

İSKENDERUN ENERJİ VE ÜRETİM TİC. A.Ş.  
DANGEROUS GOODS HANDLING GUIDE




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## REVISION PAGE

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## 1. ENTRANCE

When dangerous cargo enters the port and is handled or stored in port areas, it must be checked that general safety and security are ensured, the cargo is surrounded, safety measures are taken for all persons in or near the port area, and the environment is protected.

### 1.1 General Information About The Facility

#### FACILITY INFORMATION FORM

|    |  |  |                |                  |
|----|--|--|----------------|------------------|
| 1  | Name/title of facility operator  | İskenderun Energy and Production Trade. Inc.   |                |                  |
| 2  | Contact Information of facility operator (address, phone, fax,e-mail and web page) | Budak Street No:4 G.O.P./ANKARA  |                |                  |
| 3  | Name of facility   | Sugözü Power Plant Pier  |                |                  |
| 4  | Province of the facility   | Adana (Yumurtalık)   |                |                  |
| 5  | Contact Information of facility (address, phone, fax,e-mail and web page)          | <b>Facility Address:</b><br>Sugözü Köyü 01680 Yumurtalık/ ADANA<br><b>Phone:</b> 0322 355 24 55<br><b>Fax:</b> 0322 355 24 56<br><b>Web:</b> <a href="http://www.isken.com.tr">www.isken.com.tr</a><br><b>E-Mail:</b> <a href="mailto:isken_power_plant@isken.com.tr">isken_power_plant@isken.com.tr</a> |                |                  |
| 6  | Geographical area of facility  | East Mediterranean/ İskenderun Körfezi   |                |                  |
| 7  | Port Authority of facility and contact details                                     | Ceyhan Regional Port Authority<br>Phone: 0322 639 21 39 / 639 21 40  |                |                  |
| 8  | Mayor ship of facility and contact details   | Yumurtalık Municipality / 0322 671 20 17   |                |                  |
| 9  | Free Zone or Organized Industrial Zone of facility                                 |  |                |                  |
| 10 | Validity date of shore facility Operating Permit/Provisional Operating Permit      | 22.06.2025   |                |                  |
| 11 | Facility operating status (X)  | Own load and add.third party (X)   | Own load (...) | Third part (...) |




|    |   |  |
|----|---|--|
| 12 | Name and surname of facility responsible person, contact information (phone, fax,e-mail)  | Ekrem ŞAHİN<br>Phone: 0322 355 24 55<br>E-Mail: <a href="mailto:ekrem.sahin@isken.com.tr">ekrem.sahin@isken.com.tr</a>   |
| 13 | Name and surname of responsible person for dangerous goods operation of facility, contact information information(phone, fax,e-mail)  | Mehmet ARAS<br>Tel : 0322 355 24 55<br>E-Mail : <a href="mailto:mehmet.aras@isken.com.tr">mehmet.aras@isken.com.tr</a>   |
| 14 | Name and surname of Dangerous Goods Safety Advisor of Facility, contact information (phone, fax,e-mail)   | Hasan AKDEMİR<br>Phone: 0534 368 73 75<br>E-Mail: <a href="mailto:hasan@atasarmuhendislik.com.tr">hasan@atasarmuhendislik.com.tr</a>   |
| 15 | Marine coordinates of facility  | Coal Discharging Pier:<br>36° 50' 01" K / 35° 53' 26" D<br>Mendirek Pier:<br>36° 49' 35" K / 35° 53' 15" D   |
| 16 | Type of dangerous goods handled in facility (goods under MARPOL Annex-1, IMDG Code, IBC Code, IGC Code, IMSBC Code, Grain Code, TDC Code and asphalt/bitumen and scrap goods)   | Hazardous Solid Bulk Cargo(Coal)   |
| 17 | Dangerous goods handled at the facility (loads in 16th article will be written separately. Additional cargo request will be sent to the port authority with the ANNEX-1 function. It will be added to DCHG when appropriate.) | Load of Coal   |
| 18 | Classes for handled cargo subject to IMDG CODE  | There is no dangerous cargo handled within the scope of IMDG code  |
| 19 | Groups in characteristic table for handled cargo subject to IMSBC Code  | COAL GROUP B (andA)  |
| 20 | Types of ship berthing to facility  | Coal Discharging Pier: Ships that bring coal to our facility anchor at the Area determined according to the Ports Regulation and transfer (limbo) to the barges by means of a floating crane.<br>Barges; Coal is approached to the unloading pier by tugboats and the bulk coal load is discharged with a completely closed automatic conveyor system, where all environmental precautions have been taken.<br>Jetty Jetty: Marine vessels and floating cranes and coal barges used in coal limbo and loading/unloading services; In bad weather conditions, when they do not carry out their limbo operations, they take shelter at the jetty pier. |
| 21 | Facility's distance to main road (kilometer)  | 8 km   |

|    |   |   |
|----|---|---|
| 22 | Facility's distance to railway (km) or railway connection (Yes/No)                  | No railway connection. It is 32 km from Ceyhan Train Station.   |
| 23 | Facility's distance to closest airport (km) and its name                            | Adana Şakirpaşa Airport 90 km<br>Cukurova International Airport– 120 km   |
| 24 | Goods handling capacity of facility (Ton/Year; TEU/Year; Vehicle/Year)              | 4.999.000 Ton Bulk Coal/ Year   |
| 25 | Scrap handling made/not made in facility  | No  |
| 26 | Is there border crossing (Yes/No)   | No  |
| 27 | Is there a bonded areas?(Yes/No)  | No  |
| 28 | Goods Handling equipment and capacity   | 2,500 tons/hour floating crane, 2,500 tons/hour self-unloading barges, 2,500 tons/hour closed coal conveyor system on the pier. |
| 29 | Storage tank capacity (m <sup>3</sup> )   | --  |
| 30 | Open storage area (m <sup>2</sup> )   | --  |
| 31 | Semi-closed storage area (m <sup>2</sup> )  | --  |
| 32 | Closed storage area (m <sup>2</sup> )   | --  |
| 33 | Determined fumigation and/or decontamination from fumigation area (m <sup>2</sup> ) | Indoor areas throughout the facility, open areas around work areas when necessary.  |
| 34 | Name/title of pilotage and towage service provider, contact information             | Pilotage Service: ANKAŞ 0326 645 71 70<br>Towage Service: UZMAR 0326 645 43 43<br>ARPAŞ 0326 645 38 10                          |
| 35 | Name/title of pilotage and towage service provider, contact information             | Yes   |



|                                 |  |                |               |                          |                          |   |
|---------------------------------|--|----------------|---------------|--------------------------|--------------------------|---|
| 36                              | Capacity of Waste Acceptance Facility<br>(This part will be issued separately according to the waste accepted by facility) |                |               | Type Of Waste            |                          | Capacity (m³)   |
|                                 |  |                |               | Sludge                   |                          | 30  |
|                                 |  |                |               | Bilge Water              |                          | 50  |
|                                 |  |                |               | Hause hold (Garbage)     |                          | 60  |
|                                 |  |                |               | Waste Oil                |                          | 20  |
| 37                              | Characteristics of berth/jetty etc. Areas  |                |               |                          |                          |   |
| Berth/Jetty No                  |  | Height (meter) | Width (meter) | Max. water depth (meter) | Min. water Depth (meter) | Tonnage and height of The largest ship berthed (DWT or GRT- meter)  |
| Coal Unloading Pier No. 1 Berth |  | 167            | 16            | 7.5                      | 7.1                      | It is used for docking barges and unloading coal.   |
| Coal Unloading Pier No. 2 Berth |  | 167            | 16            | 7.5                      | 7.4                      | It is used for docking barges and unloading coal.   |
| Breakwater Pier Coal Barge Dock |  | 157            | 12            | 7.3                      | 6.4                      | It is for sheltering marine vessels, floating cranes and coal barges used in coal limbo and loading/unloading services during bad weather conditions and when they are not performing limbo operations. |
| Breakwater Pier RoRo Ramp       |  | 157            | 18            | 6.9                      | 5.8                      |   |
| Pipeline Name (If Available)    |  |                |               | Number (Piece)           | Length (Meters)          | Diameter (Inches)   |
| Not available                   |  |                |               |                          |                          |   |

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## 1.2 Loading /Discharging and Handling Procedures for Dangerous Goods in Shore Facilities

handled at İskenderun Energy Production and Trade Inc. (İSKEN) coastal facilities is the bulk coal cargo within the scope of the IMSBC Code. In this context, the class of the bulk coal cargo is MHB; its group is B ( and A ) .

