detector detects gas, the siren sounds and the red lamp starts flashing. The next process is to look at which detector detected the gas on the panel screen to find out from which area the gas came from without wasting time.

## How Does the Gas Detector Notify Our Facility When It Detects Gas?







The LEL value on the panel must be <u>0</u>.

The max LEL value detected by the device is 40. At 40 and above, the siren starts to sound.

The panel showing the gas detectors and the indicator on the screen in the HSE-Q room of the administrative building

## DRAGER FIXED FLAME DETECTORS

There are a total of 20 flame detectors within the Altintel facility; the locations and intended uses of these detectors are as follows;





Flame detectors at Altintel Port and Terminal Operations Site;



The flame detectors in our facility are located in critical locations. The 5-second response time of flame detectors provides us with great convenience in fire detection.

## DRAGER FLAME DETECTION and ALARM SYSTEM

The facility has 10 units of Drager Flame 3000 Detector and 5 units of Drager Flame 5000 Detector



## Drager 3000 model specifications;

- Horizontal 120-degree vertical 80-degree flame vision
- Response time from 4 seconds to 30 seconds
- Chemical fire sight distances

Ethyl alcohol = 30 meters

Fuel Oil = 60 meters

Diesel = 50 meters

BGE = 20 meters

- II 2 G Ex d IIC T4 ATEX certified
- IP66 certified

## Drager 5000 model specifications;

- Horizontal 90-degree vertical 65-degree flame vision
- Response time from 4 seconds to 30 seconds

- Chemical fire sight distances

Ethyl alcohol = 25 meters

Fuel Oil = 44 meters

Diesel = 40 meters

BGE = 15 meters

- II 2 G Ex d IIC T4 ATEX certified
- IP66 certified
  - For each detector, 1 alarm levels are specified in the system. Flame detectors sound an alarm when they see a flame 30 cm X 30 cm in size.
  - Alarms are located opposite the 2nd pit pole and on the 7th pit entrance electricity pole. When flame detectors are detected, sirens at 2 locations will be activated.
  - The system is also designed to send e-mails to the HSE-Q department and concerned departments. The system sends an e-mail 10 seconds after the flame detector receives a signal.
  - The main control of the flame detection and alarm system is in the panel rooms. The display screen is also available as a software program on the computers of the responsible units and individuals.
  - Each detector is calibrated twice a year by an authorized company.

## COMMUNICATION IN CASE OF FLAME DETECTION and ALARM SYSTEM ACTIVATION

- In case the siren is activated <u>during working hours on weekdays</u>, the responsible personnel will notify the HSE-Q Department.
- After the alarm sounds and the HSE-Q Department is notified, the HSE-Q personnel detects which detector is alarming by looking at the display screen and informs his/her supervisor first. HSE-Q Chief investigates the alarm cause and takes action in accordance with the emergency plan. It is also possible to detect which area has a flame through the e-mail system.
- In case the siren on the lighting pole opposite tank no. 9 and the lighting pole at the entrance to the 7th pit are activated **outside of working hours on weekdays and on weekends**, the main gate security personnel will notify the Operation Shift personnel.
- After Security informs Operation Shift personnel, Operation Shift personnel immediately inform the HSE-Q Department. The HSE-Q Department takes immediate action.
- It is forbidden to enter the System Main Module and Measurement Modules except for authorized persons.
- System malfunctions will be notified by the HSE-Q Chief.

### If the Flame Detector is activated during Vessel/Barge Operation

- The vessel operation is safely stopped.
- The vessel personnel is informed by radio that the operation will be stopped.
- If the intermediate pump is running, it is switched off
- The valve of the corresponding line or lines on the pier is closed.
- If the fire is not in the tank area, the tank bottom is closed to prevent the fire from growing.

- Authorities are notified (Operation and HSE-Q Department).
- Personnel must leave the fire area safely and act in accordance with the emergency task.
- The notification of the official responsible for the vessel's departure must be waited.

## If the Flame Detector is activated during Tanker Operation

- All tanker operations in the fire area must be safely stopped.
- The pump is switched off by pressing the emergency stop button.
- The valve of the corresponding line or lines in the filling platform is closed.
- If the fire is not in the tank area, the tank bottom is closed to prevent the fire from growing.
- Authorities are notified (Operation and HSE-Q Department).
- Personnel must leave the fire area safely and act in accordance with the emergency task.
- All tankers on the filling platform are moved away from the filling platform.

## FIRST DETECTION/RESPONSE IN CASE OF FLAME DETECTION and ALARM SYSTEM ACTIVATION

- In case the flame detector sounds an alarm, the responsible individuals must be informed and directed.
- If the fire occurs during a shift, the fire area should not be entered uncontrolled and the fire should be treated with flame protective clothing.

The administrative building has 2 alarm systems, one on the lighting pole on the road and one on the 7th pit lighting pole, which can spread the sound to the entire facility.

- A second person is informed before going to the area of fire area.

The fire must be responded to with the relevant fire equipment.

When the detector detects flame, the siren sounds and the red lamp starts flashing. The next process is to find out where the flame is coming from without wasting time and start to respond appropriately to the fire.

## How Does the Flame Detector Notify Our Facility When It Detects Gas?





## 9. OCCUPATIONAL HEALTH and SAFETY

# **9.1.** Occupational Health and Safety Measures **PURPOSE**

The purpose of this procedure is to identify dangers, associated risks, and the severity of risks that affect or may affect the health and safety of employees, other workers (including temporary workers and contractor personnel), trainees, visitors and other individuals in Altıntel's workplace, and to minimize such risks.

## **SCOPE**

Risk Assessment Management; Altintel is responsible for all activities within the boundaries of the workplace.

## **AUTHORITIES**

Senior Management, OHS Management Representative, Inspectors and Other Department Directors

## **DEFINITIONS**

**Workplace:** Any physical location where work-related activities are carried out under the control of the institution. In deciding the scope of the concept of the workplace, **the institution** must take into account, for example, the OHS impacts on personnel who are traveling or in transit (e.g. in an automobile, aircraft, vessel, or train) and on personnel working at a client's premises or at home.

**Incident :** Work-related incidents that cause, or have the potential to cause, injury or impairment of health (regardless of severity) or death.

**Danger:** A source, situation or process that may cause injury or impairment of people's health, or a combination of these.

**Risk:** The combination of the likelihood of a dangerous incident or exposure to such an incident occurring and the severity of an injury or impairment of health that could result from the occurrence of such an incident or exposure to such an incident.

**Acceptable risk:** Risk reduced to a level that can be tolerated according to legal requirements and its own OHS policy.

**Health impairment :** An identifiable, adverse physical or mental condition caused and/or worsened by a work activity or work-related condition.

## **APPLICATION**

## **Identification of Dangers**

The OHS Representative identifies all dangers and risks by conducting a survey covering all work areas and activities.

A team is formed with employees working in the related departments under the coordination of the OHS Management Representative to identify dangers and risks.

The following are taken into account in identifying dangers and assessing risks.