**Table 2: Coal Load Characteristics Within The Scope Of IMSBC Code**


| <b>REPUTATION</b> | <b>NAME AND DESCRIPTION</b> | <b>CLASS</b> | <b>GROUP</b> |
|-------------------|-----------------------------|--------------|--------------|
| -                 | COAL                        | MHB          | B ( and A )  |

There is no temporary storage area in the coastal facility within the boundaries of the coastal facility definition specified in the Regulation on the Transport of Dangerous Goods by Sea and Loading Safety. Temporary storage of coal is carried out in open storage areas subject to Customs and Environmental legislation located outside the coastal facility boundaries.

Handling any other dangerous cargo other than coal, the legislative requirements will be complied with. In this context, the notification of cargo not specified in the Dangerous Cargo Handling Guide and planned to be handled in the facility will be made to the Ceyhan Regional Port Authority . According to the code and safety data sheet to which the cargo in question is subject, the equipment that should be in the facility will be kept in the facility and all necessary precautions such as first aid, fire, safety, etc. will be implemented.


The general rules to be followed in the coal handling facility are as follows:

- Imported coal, which is the raw material for power plant production, comes from abroad by ships and the ships are anchored in the anchorage area determined according to the Ports Regulation with air/sea permission. Imported coal is transported to the specially constructed Coal Discharge Pier by air/sea permission marine vehicles and discharged from there with a completely closed conveyor belt system. Coal carrying barges are marine vehicles with special discharge equipment and have the ability to discharge themselves. There is no crane, crane etc. equipment on the Coal Discharge Pier. Therefore, there is no port personnel who are always on duty during operations at the port interface.
- If the dangerous cargo to be discharged has come from abroad, the discharge cannot be started until the customs procedures are completed and the discharge permit is received.

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- Although there are no port personnel on duty at the port interface at all times, there are personnel on duty in the port area for observation, maintenance and repair work; it is ensured that the employees in question act in accordance with the Personal Protective Equipment Use Instruction during their duties . Employees are both trained and supervised in this regard.
- At the facility, bulk coal cargo, which is considered a hazardous cargo, is transported from the pier to the open storage area by a conveyor system. The system is checked before the operation; if there is a problem, the operation is not started until it is fixed.
- Communication systems are tested to ensure coordinated operation of the barge and shore conveyor systems , and dangerous cargo is not handled with faulty equipment/hardware .
- Lighting is checked during night work. If it is insufficient, lighting is done with an additional projector. is provided.
- Occupational Health and Safety rules in all work is applied.
- Coastal Facility Emergency Plan requirements are applied for any situations requiring emergency response.

**Coal Cargo Handling Procedure** is detailed in section 6.1.

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## 2. RESPONSIBILITIES

The handling of dangerous cargo are specified in the Regulation on the Carriage of Dangerous Cargoes by Sea and Loading Safety.

### 2.1 General Responsibilities

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


- They are obliged to take all necessary measures to make the transportation safe, secure and harmless to the environment, to prevent accidents and to minimize the damage when an accident occurs.
- EmS Guide, which includes Emergency Response Methods and Emergency Schedules for Ships Carrying Dangerous Goods .
- They benefit from the Medical First Aid Guide (MFAG) in the annex of the IMDG Code in order to provide the necessary medical first aid for the people affected by the damages of the dangerous goods and the health problems caused by the accidents involving these cargoes.

### 2.2 Responsibilities Of The Cargo Person

- Prepares or arranges for the preparation of mandatory documents, information and papers regarding dangerous goods and ensures that these documents are with the goods during the transportation activity.
- that dangerous goods are classified, packaged, marked, labeled and placarded in accordance with their type .
- It ensures that dangerous goods are loaded, stacked and securely fastened in approved packaging and cargo transport units in accordance with the rules and in a safe manner.

### 2.3 Responsibilities Of The Coastal Facility Operator

- Do not berth the ships carrying dangerous goods without the permission of the port authority.
- Provides written information within the scope of facility rules, cargo handling rules and relevant legislation to the ship that will dock at its facility.
- It does not handle dangerous goods for which it has not received a handling permit from the Administration , and it does not make the ships that will dock by making a plan within this scope.
- Requests the mandatory documents, information and documents related to dangerous goods from the cargo person and ensures that they are found with the cargo. If the relevant documents, information and documents cannot be provided by the cargo person, it is not obliged to accept or handle the dangerous cargo at its facility .
- It carries out the loading or unloading operation according to the agreement to be reached by sharing all the data that may be required according to the characteristics of the cargo with the ship's person. The ship does not change the operation without the knowledge of the person concerned.

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

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

Handling of dangerous goods and the planning of this handling are documented by receiving the necessary training, and does not assign personnel without documents to these operations.

g) Dangerous goods handling in its facility It ensures that the equipment is in working condition and that the relevant personnel are trained and documented on the use of these equipments.

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

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

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

j) Keeps an up-to-date list of all dangerous goods on board the vessels berthed and in the closed and open areas of the facility and gives this information to the relevant parties upon request.

k) Notifies the port authority of the instant risk posed by the dangerous goods that it handles or temporarily stores in its facility and the measures it takes for it .

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


m) Provides the necessary support and cooperation in the controls and inspections carried out by the Administration and the port authority.1.4 S), Class 6.2 and Class 7 dangerous goods that are not allowed for temporary storage , out of the coastal facility as soon as possible, without waiting, and applies to the Administration for permission in cases where it is necessary to wait.

o) Temporarily stores the cargo transport units where dangerous goods are transported in accordance with the separation and stacking rules, and takes fire, environment and other safety measures in accordance with the class of the dangerous cargo in the storage area. It keeps fire extinguishing systems and first aid units ready for use at any time in the areas where dangerous goods are handled and makes the necessary controls periodically.

ö) Gets permission from the port authority before the hot working works and operations to be carried out in the areas where dangerous goods are handled and temporarily stored.

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

r) It ensures the internal loading of the cargo transport units in accordance with the loading safety rules in its facility.

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## 2.4 Responsibilities Of The Ship Owner

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

## 2.5 Dangerous Goods Safety Advisor Responsibilities

- DGSC authorized under the IMDG Code prepare quarterly reports regarding their responsibilities specified in the regulation and directive and notify this report to the Administration.
- For the IMDG code, DGSCs have information about the dangerous goods activities in general, about the IBC Code, IGC Code, IMSBC Code and MARPOL 73/78 applications, depending on their interest, within the scope of dangerous goods handled at the coastal facility.



- DGSC's are present at the shore facility during DCCC inspections and actively participate in the inspections.
- DGSC's will arrive at the facility within 2 hours at the latest, when requested by the port authority of the coastal facilities they serve, or in case of emergency, when the dangerous goods stored or handled by the facility and cargo persons are called during the operation.
- DGSC, serving at the coastal facility, prepares the Dangerous Goods Handling Guide of the coastal facility together with the coastal facility and checks its accuracy. There is a signature on the guide.
- The quality management system (QMS) established at the coastal facility is followed by an internal audit at least once every 6 months . QMS procedures, nonconformities, risk assessments, near misses miss ), planned maintenance-attitude works, special permits, all work and operations including emergencies.
- Procedure and checklist in accordance with all national and international rules regarding entry into closed areas and has it approved by the coastal facility operator.

## 2.6 Carrier's Responsibilities

- It requests mandatory documents and documents related to dangerous goods from the cargo person and ensures that they are present with the cargo during the transportation activity.
- checks the compliance of the dangerous goods classified, packaged, marked, labeled and plated by the cargo person with the legislation.
- It checks that the dangerous goods are packed in accordance with the rules by using approved packaging and load transport units, they are safely loaded and securely fastened to the cargo transport unit.

## 2.7 Dangerous Goods Handling Officers


The personnel and relevant persons responsible for all operations related to hazardous materials in our facility are listed in the table below.

| Name/ Surname   | Mission                       | Contact information |
|-----------------|-------------------------------|---------------------|
| Mehmet Aras     | Operations Manager            | 0322 355 24 55      |
| Enis Bayar      | Deputy Director of Operations | 0322 355 24 55      |
| Mehmet Tontu    | Shift Manager                 | 0322 355 24 55      |
| Ahmet Saliver   | Shift Manager                 | 0322 355 24 55      |
| M. Eren Erdoğan | Shift Manager                 | 0322 355 24 55      |
| Omer Barak      | Shift Manager                 | 0322 355 24 55      |
| Varol Durhasan  | Operations Eng.               | 0322 355 24 55      |



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|----------------------|-----------------------------------|----------------|
| Muhsin Emre Baltali  | Operations Eng.                   | 0322 355 24 55 |
| Ufuk Akbayrak        | Operations Eng.                   | 0322 355 24 55 |
| Lutfu Talay          | Transshipper Operations Manager   | 0533 749 67 80 |
| İsa Levent           | Transshipper Operations Manager   | 0533 749 67 80 |
| Cenk Cologlu         | Transshipper Technical Manager    | 0533 749 67 84 |
| Ziya Korhan Elkatmis | Transshipper Technical Manager    | 0533 749 67 82 |
| Baran Mehmet Gurbuz  | Transshipper 2nd Captain          | 0533 749 67 86 |
| Hasan Akdemir        | Dangerous Goods Safety Consultant | 0534 368 73 75 |

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### **3. RULES TO BE APPLIED / FOLLOWED AND MEASURES TO BE TAKEN BY THE COASTAL FACILITY**

This section explains how the measures regarding the issues specified in the third section of the "Regulation on the Carriage of Dangerous Goods by Sea and Loading Safety" are implemented and how the requirements of the provisions in the fourth section are met.

#### **3.1 Rules To Be Followed By Coastal Facility Operators**

##### **3.1.1 Permission, Documentation and Operation Information and Measures Taken for Ships Carrying Dangerous Cargoes**

Any ship carrying coal, the only dangerous cargo handled at the coastal facility, cannot approach the facility without the permission of the port authority. The agency company that has agreed to obtain the relevant permits coordinates with the port authority and obtains the necessary permits. With the planning made within this scope, the ships that will approach are prevented from being victimized.

Mandatory documents, information and documentation regarding dangerous cargo are requested from the cargo officer. Dangerous cargo is not accepted to the facility and handling operations are not started unless the necessary documents are provided by the cargo officer.

Coal unloading at Isken shore facilities is initiated after all necessary data, including facility rules and handling rules, are shared with each other according to the characteristics of the cargo, with the approval of the transshipper personnel, Isken operation managers and the ship's authority, and no changes are made to the operation without the knowledge of the ship's authority.


Dangerous cargo handling operations are carried out by determining the working limit and taking the necessary precautions for handling after considering the safe working capacity of the facility, weather forecasts and examining the transportation documents.

##### **3.1.2 Education**

Dangerous cargo handling operations at the port facility receive the necessary training specified by the administration. Personnel who have not received training are not assigned to operations.

The hazardous cargo handling equipment in the facility is in continuous operation, personnel are trained within the framework of the necessary procedures and their maintenance is carried out according to the maintenance procedures determined after the first production.

Training on handling coal cargo within the scope of the IMSBC code is provided by the hazardous material safety advisor (DGSC), the hazardous material training provided is listed below.

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## **General Awareness/Recognition Training**

Personnel involved in handling operations should receive training on the safe transport or handling of dangerous cargoes commensurate with their duties. Training should be designed to ensure familiarity with the general hazards of the relevant dangerous cargoes and the legal requirements. This training should include identification of types and classes of dangerous cargoes, labelling, marking, packaging, segregation and compliance with requirements; description of the purpose and content of transport documents and description of existing emergency response documents.

## **Task Oriented Training**

Personnel involved in handling operations must receive detailed training on the specific requirements for the safe transportation or handling of hazardous cargo, in accordance with the function they perform.

## **Security Training**

Personnel involved in handling operations must receive training on the risks involved in the release of dangerous loads and the functions they perform.


### **3.1.3 Hazardous Material Handling Equipment and Installations**

All tools and equipment used in handling and storage operations in our coastal facility are kept in accordance with the maintenance and handling procedures determined after the first production. Records are kept and provided to the administration upon request.

The discharge of hazardous materials (only coal cargo) arriving at our coastal facility is carried out by performing the Limbo process via a floating platform called Transshipper, which has a Water Vehicle Conformity Certificate, and transferring it to the coastal conveyor system with barges with a load carrying capacity of 10,000 tons. The barges in question have the feature of self-discharging.

| <b>Equipment / Plumbing</b>                                 | <b>Number of</b> | <b>Capacity</b>   |
|---|------------------|-------------------|
| Watercraft Compatibility Floating Platform with Certificate | 1                | 3,000 tons/ hour  |
| Watercraft Compatibility Barge with Certificate             | 2                | 10,000 tons       |
| Closed Conveyor System ( Coal Unloading ) Pier              | 1                | 2,500 tons / hour |

In the handling of dangerous cargo are subject to maintenance and handling procedures determined after the initial production, and the procedures performed are recorded.

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### 3.1.4 Work Safety Measures and Personal Protective Equipment

Occupational health and safety measures at the coastal facility are meticulously implemented within the framework of laws and regulations determined by the administration. Detailed information on occupational health and safety is provided in Section 9.

The personal protective equipment used by coastal facility personnel handling hazardous materials during operations is as follows.

- Work Gloves
- Raincoat
- Helmet
- Work Shoes
- Work Safety Glasses
- Leather Jacket or Coat

### 3.1.5 Docks, Wharves, Warehouses and Storehouses Handling Hazardous Materials

There is no loading process in our shore facility and there is no closed area. The discharge of coal cargo, which is included in the Solid Bulk Cargo class, is carried out according to the IMSBC code rules. No other cargo handling is carried out other than coal cargo and, if requested by the Administration, information about the cargo is shared with the relevant parties.