- a) Routine and non-routine activities,
- **b**) Activities of personnel with access to the workplace (subcontractor activities are covered under temporary risk assessment)
- c) Human behaviors, capabilities and other human factors,
- **d)** Identified dangers that originate outside the workplace and have the potential to adversely affect the health and safety of people under Altintel's control in the workplace,
- e) Dangers originating from work-related activities under Altintel's control in the vicinity of the workplace,
- f) Infrastructure, equipment and materials in the workplace provided by Altintel or others,
- g) Changes made or proposed to be made to Altintel's operations or materials,
- h) All changes to the OHS management system, including temporary changes, and their impacts on enterprises, processes, and activities; equipment-process changes, changes in chemicals, personnel changes, machinery purchases within the scope of new investment, relocation of machinery equipment; when there are construction works, potential dangers and risks that may occur in connection with these changes are assessed by the team and necessary updates are provided.
- i) Applicable legal obligations in relation to risk assessment and implementation of necessary controls,
- **j**) Design of work areas, processes, facilities, machinery/equipment, operating procedures, and work organization and their adaptation to human capabilities.

Following the identification of the danger, it is identified who is likely to be harmed and how. Employees, subcontractors and visitors are taken into account. All activities are examined for daily operating conditions as well as for non-routine situations. At this stage, it is also considered whether existing control methods are sufficient.

#### **Assessment of Risks**

"Risk Assessment Form" is used during these activities.

Coordination Responsibility for setting the Risk Score lies with the Management Representative. The evaluation forms are sent to the department officers and the Assistant Facility Director and the Director to obtain their opinions and be published on the system by the Management Representative.

The assessment determines, for the identified dangers, the likelihood of the incident or exposure occurring and the severity of the injury or health impairment that may be caused by the incident or exposure. The following information is used in this assessment, followed by a calculation of possibility/exposure and severity

It is also checked whether there are any legal requirements for the danger and risk involved.

Operational controls are identified for unacceptable risks; action plans are prepared for very high and high risks and the SLF Procedure is applied.

## ► Severity:

5 :	FATAL ACCIDENT, LOSS FOR MORE THAN 1 MONTHS FOR THE FACILITY
4 :	LOSS OF LIMB, SEVERE FRACTURES, SEVERE INJURIES, CIRCUMSTANCES THAT MAY CAUSE OCCUPATIONAL DISEASES IN THE SHORT-TERM OR LONG-TERM
3	ACCIDENTS RESULTING IN LOSS OF LABOR (CONCUSSION, SEVERE SPRAINS OR MUSCLE INJURIES, MILD)
2 :	MILD INJURIES, CIRCUMSTANCES NECESSITATING BASIC FIRST AID, OPEN WOUNDS, WAIST INJURY, MODERATE)
1	MILD CUTS AND INJURIES, SPRAINS

## **▶** Possibility:

5	VERY HIGH POSSIBILITY (MAY BE ENCOUNTERED DAILY)
4 :	HIGH POSSIBILITY (MAY BE ENCOUNTERED AT LEAST ONCE IN A MONTH)
3	MODERATE POSSIBILITY (MAY BE ENCOUNTERED ONCE IN 3 MONTHS OR LESS)
2	LOW POSSIBILITY (MAY BE ENCOUNTERED ONCE IN 6 MONTHS OR LESS)
1 :	LOW POSSIBILITY (MAY BE ENCOUNTERED ONCE IN A YEAR OR LESS)

Exposure to radiation and dangerous chemicals is rated as 4 below legal limits and 5 above legal limits, regardless of duration.

## ► Risk Score:

Risk Control Plan based on the result of the risk severity assessment table:

**Insignificant Risk:** No further work or documentation is required. Controls may be necessary for the future when major risks have been completely ruled out.(1-2)

**Low Risk:** Additional controls are not required. The problem can be eliminated with routine controls.(3-4)

**Medium Risk :** Risk preventive actions must be taken. Necessary arrangements must be made by taking the costs into account.(5-9)

**High Risk :** Corrective/Preventive Actions must be taken within 1 week. Actions must be taken to reduce the risk and, where necessary, temporary measures must be taken to continue the action with a supervisor. Checkpoints must be determined and the severity of the risk must be monitored.(10-15)

**Very High Risk :** Immediate Corrective/Preventive Action must be taken. Operations must not commence until the risk has been mitigated or eliminated completely. Regular controls must be performed. If detected in the operation, the activity must be stopped. (16-25)

Po	Effect ossibility	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
	5	5	10	15	20	25

When identifying controls for unacceptable risks or planning changes to existing controls, risk mitigation must be taken into account in accordance with the following hierarchy:

- a) Elimination,
- b) Replacement,
- c) Engineering controls,
- d) Signs/warnings and/or other administrative controls,
- e) Personal protective equipment

**Review of Risk Assessment** 

The "Risk Assessment Form" is reviewed once a year by the OHS Representative. However,

changes that may occur in activities during the year, temporary works, commissioning or removal

of new processes/equipment, changes in raw materials or chemicals used, emergencies,

occupational accidents, occupational diseases, near misses, before and after corrective and

preventive actions, emergence of legal requirements or changes in legal requirements,

organizational changes, etc. require review without waiting for a one-year period.

9.2. **PPE Use Procedure** 

**PURPOSE:** PERSONAL PROTECTIVE EQUIPMENT USE REGULATION

**SCOPE**: ALL PERSONNEL

**REMARK:** 

The main purpose of occupational safety is to prevent dangers originating from work,

environment and social activities, to provide a healthy and safe living and working environment,

to minimize the events that damage the well-being of all people with the necessary pre-

determined measures, to protect the psychological and physical health of employees against

occupational accidents and occupational diseases.

Personal protective equipment is one of the most essential auxiliary tools in ensuring

occupational safety.

Using and making personal protective equipment available aims to protect against risks in

the workplace.

According to the legislation, personal protective equipment protects both the employee and

the employer against material and moral risks.

Protective equipment is made for the health and safety of employees.

Ear muffs are regularly used where noise (85 Db/A) is high.

Sharp, pointed, heavy, hot, caustic, and corrosive materials must not be handled without

gloves.

Wells and tanks must not be entered without a <u>safety harness</u>. It must not be climbed on

places where there is a danger of falling, such as pier roofs and high poles.

Work with harmful gases, dust, smoke, and vapors must not be carried out without wearing

a protective mask.

- In places such as boilers and mills where there is a high possibility of heavy parts falling, it is not allowed to work without wearing a helmet.
- Steel-toed <u>work shoes</u> must be used where heavy parts are lifted and transported.
- <u>Safety goggles</u> must be worn in places where parts are splashed, such as mechanical workshops.

#### SPECIFICATIONS OF PERSONAL PROTECTORS

- Its use must be protective against risks.
- It must be suitable for the employee's body and the work he/she is doing.
- It must not carry any risk, it must not create risk, and it must comply with standards.
- It must not make work more challenging and reduce capability.
- Personal protectors are not issued for social welfare purposes. It is not the property of the employee. It belongs to the employer.
- It must only be used at work.