Dangerous cargo is handled , the immediate risk posed by dangerous cargo and the measures taken accordingly are reported to the port authority. Some of the measures taken are as follows;

- Has been established to ensure that areas where hazardous cargo is handled are constantly monitored by facility personnel or security guards. These areas are monitored by cameras 24 hours a day, without leaving any blind spots, and records are kept.
- There are emergency notification (alarm) buttons in docks, piers and temporary storage areas. The locations of the buttons are indicated with warning signs.
- Hazardous cargo is handled and stored, the necessary entrance and exit opportunities are provided and access roads are kept open.

### Dock and Pier

The discharge of coal cargo is carried out at 1 berthing pier located on the pier, the features of which are given below. The total length of the pier is 167 meters. Ship acceptance is carried out in our facility during the day and at night.

| Dock/<br>Pier No. | Height<br>(meters) | Width<br>(meter) | Maximum<br>Water Depth<br>(Metre) | Minimum<br>Water Depth<br>(Metre) | Tonnage and Length of<br>Largest Ship to Berth<br>( Dwt or Grt - Meter) |
|-------------------|--------------------|------------------|-----------------------------------|-----------------------------------|---|
| Dock              | 167                | 16               | 7.50                              | 6.5                               | 10,000 DWT  |

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## **Separated Warehouses and Depots for Hazardous Materials**

In our facility, only coal subject to the IMSBC Code is handled as a hazardous material and its temporary storage is carried out in an open storage area outside the coastal facility boundaries and Climate Change regarding the sealing in the storage area .

## **Fire Intervention and Fire Extinguishing Systems and First Aid Units in Hazardous Material Handling Areas**

Iskenderun Energy Production and Trade Inc. In the coastal facility, equipment and hardware selection was made by considering the fire equipment, facility type, the characteristics and number of ships and marine vehicles to be docked, the type and amount of cargo, and the characteristics of the facility. The fire plan prepared accordingly is approved by a mechanical engineer registered with the Union of Chambers of Turkish Engineers and Architects .

Fire equipment is certified by class organizations that are accredited by TÜRKAK as "Inspection Organizations" for firefighting or authorized by the ministry.

We will fight fires at our coastal facility the list of persons and their duties, fire extinguishing systems and first aid teams and the duties of these teams are as in the "Emergency Action Plan" .

The firefighting team in our facility is equipped with firefighting equipment and fire extinguishers and first aid units and equipment are kept ready for use at all times. Information on the fire protection systems in our coastal facility is as in Sections 8.10, 8.11, 8.12.

### **3.1.6 Transport Safety and Accident Reporting**

An accident prevention policy has been established to ensure safe, secure and environmentally friendly transportation at the coastal facility, to prevent accidents and to minimize the damage when an accident occurs. When reporting accidents that may occur due to hazardous materials to the port authority, an incident notification form containing the information in ANNEX-16 is filled out.

Explaining its strategy to prevent accidents that may be caused or involved by dangerous cargo at the coastal facility , and ensuring the safety of life, property and the environment at the highest level written as document aspect One "Accident Prevention Policy (DOG)" It has been established and this policy is implemented. It is signed by the highest level manager of the APP coastal facility and kept up to date and posted in administrative buildings and other work areas, areas visible to personnel. is hanging.


### **Accident Prevention Policy**

Iskenderun Energy Production and Trade Inc. , our company; The basis of the Accident Prevention Policy, which will be implemented in full compliance with the Occupational Health, Safety and Environment Policy , has been determined as preventing fires and accidents and not harming people and the environment.

### **Hazardous Material Handling , Loading and Discharging:**

- In all activities carried out in the facility, the primary priority should be to prevent accidents completely or to minimise their risks.



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- Preventing our employees from being injured or exposed to any negative effects in work accidents.
- Taking all necessary precautions to ensure safety and security for our employees , customers, stakeholders and the environment on ships and in our shore facility work areas,
- Pursuing a policy of continuous improvement to implement the best available technologies for accident prevention ,
- Determining appropriate emergency response procedures in case of an accident and practicing them,
- All activities that may lead to accidents in our facility have been identified and the necessary measures have been taken to fulfill the obligations to prevent such accidents.
- Assigning personnel with appropriate knowledge, skills, training and experience to critical tasks that will affect safety and security in operational business processes,
- Conducting risk assessments to identify and evaluate accidents,
- Ensuring continuous development of personnel through training and complying with national and relevant international legislation and standards,


We have goals and we undertake to fulfill the following requirements to achieve these goals.

- Loaded/unloaded and handled in the Port Facility will be obtained; the definition of the hazard specific to that material, first aid measures, fire measures, response measures in case of leakage/spillage, special conditions for handling , measures in case of personal exposure , and measures to prevent damage to the environment, if any, will be analyzed in detail, and the needs and necessary measures will be set forth.
- Necessary equipment and supplies will be provided to prevent the possible harmful effects of these hazardous substances.
- hazardous materials are handled are constantly monitored by the relevant facility personnel and/or security guards, the necessary monitoring arrangements will be made, measurement devices will be made available and the installed alarm systems will be checked.
- In order to be able to perform the necessary intervention in emergency situations, sufficient entry and exit opportunities will be provided to areas where hazardous materials are handled , and personal protective equipment and equipment appropriate for the hazardous materials handled will be kept ready and available at all times.

Implementation of our policy is a primary duty for our facility employees, and conveying this policy to other personnel working with us is also among our priorities.

### 3.1.7 Control

The necessary cooperation and support is provided in the controls and inspections carried out by the administration and the port authority. Planning is made by applying for renewal of the Dangerous Cargo Conformity Certificate and Coastal Facility Operation Permit documents at least 2 months in advance before their validity period expires. The presence of relevant personnel and consultants is ensured during the inspections.

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### 3.1.8 Hot Work

#### Principles Regarding Hot Work and Operations in the Port Facility


The port authority will only grant permission when a request is made to carry out hot work or other maintenance or repair work on deck or on shore that may pose a hazard due to the presence of dangerous cargoes, as long as it does not pose a hazard. Permission for hot work to be carried out in areas where hazardous materials are handled will be obtained from the Harbour Master by the facility manager.

Hazardous cargo is handled and temporarily stored, the area where the work will be performed and the areas adjacent to it are frequently inspected, including tests performed by accredited testing organizations, to ensure that the areas where the work will be performed are not flammable and/or explosive environments and that there is insufficient ventilation and oxygen.

Inspections should be carried out by the coastal facility in the form of a procedure and checklist. These issues include, at a minimum, the following:

- It must be ensured that hazardous loads and other flammable materials are removed from work areas and adjacent areas.
- Flammable building materials must be effectively protected against accidental ignition.
- Open pipes, pipe penetrations, valves, joints, gaps and open parts must be covered and sealed to prevent flames, sparks and hot particles from spreading from work areas to adjacent areas or other areas.
- A sign stating the permit for the hot work to be done and the safety precautions to be taken must be hung in the work area and at all work area entrances, and at least one fire extinguisher or other suitable fire extinguishing equipment, together with all its apparatus, must be kept in an easily accessible place, ready for immediate use.

The permit and safety precautions must be easily visible and clearly understandable to those who will be doing the hot work. Working procedure and detailed information on hot works are in chapter 6.

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## 4. CLASSES OF HAZARDOUS GOODS, TRANSPORTATION, LOADING/UNLOADING, HANDLING, SEPARATION, STACKING AND STORAGE

### 4.1 Classes of Dangerous Goods

Necessary information about dangerous goods handled in our port is as follows.

| <b>FAME</b> | <b>NAME AND DESCRIPTION</b> | <b>CLASS</b> | <b>GROUP</b> |
|-------------|-----------------------------|--------------|--------------|
| -           | COAL                        | MHB          | B(and A)     |

Substances (including mixtures and solutions) and articles subject to the provisions of the IMDG CODE and IMSBC CODE fall into one of the classes from 1 to 9, according to the hazard they present or the most predominant hazard. Some of these classes are divided into subdivisions. These classes or divisions are listed below:

Solid bulk cargoes that may present chemical hazards during transportation due to their chemical properties or characteristics are classified as Group B. Some of these materials are classified as hazardous cargoes and others are called Materials Possible Hazardous Only in Bulk (MHB). It is extremely important to obtain up-to-date and accurate information about the physical and chemical properties of cargoes to be transported in bulk prior to loading.