#### SPECIFICATIONS OF PERSONAL PROTECTORS

### **HEAD PROTECTORS**

## **Head protectors**;

- Protective helmets used in industry (mines, construction sites and other industrial areas),
- Scalp protection (caps, bonnets, hair nets with or without visors),
- Protective headgear (bonnets, caps, sailor's caps, and the similar, made of normal fabric or impermeable fabric)

**HELMET:** It is a safety (hat) material that protects the head of individuals working in the facilities against impacts, falling objects, and electric shocks in case of contact (at low voltage) in case of any accident.



#### FIELD OF USE:

- Entering the galleries
- Entering the LNG and LPG tank field,
- Working in construction,
- When working at heights,
- Electrical work,

### WHEN HELMET IS NOT USED:

- Electric shocks; accidents resulting in shocks and injuries.
- Head impact; falling or thrown objects can cause sprains, fractures and concussions.
- Splashes, spills and drips can irritate and burn eyes and skin.

## Considerations when using a helmet

- The helmet protects the wearer to a certain extent against objects that may hit the head.
- Before each use, the helmet must be carefully examined and checked for cracks, cuts, or other defects. If such a case is encountered, the helmet must not be used.
- Helmets that have been involved in an accident should also be taken out of service, even if there is no apparent defect.
- Before putting it on, it must be checked that the helmet is attached to the headgear at the right parts and the wearer must adapt it to the head in such a way that it does not impair the impact-resistant quality of the helmet.
- Helmets must be stored in a cool, dark place and used within five years from the date of manufacture and within three years after opening the package.
- Helmets must be stored in a dry and clean place at normal room temperature where they will not be exposed to infectious agents.
- Helmets must be kept clean.
- It must be ensured that there are no holes in the helmets to be used by the personnel working in electrical works, that there are no metal parts inside, and that they are not manufactured or purchased in a water-retaining channel and similar manner on the outer surface.
- The retaining strap must be adjusted to ensure that the helmet is fully adapted to the wearer's head.
- The helmet must be cleaned in hot water below 50°C with a mild detergent (approximately once a month).
- Direct contact with any solution or spray containing solvents or alcohol weakens the durability of the protective shell of the helmet. Therefore, such practices must be avoided.

## **EYE PROTECTORS**

## Goggles

- Closed goggles (diving goggles)
  - X-ray goggles, laser beam goggles, ultra-violet, infrared, visible radiation goggles
  - Face shields
  - Arc welding masks and helmets (hand-held masks, masks that can be attached to the head or protective headgear)

**GOGGLES:** Protective equipment used to protect the eyes from dangers, physical and chemical effects, or radiation.



### **FIELD OF USE:**

- Grinding,
- Using a drill or hand drill,
- grinding concrete, cement and workbenches,
- Spray and gun paint works,
- Cleaning the boilers with pressurized air
- Sawing,
- Working on refrigerant, all kinds of chemicals, naphtha, acid-base and alkaline substances,
- Grounding and opening and closing the circuit,
- Replacing high voltage fuses,
- Welding or using a blower (welding) for cutting,

- Watching the cauldron fire,
- Washing with high-pressure water or cleaning detergents,
- Changing mercury vapor or similar lamps while the line is powered,
- Working with molten metals,
- Working in very windy environments,
- Gardening with hand tools such as picks and shovels

## When goggles are not worn;

fragments hitting the eye can injure the eye, fracture, or crack the bones around the eye. Chemicals, chemical vapors, etc. that get into the eyes can cause irritation of the eyes and blindness in the future.

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## Considerations when using goggles;

Protective against specific danger(s),

- They must be comfortable to wear
- They must not restrict vision or movement
- They must be resistant to cleaning and decontamination (disinfection)
- They must not prevent the use of other PPE that may be required etc.
- Eye protection provided to workers must be easy to clean when dirty

**WELDING MASK:** It is a protective material that protects the face and eyes of the worker from harmful rays, sparks, and spattering burrs that are produced during welding.

### FIELD OF USE:

• Welding.

When the welding mask is not used; burrs that get into the eyes cause swelling, redness, and blindness in the eyes.

## **HAND PROTECTORS**

## **Special protective gloves:**

- From machinery (puncturing, cutting, vibration and etc.)
- From Chemicals
- From electricity and heat
- One-fingered gloves
  - > Finger sleeves
  - Armlets
  - Wrist protectors (wrist guards) for heavy work
  - Fingerless gloves
  - Protective gloves

**GLOVES:** They are a safety material that protects hands from physical, chemical, electrical, mechanical, and microbial dangers.



## Field of use:

- Manually opening or closing cutters and disconnectors,
- Fixing a fuse,
- Checking for voltage on the line,
- Grounding and short-circuiting,
- Working with chemicals,
- Performing maintenance and repair,
- Gardening and spraying,
- Storage of equipment such as metal materials,

- Additionally, gloves must be used when required by supervisors or when the employee requests them to be used.
- It is necessary to avoid contact with the energized area with insulated gloves only.
- Mechanical working gloves (leather, fabric, rubber coating for woven works, etc.)
   must be used against crushing and pricking.
- Welding (leather, fabric reinforced leather, etc.) gloves must be used when working in welding works.
- Heat resistant gloves (glass fiber, aluminum foil, kevlar fabric, etc.) must be used in places with high temperatures (above 60°C).
- Acid (rubber, plastic, rubber, etc.) gloves must be used where acidic, basic and chemical substances are present.

When Gloves are not Used: Burning, cuts, disintegration, bruising, irritation, finger or hand rupture, and electric shock when working with electricity may occur.

## Considerations for using gloves;

- Gloves must be cleaned at the frequency and in the manner specified by the company from which the glove was purchased (in the package insert or package).
- Contact between oil and gloves must be avoided.
- The glove must be checked for leakage using the air test method. All rubber equipment deemed unsuitable for use as a result of the tests will be torn, cut, or at least marked (so that it cannot be used in any other electrical service).
- Rubber gloves must not come into contact with sharp objects, and leather protectors
  must be worn over rubber gloves for mechanical protection. Such skin protectors
  can never be used for shock protection.
- Employees must not wear rings that may damage the glove
- Isolated gloves must be powdered and stored in cool and dry places as far as possible, out of direct sunlight.
- Gloves must be stored (preserved) in their natural shape. Gloves (protectors) are stored in bags, boxes, or specially-made containers.
- The leather protectors must be examined before each use to ensure that there are no holes, tears, or contamination.

## **FOOT PROTECTORS**

- Regular shoes, ankle boots, long boots, safety ankle boots, and safety long boots
- > Shoes with quick release laces and hooks
- > Shoes with toe protectors
- ► Heat-resistant shoes and shoe covers
- ➤ Heat-resistant shoes, ankle boots, long boots and leggings

## Thermal shoes, ankle boots, long boots and their covers

- Vibration-resistant shoes, ankle boots, long boots, and their covers
- Anti-static shoes, ankle boots, long boots, and their covers
- Insulated shoes, ankle boots, long boots, and their covers
- Protective ankle boots and long boots for chainsaw operators
- Wooden-soled shoes
- Detachable upper foot protectors
- Knee Pads
- Leggings
- Removable insoles (heat-resistant, puncture-resistant, sweat-proof)
- Removable spikes (against ice, snow and slippery surfaces)

**Footwear:** It is a safety material that protects the feet against chemical, physical, mechanical, electrical, thermal, etc. dangers.



#### FIELD OF USE:

- Electrical work,
- Storage and transportation,
- All maintenance and repair work
- Working on slippery surfaces,
- Wet, hot, cold and water works
- Working with chemicals

When foot protectors are not used: Electric shock, foot injury, fracture, fracture, irritation, burning, frostbite, finger fracture, dislocation, injury, or rupture may occur.

## **Considerations when using Foot Protectors;**

- When using work shoes, dirt and other contaminants (oil, chemicals, etc.) smearing on both the sole and the upper leather must be kept clean regularly by wiping with a damp cloth.
- Sharp tools/materials must not be used for cleaning shoes.
- The tops of the shoes should be painted when dry and/or periodically with suitable shoe paint and polish.
- If for any reason the shoes get too wet, they must be left to dry on their own in an open, cool and well-ventilated place. It must not be dried by utilizing any heat source (direct or radiant heat source).
- Work shoes can be stored for a maximum of 5 years under appropriate conditions.
- Work shoes must be transported in their original boxes.
- Work shoes must be protected from water and extreme heat. Heavy objects must not be left on the shoes.
- Shoes must be worn with the laces tied and tucked in.
- Shoes must not be worn on the heel like footing-.
- Work shoes must not be used by distorting their original shape (by removing the steel toe protector)

### **FACE PROTECTORS**

Masks with gas, dust and radioactive dust filters

- Air supplied breathing apparatus
- Respirators with a welding mask that can be worn and removed
- Diver equipment
- Diving suit

Mask: It is a safety material that provides protection against dust, smoke, chemical vapor etc.







**FIELD OF USE:** 

- In chemical-related activities,
- In welding,
- In spraying works,
- In lawn mowing,
- In painting works,
- In wells, sewers and other underground sites connected to sewers
- In the works carried out in cold storages where there is a danger of refrigerant gas leakage,

## Considerations in the use of masks:

The masks and respirators to be used must be selected in accordance with the face size
of the workers and the work they will do, and they must have pressure-regulating
valves.

- Filters or strainers that make breathing difficult or that expire from storage and use must be checked and replaced immediately.
- Strainer masks must not be used in confined spaces or where oxygen is scarce
- The pressure of the air or oxygen supplied to the mask or respirator must always be adjustable so as not to cause discomfort to the worker using it.
- Respirators 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 PROTECTORS**

## Hardware used against falls:

- Anti-fall equipment (with all necessary accessories)
- Kinetic energy-absorbing braking equipment (with all necessary accessories.)
- Equipment that can hold the body in space (parachutist belt)

## **Protective clothing:**

Protective workwear (two-piece and overalls)

Clothing providing protection from machinery (punctures, cuts, etc.)

- Chemical protection clothing
- Clothing for protection against infrared radiation and molten metal splashes
- Heat-resistant clothing
- Thermal suit
- Clothing for protection against radioactive contamination
- Dust-proof suit
- Gas-tight suit
- Fluorescent, reflective clothing and accessories (armbands, gloves and similar)
- Protective covers.

**Protective clothing:** Safety equipment that protects the body from external factors.









### Field of Use:

- In chemical-related activities,
- In operations in cold areas,
- In operations in hot areas,
- In environments where rain and water are present,
- In working with refrigerants

## When Protective Clothing is Not Used

There may be electric shock, skin irritation and injury when chemicals are spilled on, burns may occur on the body due to extremely hot and cold environments, heat stroke may occur due to hot and cold environments, irritation and injury may occur when working with gases.

## **Considerations in the use of protective clothing:**

- Clothes must be clean, not torn
- Appropriate clothing must be chosen for the working environment
- Protective clothing that does not squeeze the body and will be comfortable must be chosen

### **EAR PROTECTORS**

In a workplace, when the intensity of noise exceeds 80 dB (A), workers must use ear protectors to prevent occupational accidents and hearing loss. The leakage of a gas or vapor under high pressure to the atmosphere, riveting works, the sound emitted by tools and devices such as

hammers and saws, the sounds emitted by machines and compressors used in weaving works can be examples as sources of noise in the workplace.

A good ear protection must both reduce the noise intensity to the necessary and safe level and be comfortable to wear. This is because earmuffs that are not comfortable to wear can cause occupational accidents and hearing loss, as they cannot be used continuously.

### **USE OF EAR PROTECTION**

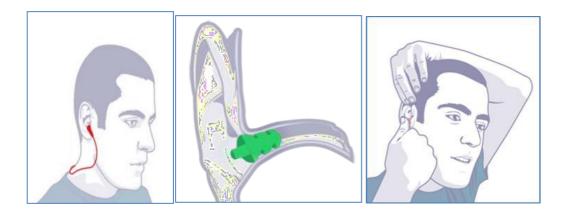
- Ear protection must be selected in accordance with the work and standards.
- People who have discharge, pain or previous surgery etc. in the ear canal must not wear ear plugs.
- Before wearing earplugs, it is necessary to be examined by an occupational physician to see if they are suitable.
- Although there is no significant difference between earplugs and earmuffs in terms of protection, earplugs provide better protection if worn correctly.
- Earplugs must be inserted with clean hands, in an absolutely quiet environment and by pulling the ear canal upwards and backwards with the other hand and removed in a quiet environment.
- Earmuffs or earplugs must be worn for half an hour on the first day and then increased by a factor of one every day for a one-week acclimatization program.
- When the material wears out and its structure deteriorates, it must be replaced with a new one.

## The following are the standards that products related to ear protectors must meet:

- EN 352-1: Protective Earmuffs
- EN 352-2: Earplugs
- EN 352-3: Earmuffs to Fit Helmets
- EN 458 : Selection, Use and Maintenance of Noise Protective Devices

## How to use Shower Ear Plugs?

**Instructions for Use:** Please follow the steps below.



- Hold your auricle with your hand and pull it upwards, gently insert the earplug into your ear canal. Make sure it fits perfectly in your ear.
- When your earplugs are in your ear, make sure that the string does not get stuck in your arm or other objects.
- Sudden removal of an earplug can cause a pressure difference in the ear and stress the eardrum
- Do not push the earplug further than shown in the figure. If you push the earplug further than shown, you may touch your eardrum and feel great discomfort, please take care to use the product that suits you.

#### **LIFE JACKET**

A life jacket is a personal flotation and rescue equipment that allows the wearer to stay afloat so that they can breathe comfortably, is designed in such a way that it does not interfere with boarding lifesaving vehicles and most of its components are made of floating materials.

#### **LIFESAVER**

It is a life-saving tool that is thrown to the person who falls into the sea as soon as possible and ensures that people stays on the water until the moment of rescue, their location is known and that they are rescued.