Dangerous solid bulk cargoes are defined in SOLAS Regulation VII/7. Within the scope of this Code, dangerous cargoes will be classified according to Chapter 2 of the IMDG Code.

**Class 4 :** Flammable solids; substances liable to spontaneous combustion; substances which, in contact with water, emit flammable gases;

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

Class 4.2 : Substances liable to spontaneous combustion

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

**Class 5 :** Oxidizing substances and organic peroxides;

Class 5.1 : Substances causing oxidation

Class 5.2 : Organic peroxides

**Class 6 :** Toxic and infectious substances


Class 6.1 : Toxic substances

Class 6.2 : Infectious substances

**Class 7 :** Radioactive Material;

**Class 8 :** Corrosive Substances;

**Class 9 :** Various Hazardous Substances and Objects;

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### Materials that are Hazardous Only in Bulk (MHB)

These materials are classified as packaged dangerous goods in the IMDG Code. These materials are materials that may pose chemical hazards when transported in bulk, except for bulk materials. These materials pose significant risks when transported in bulk and serious precautions must be taken.

If a cargo poses more than one chemical risk, the substance will be classified as MHB. When the test method is determined, a sample taken from the cargo to be transported will be used for testing. Samples will be taken from the stack at 3 meter intervals longitudinally from the surface to the inside from a depth of 200-360 mm. A substance may be classified as MHB based on known hazard properties or similarities in accident records.

#### Flammable Solids


These substances are substances that can burn or ignite readily when carried as bulk cargo and do not meet the criteria for assignment to class 4.1 (see IMSBC Code). 9.2.2.1) *the United Nations Manual of Tests and Criteria* have a burning time of less than 2 minutes. Metal powders and metal alloys shall be classified as MHB if they ignite in 20 minutes or less and cover the reaction sample. The length of the test sample in the scan test shall be 200 mm. A summary of this approach is given in the table below:

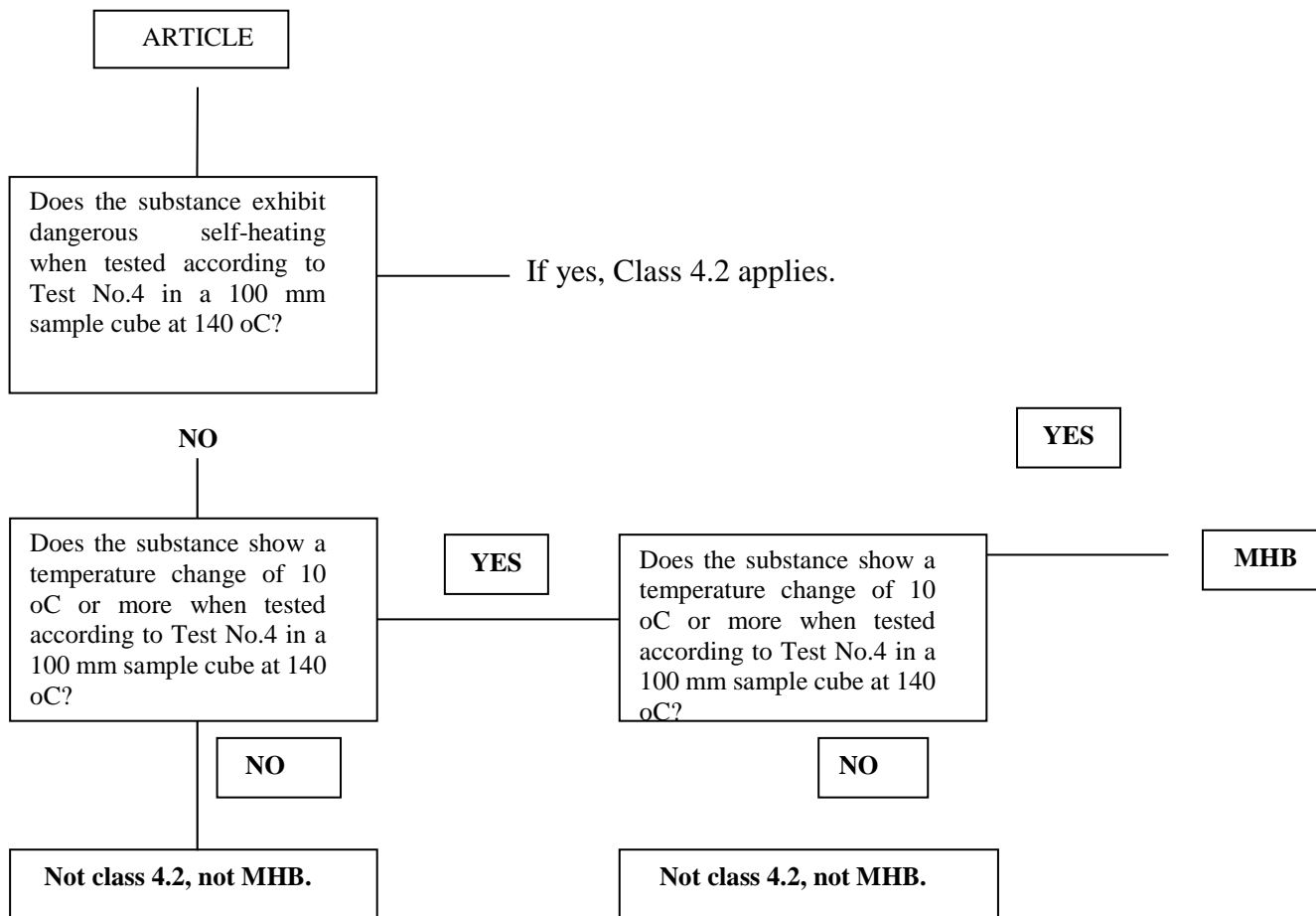
| <b>Thick Loads</b>        | <b>Risk Class 4.1 PG III, Burning time , Burning distance</b> | <b>MHB Combustion time , Burning distance</b> |
|---------------------------|---|---|
| Dust metal in the form of | 5 minutes more however 10 minutes under , 250 mm              | ≤ 20 minutes , 200 mm                         |
| Thick article             | < 45 seconds , 100mm  | ≤ 2 minutes , 200mm                           |

#### Spontaneous Combustible Solids

Substances that are liable to spontaneous combustion when carried as bulk cargo and do not meet the criteria for assignment to 4.2.


In tests carried out in accordance with the test methods given in the United Nations Manual of Tests and Criteria, chapter III 33.3.1.6, if the temperature of the test specimen is 140 and 100 C, 100 mm<sup>3</sup> If a sample is used and the temperature increases by more than 10 C, the substance may be classified as MHB. The following flow chart shows the test procedures. Shows

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In addition, if the temperature increases by more than 10 °C or is observed to rise above ambient temperature during the tests performed according to the test methods specified

in the United Nations Manual of Tests and Criteria , *Part III, 33.4.1.4.3.5* , the substance will be classified as MHB. During this test, the temperature of the sample will be measured for 48 hours. If the temperature increases at the end of the 48-hour period, the test process is carried out in accordance with the test method. will be extended.

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## 4.2 Packages and Packages of Dangerous Goods

Markings, labels and/or placards on products are all communication channels to the user. These communication channels tell the user about the shipment or product characteristics. The IMDG Code provides clear procedures for authorization of shipments, as well as prior notification, markings, labels and documentation (manuals, electronic data processing or electronic information interchange techniques and placard attachment).

Clearly states that no one may provide transportation of dangerous goods unless the dangerous goods are appropriately marked, labeled, placarded and have an approved document.

Those carrying dangerous goods must clearly state the UN Number and proper shipping name on the cargo. In the case of the presence of a marine pollutant, the words "marine pollutant" must appear on the document accompanying the shipment. This requirement is particularly important in order to determine the emergency procedures required to respond appropriately in the event of an accident involving these goods. In the case of the presence of a marine pollutant, the ship's master must comply with the requirements of MARPOL 73/78.

## 4.3 Placards , Plates, Brands and Labels for Dangerous Goods

Iskenderun Energy Production and Trade Inc. does not handle dangerous goods with international codes and labels and placards bearing the UN number at its coastal facility .

## 4.4 Signs of Dangerous Goods and Packaging Groups


Handled in our port is coal, which is Solid Bulk Cargo. There is no UN number determined for the coal handled within the scope of the IMSBC Code and it is in the B(and A) group in the MHB class.

| <b>FAME</b> | <b>NAME AND DESCRIPTION</b> | <b>CLASS</b> | <b>GROUP</b> |
|-------------|-----------------------------|--------------|--------------|
| -           | COAL                        | MHB          | B(and A)     |

## 4.5 Separation Tables of Dangerous Goods by Ship and Port

Iskenderun Energy Production and Trade Inc. does not receive hazardous cargo other than coal at its coastal facility. In the event of a different hazardous cargo, the separation rules specified in international codes will be followed. Information on these rules is provided below.



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## Parsing Definition

Segregation is the process of separating two or more substances or items that are considered mutually incompatible because their packaging or stacking together could create unnecessary hazards in the event of leakage, spillage or any other accident.

However, since the extent of the hazards involved may vary, the required segregation arrangements may also vary. Segregation is achieved by maintaining certain distances between incompatible hazardous materials or by the use of one or more steel bulkheads or decks, or a combination of these. The distance between such hazardous materials may be filled by other loads that are compatible with the hazardous materials or articles in question.


## Stacking and Separation Conditions

1. Loading and stacking of dangerous solid bulk cargoes shall be done safely and correctly in accordance with the characteristics of the cargo. Dangerous cargoes that are not kept together shall be separated from each other. will be separated.
2. The carriage of hazardous solid bulk cargoes that are self-heating or flammable is a risk to cargo unless adequate precautions are taken to minimise the possibility of fire. will not be done.
3. Hazardous solid bulk cargoes capable of giving off hazardous vapours shall be loaded in a well-ventilated cargo space.

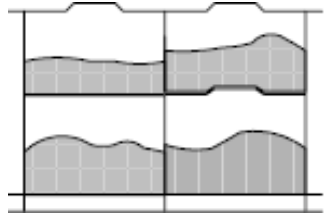
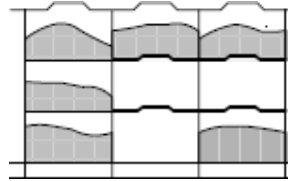
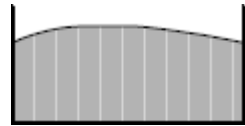
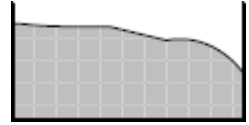

## Segregation Between Solid Bulk Cargoes Presenting Chemical Hazards

Unless otherwise specified in this section or in the detailed information pages for Group B cargoes, segregation among solid bulk cargoes presenting chemical hazards shall be made in accordance with the table below.


| Thick pouring materials   |                    |     |     |     |     |     |   |   |      |
|---|--------------------|-----|-----|-----|-----|-----|---|---|------|
|   | Class / Department | 4.1 | 4.2 | 4.3 | 5.1 | 6.1 | 7 | 8 | 9MHB |
| Flammable solids  | 4.1                | X   |     |     |     |     |   |   |      |
| By yourself flammable substances                                  | 4.2                | 2   | X   |     |     |     |   |   |      |
| With water contact to do in flammable gases remover substances    | 4.3                | 3   | 3   | X   |     |     |   |   |      |
| Oxidizing substances  | 5.1                | 3   | 3   | 3   | X   |     |   |   |      |
| Toxic substances  | 6.1                | X   | X   | X   | 2   | X   |   |   |      |
| Radioactive substances  | 7                  | 2   | 2   | 2   | 2   | 2   | X |   |      |
| Corrosive substances  | 8                  | 2   | 2   | 2   | 2   | X   | 2 | X |      |
| Miscellaneous dangerous substances And items                      | 9                  | X   | X   | X   | X   | X   | 2 | X | X    |
| Only pouring while in the state danger supply who materials (MHB) | MHB                | X   | X   | X   | X   | X   | 2 | X | X    |

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## Numbers showing segregation conditions

|  |   |
|--|---|
| <p>2 "Separate "To be held":</p> <p>When loading is done below deck, it will be in different holds. A vertical separation that will ensure that the loads are in different compartments can also be considered equivalent if it is separated by a deck resistant to fire and liquid leaks.</p> |    |
| <p>3 "With a full bulkhead or hatch will be separated":</p> <p>It means vertical or horizontal separation. If the decks are not resistant to fire and liquid leaks, only a complete partition in the longitudinal direction is acceptable.</p>   |    |
| <p>X Segregation, if any, is shown in the detailed information pages on loads in this Code.</p>  |   |
| <p><b>Symbols</b></p> <p>Related bulk material</p>   |   |
| <p>Bulk material that should not be kept together</p>  |  |
| <p>Liquid and fire resistant deck</p>  |  |


NOTE: Vertical lines represent watertight transverse bulkheads between cargo volumes.

|   |  |                     |                      |                |
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#### **4.6 Separation Distances and Separation Terms of Dangerous Goods in Warehouse Storages**

Handled at İskenderun Energy Production and Trade Inc. (İSKEN) coastal facilities is the bulk coal cargo within the scope of the IMSBC Code, and since no other type or kind of dangerous goods are handled , no separation is made.

There is no closed area as defined in Article 4, paragraph ö) (closed area) of the Directive on the Issuance of the Coastal Facility Dangerous Cargo Conformity Certificate in the areas where dangerous cargo (coal) is handled. In addition, the temporary storage of dangerous cargo (coal) is carried out in an open storage area located outside the coastal facility boundaries and not having the characteristics of a closed area.


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## 5. EMS GUIDE FOR HAZARDOUS LOADS HANDLED ON THE COASTAL FACILITY

The loading/unloading, handling and temporary storage of dangerous cargo, aims to contribute to the safe performance of these activities ;

- Hazardous substance classes,
- Labels of hazardous substances,
- Signs of hazardous substances,
- Emergency Assembly Points
- General Fire Plan,
- Notifications to be made inside and outside the facility in case of emergency,
- Coal handling information and rules,
- Operation procedure for safe handling of hazardous solid bulk cargoes
- Emergency response and organization scheme,
- Fire manual
- Use of fire extinguishers according to their types,
- Emergency procedure
- Matters to be taken into consideration during general handling,

The EmS guide , which includes the Emergency Response Methods and Emergency Table for ships carrying dangerous goods in case of emergencies such as fire, leakage and spillage that occur during the transportation of dangerous cargoes and includes the subjects mentioned above , is as in ANNEX-10.