## LIFESAVER STRUCTURE

It keeps the victim on the surface of the water thanks to its buoyancy. With its distinctive color, reflective bands and light, it will locate the casualty. They are built in such a way that their salvo allows the casualty to be rescued.

### Features that life jackets must have;

- It must be able to be worn within one minute without assistance,
- The person who falls into the water, even if the person is fainted or unconscious, must turn the user face upwards within five seconds. They must keep the person's mouth above the water in a position where they can breathe freely.
- The lifejacket must have a whistle securely fastened to it and a light with a capacity of 0.75 candle illumination that can burn for at least eight hours.
- It must be in a visible color that is easily recognizable.
- There must be bright reflective tapes reflecting light glued or sewn on the lifejacket.
- If the wearer jumps into the water from a height of at least 4.5 meters, the jacket must not come off and be damaged. It must also allow the jumper to enter the water without injury.

#### **ACCESSIBILITY:**

- It can be accessed at the pier end lifejacket locker and port security point.
- Life jackets must be properly stowed and kept in easily accessible places.
- It must be able to be worn in an emergency (fire, etc.) in a short time.

#### **FIELD OF USE:**

Pier Area

#### Life Jackets by Area of Use

	They must be used in pier area works and pier area visits in our facility.
Buoyancy Assistants	They are manufactured as a swimming aid rather than a life jacket. They provide
	good protection in inland waters close to the coast where help can arrive quickly.
Sales	Not suitable for prolonged rescue operations in rough seas.
	Does not prevent unconscious victims from lying face down.
	They are not designed to save the life of an unconscious casualty, but to help a
	conscious person who knows how to swim to stay afloat.
	It is designed to be thrown from the vessel, pier to the casualty at sea or to
Disposable Lifesavers	provide additional buoyancy to the person at sea.
	These types were not produced as clothing. A person does not wear this type.
	The equipment thrown to the casualty are lifesaving equipment such as lifesavers, buoyancy cushions, etc.
	It will be used in cases such as falling into the sea in the pier area.

9.3. **Confined space entry permit measures and procedures** 

**DEFINITIONS:** 

CLOSED CONTAINERS, AREAS: Areas with limited entry and exit, not designed for

continuous human presence, with a potentially hazardous atmosphere risk or hazardous

atmosphere, requiring technical measurements, special personal protective equipment and

permission-approval from authorized personnel for work and entry-exit. (Wells, Manholes,

Tunnels, Channels, Open Pits and Pools, Warehouses and Tanks etc.)

PERSONAL PROTECTIVE EQUIPMENT (PPE) :All tools, instruments, equipment, and

devices designed for this purpose that are worn, put on, or held by the employee, which protect

the employee against one or more risks arising from the work carried out and affecting health

and safety.

**EX-PROOF:** Explosion-Proof Equipment.

**MENHOL:** An opening/hole designed for entry, exit, descent.

**EFFECTIVE HEAT:** Air temperature is the combined effect of air temperature, air humidity

and air flow velocity on a person.

**EXPLOSION:** It is a burning event that releases heat energy, develops in the form of a shock

wave with an approximate speed of 100 m/s. - 1000 m/sec., develops in the form of a shock wave,

creates a large gas expansion and pressure, and occurs with the formation of violent and effective

sound.

LOWER FLAME / EXPLOSIVE LIMIT (LEL - Lower Explosive Limit) : The lowest

concentration at which mixtures of flammable gases or vapors with air can produce

flash/explosion in the presence of an external spark or similar ignition source, and is the

percentage at 20 C temperature and 1013 hPa pressure conditions.

UPPER FLAME / EXPLOSIVE LIMIT (UEL - Upper Explosive Limit) : The highest

concentration at which mixtures of flammable gases or vapors with air can produce

flash/explosion in the presence of an external spark or similar ignition source, and is the

percentage at 20 C temperature and 1013 hPa pressure conditions.

**TLV-STEL:** Threshold Limit Value - Short-term exposure Limit Value (15 minutes)

**TLV-TWA:** Threshold Limit Value - Time weighted average (8 hours)

COLLECTIVE PROTECTION MEASURES TO BE TAKEN BEFORE WORKING IN CLOSED CONTAINERS AND AREAS;

**HEALTH AND SAFETY MARKINGS:** At the possible entrance and exit points of the working area, commanding, warning, prohibitive, and emergency markings and barriers/warning signs against bumps and falls will be placed that employees will notice.

**FALLING FROM HEIGHTS:** Handrails must be placed against possible falling from height in the container or area to be worked on. If there are possible railings, their adequacy and robustness must be checked (e.g. pier installation in in-tank maintenance works)

Safe anchorage points must be established in the working area where workers can fasten their seat belts

Precautions shall be taken on the working floors and stairs against slipping and falling during the work in and out of the working area (Tunnel descents, descents under the weighbridge, etc.).

Warning signs will be hung on the tank for the tanks whose upper manhole is opened.

**LIGHTING:** If general lighting is insufficient, additional exproof lighting must be provided. Depending on the operating time, a spare battery must be available. The operation and activation of the generator must be checked against power outages.

**SIGNAL ROPE/ GUIDE ROPE**: In order to fasten the safety belt of the employee and to be able to turn themselves in case of emergency when necessary, to land them in a safe place and to be able to determine the location and distance of the casualty while in the closed container, min. 250 kg signal rope/guide rope with pulling force will be available. The signal rope will be securely attached to an anchor point.

**VENTILATION:** Forced ventilation will be provided in the closed container and area, continuous operation will be ensured, and spare ventilation equipment will be available in case of failure. (e.g. installation of an air-absorbing fan from the upper manhole during welding work in a closed vessel, backup in case of failure)

**ELECTRICITY:** There will be a grounding connection against possible static electricity or electric currents in the closed container or area.

**EMERGENCY AND FIRST AID:** At least 1 personnel with a first aid certificate will be available in the facility. First aid kit, oxygen cylinder and stretcher will be kept ready in the facility and close to the work area. Appropriate fire extinguishing equipment and materials must be available against fire risks. The first rule in fire response is to rescue employees.

**COMMUNICATIONS:** It will be prepared for possible difficulties in communication. Voice communication with the employee will be provided at all times.