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## 6. OPERATIONAL MATTERS

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

İskenderun Enerji Üretim ve A.Ş. anchor at a sufficient depth in the area determined according to the Ports Regulation, the coal is transferred to the 10,000-ton barges (limbo) with the Transshipper (floating crane) system , and as a result of the barges being carried to the pier by means of a tugboat, it is transferred to the closed conveyor system, for which all environmental precautions have been taken, and taken to the open storage area outside the coastal facility boundaries.

Barges carrying hazardous materials can approach our facility regardless of day or night, provided that the necessary precautions are taken. Considering the position of the barge carrying hazardous cargo, the separation of the barge will be planned in risky situations (adverse weather conditions or emergencies).

#### Possible Hazards of Hazardous Solid Bulk Cargoes


The hazards of Hazardous Solid Bulk Cargoes to be handled in the Port Facility are specified in the relevant safety data sheets and the IMSBC Code. However, regardless of the characteristics of the dangerous cargoes, the precautions for the following hazards will be taken for each hazardous material.

#### Emission of Hazardous Dusts

In cases where the transportation, handling or stacking of hazardous bulk solid cargoes may cause dust emissions, all necessary precautions shall be taken to prevent or minimize such dust emissions and to protect people and the environment from such emissions. All employees shall be warned about personal washing and hygiene, and that used clothing must be washed after handling hazardous materials. During handling , appropriate protective clothing, respiratory protection and, if necessary, protective creams shall be provided and provided to employees, depending on the type of hazard

#### Hazardous Vapor Emission/Oxygen Deficiency

Where the transport, carriage or stacking of hazardous solid bulk cargoes may give rise to emissions of toxic or flammable vapours, all practicable precautions shall be taken to prevent or minimise the occurrence of such vapour emissions and to protect persons and the environment from such emissions. When hazardous solid bulk cargoes which may give off a toxic or flammable vapour are carried, transported or stacked, suitable instruments shall be available for measuring the concentration of toxic or flammable vapours. Except in an emergency, no person shall be allowed into a confined space where a hazardous solid bulk cargo which gives off a toxic or flammable vapour is stacked or where oxygen is insufficient, unless it has been determined that the atmosphere in the area is not hazardous to human health or safety. If it is necessary to enter the space during an emergency, the person entering the space shall wear a self-contained breathing apparatus in accordance with confined space entry procedures.

|   |                                       |                     |                      |                |
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### **Explosive Dust Emissions**

Whenever hazardous solid bulk cargoes are transported or handled which may give rise to dust emissions which are responsible for an explosion upon ignition, all practicable precautions shall be taken to prevent such an explosion and to minimise the effects of an explosion should it occur. Precautions to be taken include ventilation of the enclosed space to limit the concentration of dust in the atmosphere, elimination of ignition sources, minimisation of material walls and hosing down rather than sweeping.

### **Simultaneously Flammable Substances and Substances Reacting with Water**

Hazardous solid bulk cargoes that may decompose into flammable or toxic vapours or cause a simultaneous explosion when in contact with water shall be kept as dry as possible. Such cargoes shall be transported only under dry weather conditions. These cargoes may only be handled in dry weather and stored in dry areas unaffected by rain/water. These storage areas shall be particularly checked for water resistance and shall be ensured to be watertight.

### **Oxidizing Agents**

Contamination with flammable or carbon-containing materials . Oxidizing substances shall be kept away from any heat or ignition source.

### **Inappropriate Materials/Substances That Interact With Each Other**

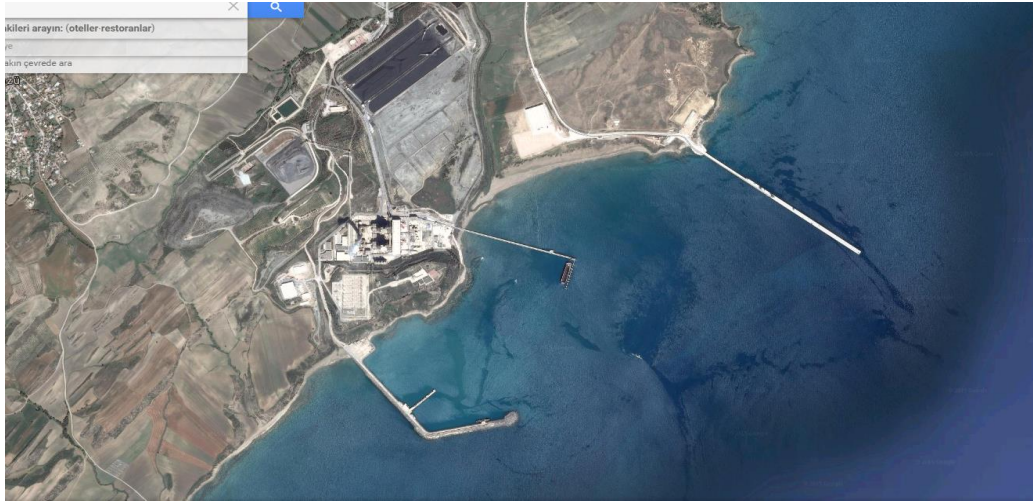
Hazardous solid bulk cargoes will not be transported, handled or stacked in a way that will cause a dangerous interaction with incompatible materials. Hazardous solid bulk cargoes will be handled and stored in a way that will not cause a dangerous reaction with other materials.

## **COAL HANDLING PROCEDURE**

### **Iskenderun Energy Production and Trade Inc. Coal Discharge System**

Sugözü Power Plant, which has a capacity of 1320 MW by operating with high-quality imported coal , is a base load power plant operating 24/7, 365 days a year and produces approximately 3% of the electricity in our country. The coal used is brought from different parts of the world by 150,000 - 200,000 tons of open sea dry cargo ships. Such ships require a sea depth of more than 20 meters when full. This sea depth is only available a few kilometers off the power plant. Therefore, a special coal transportation and discharge system was required during the planning phase of the project.





General location of the power plant and its surroundings

The special coal transportation and discharge system in question consists of transferring coal from open sea dry cargo tankers to special purpose and specially constructed sea transport vehicles manufactured for transportation/loading and transporting it to the relatively shallow coastal area. It was decided to use a floating platform for the transfer from open sea dry cargo ships to special purpose and specially constructed sea transport vehicles.


Transhipper (ISKEN) has 10,000 It is a double-hulled unloading platform in the form of a floating crane, which can accommodate a 100-ton barge (ARKAD 4 and ARKAD 5), and was manufactured in Europe and brought to the Gulf of Iskenderun.

The front and rear sections of two non-motorized barges (ARKAD 4 and ARKAD 5) are towed by specially equipped tugs . They can work together as a couple . Suitable for this purpose, the open sea tugboats (ARKAD 1 and ARKAD 2) and the boat used for personnel transportation (ARKAD 3) were manufactured in Tuzla and brought to Iskenderun Gulf.

The transshipment system consists of these 6 marine vessels and is used only for the transfer of coal from the Sugözü Power Plant. The transfer capacity of the system is approximately over 8,000,000 tons / year .

Especially the floating crane platform called Transhipper (ISKEN) requires special experienced and qualified personnel due to both its special structure and special working technique (although the platform is 108 meters long, three cranes side by side with a total working radius of well over 100 meters work on it without hitting each other and without affecting their mutual operations). In this respect, the operation of the entire system was given to the company Iskolden Taşımacılık ve Ticaret A.Ş., founded by the German company Oldendorff, the developer of this technology .