## SECURITY MEASURES TO BE TAKEN;

- 1. Before working in closed containers, decide whether the area is in CLASS A CLASS B CLASS C of the classes in the Confined Space Classification Table. Indicate the Confined Space Class on the "Entry to Enclosed Volumes Form". Write the safety precautions according to the indoor area class on the form. (HSE-Q Department)
- 2. In tanks with nitrogen regulator, the tank cannot be entered without locking the nitrogen regulator inlet valve specified in the "Permission to Entry to Enclosed Volumes". (HSE-Q Department Maintenance Department Operation Department)
- 3. Ensure that collective and personal protection measures are taken as a priority on closed containers or areas where there is a danger of falling from height. Ensure that staff use appropriate PPE where collective measures cannot be taken. (HSE-Q Department)
- 4. Upon the request of the operating department of the empty tanks, the "General Work Permit Form" is filled out and the tank top and bottom man-hol covers are opened and ventilated.
  For the tank whose manholes are opened, it is obligatory to hang warning signs both on the tank and in the bottom manhole area. (HSE-Q Department Maintenance Department Operation Department)
- 5. If deemed necessary, ensure that tanks, tunnels, etc. are ventilated by installing an ex-proof fan. (An ex-proof fan is installed on the tank requested to be cleaned and the fan remains installed for the time requested by the operation department). (HSE-Q Department Maintenance Department Operation Department)
- **6.** From the manhole cover, the responsible person must check the internal cleanliness of the container by means of an ex-proof lamp in a safe manner without sticking their head into the container. (HSE-Q Department Operation Department)
- 7. Measure O<sub>2</sub> (Oxygen) gas by suspending / placing the measuring device in a closed volume. OXYGEN must be in the range of 19.5%/23%. Do not allow operations to be performed if they are above or below these values. Write the measurement value on the

- "Closed Volume Entry Form". Measure H<sub>2</sub>S (Hydrogen Sulfide) and CO (Carbon monoxide) by suspending the meter in a closed volume. Write the measurement value on the "Closed Volume Entry Form". (HSE-Q Department)
- 8. If there are other gases likely to be in the closed container or area, their LEL% values will be measured. After the ventilation process of the tank requested to be cleaned is completed, GAS MEASUREMENT is performed inside the tank by the Technical Safety Department. If the measured values are in accordance with the values specified in the "Permission to Entry to Enclosed Volumes", the procedures continue. If the values are not suitable to enter the tank, the tank is continued to be ventilated. (HSE-Q Engineer/HSE-Q Personnel) "TEM-F-04"
- **9. If the gas detector alarms, entry to the tank will not be allowed.** (HSE-Q Department)
- If the controls and measurements are deemed appropriate, the "Permission for Entry to **10.** Enclosed Volumes Form" is filled out by the relevant authorized personnel. This form will be completed and approved by the HSE-Q Manager and/or HSE-Q Engineer and the authorized person performing the measurement. The personnel who will work will write their name and surname, fill in the date sections and sign. Employees will fill in and sign the form in the same way each time they enter. All personnel who will clean and assist with tank cleaning will sign the form. IN THE TANK CLEANING AT THE END OF THE WEEK, TANK MEASUREMENT IS DONE ON FRIDAY, VALUES ARE WRITTEN ON THE FORM FOR ENTRY INTO CLOSED CONTAINERS, APPROVAL IS OBTAINED FROM THE AUTHORITIES, RE-MEASUREMENT IS PERFORMED BEFORE ENTERING THE TANK, VALUES ARE WRITTEN ON THE FORM, IF VALUES ABOVE THE LIMITS ARE DETECTED DURING THE MEASUREMENT AND/OR IF THE GAS DETECTOR GIVES AN ALARM, ENTRY TO THE TANK IS NOT ALLOWED, THE HSE-Q ENGINEER/LEADER IS INFORMED. (HSE-Q Department - All Responsible Personnel Entering the Tank)
- 11. During the work in the closed container (tank), one person is outside as a supervisor and waits until the work is finished and helps the person inside. TANK CLEANING FOR CLASS A MUST BE SUPERVISED BY TECHNICAL SAFETY. INITIATES AND CONTROLS TECHNICAL SAFETY FOR CLASS B. WORK IS INITIATED BY CLASS C TECHNICAL SAFETY. Depending on the hazard of the chemical, this person may also be technical safety personnel. ONE PERSON IS ALLOWED TO ENTER THE TANK DURING TANK CLEANING. NO TANK CLEANING WITHOUT A SUPERVISOR. (HSE-Q Department Operation Department)

- 12. Give anti-static overalls, safety belt, anti-static bucket, anti-static broom and dustpan, chemical protective gloves, boots, clean air mask and filter to the person who will enter the closed place (tank). The person without equipment and appropriate PPE is prevented from entering the tank. (HSE-Q Department Operation Department)
- 13. A GAS DETECTOR is attached to the collar of the employee who will enter the tank. If the detector gives a warning, the amount of gas in the environment has increased. In this case, take the person out immediately, stop work. (HSE-Q Department Operation Department)
- **14.** For CLASS A and CLASS B, the employee entering the tank must wear a seat belt. A rope is tied to the seat belt and left outside the tank. It is used by the supervisor to take the person out in case of fainting. (HSE-Q Department Supervisor Personnel)
- **15.** Lighting in the closed container is done with 24 Volt portable isolated Ex-Proof lamps. The use of non-ex-proof equipment is strictly prohibited. (HSE-Q Department Electricity Personnel)
- 16. If hot (fiery) work will be conducted in the tank, all the above-mentioned applications are performed. Operation is carried out after the "Permission to Fiery Work" is given. (HSE-Q Department)
- 17. Calibrations of portable gas detectors and personal gas detectors are performed once every 6 months. Records are kept in the HSE Department. (HSE-Q Department)
- 18. When the signature of the "Permission for Entry to Enclosed Volumes" Form is completed, it is filed. Records are kept. (HSE-Q Department)
- 19. Personnel whose names are not on the "Permission for Entry to Enclosed Volumes" form cannot enter the enclosed volume. (HSE-Q Department Maintenance Department Operation Department)
- **20.** At least the following personal protective equipment shall be delivered for personnel who will work in enclosed containers and areas. Personnel with missing or faulty Personal Protective Equipment will never be employed.
  - Parachute-type seat belt,
  - Shock absorber, lanyard with hook carabiner (connection rope)
  - Full facepiece (with A2B2E2K1 filter)
  - ➤ Lighting Flashlight (Exproof)
  - Workwear with full body protection, chemical resistant tyvek coverall
  - Chemical resistant gloves (EN388 (3132) EN374-3 Chemical Protection)
  - Work shoes (EN ISO 20345:S3)

Effects of some gases on humans according to the percentage of concentration in the environment;

	> % 21	Loss of consciousness (coma), nausea, cramps, blindness, visual disturbances, restlessness and aggression
	21%	Normal concentration in air
	16%	Excessive breathing, increased pulse rate
OXYGEN ( O2 )	14%	Poor muscle coordination, increased respiration, feeling of abnormal fatigue, cyanosis (bruised lips)
	10%	Headache, vomiting, inability to move easily, possibility of loss of consciousness, breathing too fast.
	6%	Shaking movements, Gasping for breath, Cardiac and respiratory arrest
	21%	Death in a few minutes
	16%	Headache, vomiting, dizziness, difficulty breathing after a short time
CARBON DIOXIDE (CO2)	14%	Vomiting, dizziness, loss of concentration appear after 30 minutes.
, , , , , , , , , , , , , , , , , , , ,	10%	Pulse rate doubles
	6%	Fast and deep breathing, tingling sensation all over the body
	0,03%	Normal concentration in air
	1,28%	Loss of consciousness after 2-3 breaths; danger of death within 1-2 minutes
CARBON MONOXIDE (CO)	0,64%	Danger of headache and dizziness within 1-2 minutes, loss of consciousness and death within 10-15 minutes
	0,32%	Danger of headache and dizziness, loss of consciousness within 5-10 minutes and death within 30 minutes.
	0,10%	Immediate death due to paralysis of the respiratory system
	0,07%	Depression, lethargy, unconsciousness and death
HYDROGEN SULFIDE	0,06%	Severe symptoms of poisoning are observed within a few minutes. The gas damages the surfaces of the air inlets (mouth, nose).
(H2S)	0,05%	High concentration that can be inhaled after 30 minutes without threat of serious damage and death.
	0,02%	Irritation of the eyes and throat within 10 minutes, intolerable for more than 30 minutes.
	0,01%	Shaking movements, Gasping for breath, Cardiac and respiratory arrest

## **CLOSED AREA CLASSIFICATION TABLE**

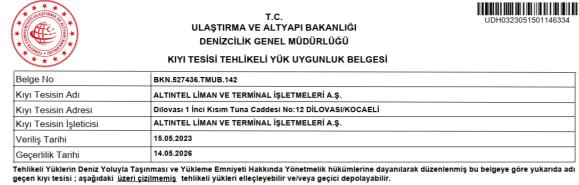
PARAMETERS	CLASS " A "	CLASS " B "	CLASS " C "	
SPECIFICATION	Instant danger to life and health There must be rescue procedures in place for the entry of one or more individuals equipped with life support equipment, with personnel in a stand by position outside the communication closed area.	An area that is hazardous but does not pose an immediate danger to health and life.  There must be rescue procedures for the entry of one or more individuals equipped with life support equipment, indirect visual and auditory communication may be provided.	Potentially hazardous area. Requires no change in operating procedures, but standard recovery procedures. Direct communication with employees can be provided from outside the closed area.	
OXYGEN	between 19.5% and 21.4% (148- 163 mm Hg)	between 19.5% and 21.4% (148-163 mm Hg)	between 19.5% and 21.4% (148- 163 mm Hg)	
FLAMMABILITY PROPERTIES	LEL value of 1% or less	LEL value less than 1%	LEL values of "0	
CHEMICAL GROUP	CHLORINATED SOLVENTS - KETONES -ALCOHOLS - HYDROCARBONS ESTERS - MONOMERS	GLYCOLS- GLYCOL ETHERS- BASE OIL - TALL OIL FATYY ACID	TUNNELS AND OPEN-ENDED AREAS	
	* Work Permit System	* Work Permit System	* Work Permit System	
	* Gas Measurements	* Gas Measurements	* Gas Measurements	
	* Continuous Tracking	* Continuous Tracking	* Personnel Training	
	* Personnel Training	* Personnel Training	* Pre-entry Plan	
	* Isolation, locking, labeling	* Isolation, locking, labeling	* Communication (1 person	
	* Ventilation	* Ventilation	continuous supervision from outside)	
	* Cleaning Operations	* Cleaning Operations	* Rescue Measures	
CONTROL REQUIREMENTS	* Special Equipment Tool requirement (Special PPE)	* Special Equipment Tool requirement (Special PPE)	* Head Protection	
FOR WORKING CLOSED AREAS	* Pre-entry Plan	* Pre-entry Plan	* Hand Protection (Chemical gloves)	
CLOSED ANEAS	* Communication (1 person continuous supervision from outside) Technical Safety	* Communication (1 person continuous supervision from outside)	* Foot Protection	
	Supervision	* Rescue Measures	* Body Protection	
	* Rescue Measures	* Head Protection	* Respiratory Protection	
	* Head Protection	* Hand Protection (Chemical gloves)	* Seat belts, safety ropes	
	* Hand Protection (Chemical gloves)	* Foot Protection	* Rescue Equipments	
	* Foot Protection	* Body Protection	* Health and safety signs	
	* Body Protection	* Respiratory Protection	* Placing warning signs	

* Respiratory Protection	* Seat belts, safety ropes
* Seat belts, safety ropes	* Rescue Equipments
* Rescue Equipments	* Recording
* Recording	* Health and safety signs
* Health and safety signs	* Placing warning signs
* Placing warning signs	

## 10. OTHER ISSUES

## 10.1. Validity of the Hazardous Cargo Conformity Certificate.

Our facility does not have a "Dangerous Goods Conformity Certificate". Our facility has a "DANGEROUS CARGO CONFORMITY CERTIFICATE" numbered 527436/TMUB.142 dated 15.05.2023 and valid until 14.05.2026.



\*\_Enfeksivöz Yükler

\* Hurda Yükler

\*-Paketli Tehlikeli Yükler-\*-Patlayıcı Yükler--

\* Radyoaktif Yükler

\*Tehlikeli Katı Dökme Yükler —

\*Tehlikeli Sıvı Dökme Yükler (Sıvılaştırılmış Gaz (LPG/LNG vb.) ve Sıkıştırılmış Doğal Gaz (CNG)).

\* Tehlikeli Sıvı Dökme Yükler (Kimyasal ve Benzeri Sıvı Haldeki Tehlikeli Dökme Yükler)

\* Tehlikeli Sıvı Dökme Yükler (Petrol ve Petrol Ürünleri)

#### Sınırlamalar:

- Kıyı tesisinde kıyı kenar çizgisi (KKÇ)'nin deniz tarafında tehlikeli yükler geçici depolanamaz.

Bu belgenin doğruluğu https://www.turkiye.gov.tr/belge-dogrulama adresinde veya mobil cihazlarımza yükleyebileceğiniz e-Devlet Kapısı'na ait Barkodlu Belge Doğrulama uygulaması vasıtası ile yandaki karekod okutularak kontrol edilebilir.



## 10.2. Defined tasks for the Dangerous Goods Safety Advisor.

WORK IDENTIFICATION		
Section / Department	: -	
Name of Job / Position	: Dangerous Goods Safety Advisor (DGSA)	
Job Code	: 036	
Occupational Code	: 2263.06	
Department Manager to whom they report	: General Manager	
Line Manager / First Leader to whom they report	: General Manager	
Affiliated Positions (Subordinates)	:-	
Acting in his place	:-	
Manager(s) to whom they report:	: Chairman of the Board of Directors, : General Manager	

## **DUTIES AND RESPONSIBILITIES:**

- 1. Monitoring compliance with the provisions of international agreements and conventions (ADR/RID) in the transportation of dangerous goods.
- 2. Providing recommendations to the enterprise on the transportation of dangerous goods according to ADR provisions.
- 3. Preparing the annual activity report of the enterprise regarding the transportation of dangerous goods within the first three months after the end of the year and submitting it to the Administration electronically.
- 4. Determining the dangerous goods to be transported and determining the requirements and compliance procedures in ADR for this substance.
- 5. Guiding the purchase of transportation vehicles to be used in the transportation of dangerous goods, which is the subject of activity of the facility.
- 6. Determining procedures for the control of equipment used in the transportation, loading and unloading of dangerous goods.
- 7. Providing or ensuring that employees receive training on national and international legislation and amendments to these, and maintaining records of this training.
- 8. Determining the emergency procedures to be applied in the event of an accident or a possible event that may affect safety during the transportation, loading or unloading of dangerous goods, having employees periodically perform drills related to them and keeping their records.
- 9. Ensure that measures are taken to prevent the recurrence of accidents or serious violations.
- 10. Ensuring that the special conditions stipulated by the legislation on the transportation of dangerous goods are taken into account in the selection and employment of subcontractors or third parties.
- 11. Ensuring that employees involved in the transportation, loading or unloading of dangerous goods have knowledge of operational procedures and instructions.
- 12. Taking measures to increase the awareness of relevant personnel to be prepared for possible risks in the transportation, loading or unloading of dangerous goods.
- 13. Creating instructions for keeping the documents and safety equipment that must be present in the vehicle during transportation according to the class of dangerous goods in the transport vehicle.
- 14. Preparing the operational safety plan specified in ADR/RID Section 1.10.3.2 and ensuring the implementation of the plan.

- 15. Recording all kinds of work including training, supervision and control on activities, keeping these records for 5 years and submitting them to the Administration upon request.
- 16. In the inspections to be carried out in the business related to their duties; to keep records by specifying the date and time of the people and works inspected.
- 17. In cases where there is any danger, stopping the work until the danger is eliminated, starting the work with its own approval when the danger is eliminated, and notifying the business or competent authorities in writing of all stages in the process until the danger is eliminated.
- 18. Determining procedures for the work and operations related to the packaging, labeling, marking and loading of the cargo loaded on the transport vehicle in accordance with the provisions of ADR/RID.

### **AUTHORIZATIONS:**

• Communiqué on Dangerous Goods Safety Consultancy

### **ACCOUNTABILITY:**

- Within the framework of their own responsibility, in legal situations.
- Communiqué on Dangerous Goods Safety Consultancy

JOB REQUIREMENTS			
Education	While it was sufficient to have a bachelor's degree in any department in order to become a specialist, with the amendment made on 19.04.2017 in the Communiqué on Dangerous Goods Safety Consultancy, only those who have a bachelor's degree in science and engineering fields of universities or those who have graduated from the Dangerous Goods and Safety program / department have the right to become DGSA.		
Experience	: To be experienced in the subject.		
Special Knowledge and Skills	Within the scope of the "Communiqué on Dangerous Goods Safety Consultancy".		

# 10.3. Issues for the carriers of hazardous cargoes arriving at/leaving the coastal facility by road

## The following items are sought in tankers coming to our facility for chemical loading.

	STAGES	AUTHORITIES	FORMS
1	The driver of the Road Tanker first comes to the Security Building and declares to the Security Officer the license plate and number of the vehicle and the company for which it will be loaded.	Security Guard	
2	After receiving confirmation from the Shipping Service, the Security Officer will record the company name, product type and license plate number of the vehicle and the name of the driver.	Security Guard Inventory / Shipping Personnel	
3	Receive the Road Tanker driver's cell phone, lighter, matches, cigarettes, camera and any other battery operated devices and his/her ID card and give him/her a Visitor Card and Helmet and send him/her to the Shipping Service.	Security Guard	
4	The driver of the Road Tanker is sent to the shipping service by the Security Officer. Receives the filling receipt and the "CERTIFICATE OF CONFORMITY FOR LOADING FOR ROAD TANKERS" form from the Shipping Service. Arrives at Technical Safety Vehicle Checkpoint for vehicle check	Stock / Shipment Personnel	STS-F-07
5	The tanker is directed to the relevant platform for filling after the vehicle control is completed with the "ROAD TANKERS - CHASSED VEHICLES GENERAL SAFETY CONTROL FORM " by coming to Technical Safety.	Technical Safety Personnel	TEM-F-01
6	Road Tanker drivers are not allowed to enter the facility with a substitute driver or passenger. However, a second driver is permitted for training purposes by informing the facility manager.	Security Guard	
7	The driver of the Land Tanker submits the loading conformity receipt and the "LOADING CONFORMITY CERTIFICATE FOR LOADING FOR LAND TANKERS (GENERAL INSTRUCTIONS TO BE COMPLIED WITH BY LAND TANKER FILLING DRIVERS)" form to the filling supervisor.	Filling Formen	TEM-F-01 STS-F-07
8	The Road Tanker driver receives 2 witness sample bottles and 2 witness sample labels for each cargo to be loaded from the filling supervisor.	Filling Formen	
9	After his/her name is announced by the Technical Police, it will be checked by HSE-Q whether the driver is wearing protective equipment and whether the Road Tanker flame arrester is installed. If the flame arrester is not appropriate for the purpose or if there is no flame arrester at all, the Road Tanker is not allowed to be filled. Similarly, if protective equipment is missing, the driver is not allowed to enter the Facility for filling.	Technical Safety Personnel	
10	The Road Tanker shall enter the facility in an appropriate manner, comply with the speed limits (10 Km/h), proceed towards the filling island, and enter the appropriate island according to the instructions and directions of the filling operators. They will act strictly in accordance with the rules of the chemical substance filling place and tank area. They will be informed by the filling personnel to strictly comply with the warning signs.	Security Personnel Road Tanker Operation Supervisor	TEM-T-07

# 10.4. Considerations for Carriers of Dangerous Goods Arriving at / Leaving the Coastal Facility by Sea

Considerations for Carriers of Dangerous Goods Arriving at / Leaving the Coastal Facility by Sea. These issues are defined in the Ports Regulation. Operations are carried out accordingly.

**Additional Issues** There are no additional issues.

#### **APPENDIXES**;

- **1.** General site plan of the shore facility
- 2. General view photos of the coastal facility
- **3.** Emergency Contact Locations and Contact Information
- **4.** General Layout Plan of Dangerous Cargos Handling Areas
- 5. Fire Plan for Dangerous Cargos Handling Areas
- **6.** General Fire Plan of the Facility
- 7. Emergency Plan
- **8.** Emergency Gathering Places Plan
- **9.** Emergency Management Scheme
- 10. Dangerous Cargo Manual
- Leaking Areas and Equipment Inlet and Outlet Drawings for CTU and Packages (Out of Scope)
- **12.** Inventory of Port Service Vessels (Out of Scope)
- **13.** Port Authority Administrative Boundaries, Anchorage Areas, and Harbor Pilot Embarkation and Disembarkation
- **14.** Emergency Response Equipment Against Marine Pollution in the Shore Facility
- **15.** Personal Protective Equipment (PPE) Use Map
- **16.** Hazardous Cargo Incidents Notification Form
- Control Results Notification Form for Hazardous Cargo Transport Units (CTUs) (Out of Scope)
- **18.** Other required appendixes
- 19. Hazardous Cargo Handling Guide Additional Cargo Notification (When Necessary)

**APPROVAL** 

HSE&Q CHIEF HSE&Q MANAGER OPERATIONS MANAGER DGSA