All transportation ( transshipment ) equipment and systems have been specifically manufactured for the purpose of transporting, shipping and unloading the coal needed by the Sugözü Power Plant as a whole, within the framework of international commercial agreements, and are operated only for this specific purpose.

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### **During Coal Handling**

For additional information on coal, the relevant section of the IMSBC Code should be consulted.

They are black, finely chopped petroleum refining residues in the form of powder and small pieces. The conditions specified in this section should not be sought for materials whose temperature is below 55°C when loading .


- Coal handling have their protective clothing and equipment ready for use. These are;

**Eyes:** In case of excessive dust, glasses should be used.

**Skin:** Gloves should be used.

**Respiratory:** Avoid breathing dust/fume/gas/mist/vapors. Keep a dust mask ready in case of dust exposure.

- The handling area in case of emergencies .
- That the team on duty for emergency response receives the necessary training in line with their duties . Personnel who have not received information about the emergency plan and medical first aid guide and training on how to use this guide will not be assigned to this operation.
- Personnel without the necessary training and information regarding coal handling are not assigned to this operation.
- All port personnel should be warned about the risks of carbon monoxide gases forming in the holds, and handling should begin after the holds are ventilated upon the ship's arrival.
- Employees working in the operation, for whatever reason, do not enter the empty spaces between the warehouses ( void space ) should not be entered.
- In the port and on the transporter, a cooling system (pressurized water spraying), breathing apparatus ( in excavators that will work in the hold ) and first aid materials must always be available.
- After the holds have been ventilated for a sufficient period, the necessary gas measurements should be made by the ship's personnel and the holds should be entered with the knowledge of the ship's personnel. Protective clothing to be used in emergencies (fire-resistant boots, gloves, overalls, headgear equipment and gas masks should be available in the administrative building and on the transshipper .
- There should never be any contact lost with the work machine operator or workers inside the warehouse. There is constant radio contact with both the work machine operators and other personnel who will be working in the warehouse.
- Handling after the operation, remove the deformed and excessively dirty personal protective equipment, wash it before re-use or inform the operation manager and have new ones provided.


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### **Important Points to Consider**

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

- Coals can give off methane, a flammable gas. Methane/air mixtures containing between 5% and 16% methane are explosive; electrical or frictional sparks, sparks such as those from a match or a cigarette, or open flames may be sufficient to cause an explosion. Methane is lighter than air and therefore accumulates at high points in cargo spaces or other enclosed spaces. If cargo spaces are not tightly sealed, methane may leak into adjacent enclosed spaces.
- Coals can be oxidized, causing depletion of oxygen in the cargo volume and increased concentrations of carbon dioxide or carbon monoxide. Carbon monoxide is an odorless gas, slightly lighter than air, and is flammable in mixtures of 12% to 75% by volume with air. It is toxic if inhaled, binding 200 times more to hemoglobin in the blood than oxygen. is connected.
- Some coals can self-heat in the load volume and self-heating can lead to self-combustion. Various flammable and toxic gases, including carbon monoxide, are produced. may appear.
- Some coals can react with water to produce acids that can cause corrosion. Various flammable and toxic gases, including hydrogen, can be produced. Hydrogen is an odorless gas, lighter than air, and can mix with air between 4% and 75% by volume. is flammable.
- Port personnel should be reminded that coal can burn internally, especially if it comes into contact with water during transportation.
- Port personnel should be reminded of the property of coal to produce METHANE gas and the resulting risk of POISONING, DEATH and explosion.
- Since the start of combustion in the hold will cause the formation of CARBON MONOXIDE, it should be reminded to the port personnel that a carbon monoxide level above 50 ppm indicates combustion in the hold and that there is not enough oxygen.
- Before the ship evacuation operation begins, the captain will receive Cargo Information and the ship's crew will take daily measurements of gas and temperature during the voyage ( Gas Monitoring - CH 4 - Temperature ) must be given to us.
- The ship discharge plan is prepared by us together with the ship officer.
- Before discharge, hatch covers will be opened and ventilation will be carried out.

| <b>SLIP ANGLE</b>          | <b>BULK DENSITY(kg/m³)</b> | <b>STACKING FACTOR(m³/t)</b> |
|----------------------------|----------------------------|------------------------------|
| Valid Not                  | 654-1256                   | 0.79-1.53                    |
| <b>MATERIAL DIMENSIONS</b> | <b>CLASS</b>               | <b>GROUP</b>                 |
| It can go up to 50 mm.     | MHB                        | B ( and A)                   |

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### **Dangers**

Coal can create flammable atmospheres, self-heat, cause oxygen depletion, and cause corrosion of metal structures. If particles smaller than 5 mm are present in 75% or more of the coal load, liquefaction may occur.

### **Stacking and Separation Terms of**

More than one hazardous solid bulk cargo that would create stacking and segregation conditions is not stored at our port facility at the same time.

### **Against Ventilation Conditions Measures**


Dangerous Solid Bulk Cargoes that require ventilation conditions are not handled or stored in our port facility. Coal cargo is not stored in closed areas.

Coal cargo handling operations, the ventilation conditions included in the IMSBC code provisions are complied with.

### **Other Precautions**

In case of fire, the measures specified in Section 8 of this document and the Hazardous Materials Emergency Plan are implemented.

- All port personnel should be warned about the risks of METHANE and CARBON MONOXIDE gases that may form in the holds, and upon ship arrival, the holds should be ventilated and entry into the holds should be ensured. In case of burns, a safe and suitable area should be determined outside the stock area where the goods can be taken from the hold and spread out to cool.
- A cooling system (pressurized water spraying) and a breathing apparatus ( for excavators that will work in the hold ) must always be kept ready in the port.
- Gas measurements should be made not only in the holds, but also in closed areas adjacent to the hold, on the deck, in closed areas such as blinds, storage areas, portholes , etc. Port personnel should be reminded not to enter a closed area where measurements have not been made for any reason. Evacuation officers should not enter the empty spaces between the holds ( void spaces) for any reason. space ) should not be entered.
- Since methane gas is lighter than air, it will accumulate at the top of the closed section. Therefore, as the evacuation continues, gas measurements should continue to be made on excavators working in the holds.
- A work machine operator and those working in the warehouse should never be out of contact while inside the warehouse . There is constant radio contact with both the work machine operators and other personnel who will be working in the warehouse.
- Never enter the empty spaces between the warehouses ( void space ), and evacuation workers should be warned not to enter enclosed spaces on deck without measurements.

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- If the burning is close to the surface, the coal in this area can be taken to the beach and extinguished. If the coal is on fire on the beach, it is appropriate to spray it with water, foam or sand.
- Water should not be sprayed into the hold. However, cold water can be sprayed outside the hold for cooling purposes.
- If the location of the heating is uncertain, foam can be sprayed into the holds, the lids closed, and the combustion can be stopped by consuming the oxygen.

## 6.2 Procedures Regarding the Additional Precautions to be Taken According to Seasonal Conditions for the Harvest, Discharge and Limbo Transactions of Dangerous Goods


- Seasonal conditions should be taken into account in the loading/unloading of hazardous materials. In cases of unfavorable weather conditions, poor visibility, lightning and electrical conditions, handling of flammable, combustible and explosive loads should be postponed or stopped for a while.
- To continue loading/evacuating in unfavorable conditions or, in cases of necessity, to keep fire, fire brigade, fire extinguishing tugs and emergency response teams waiting in conditions where they can quickly intervene in a possible undesirable situation.
- In cases where similar conditions persist, the personnel working should be selected from experienced personnel, frequent planning of rest periods in extremely intensive work, increasing lighting, etc. precautions should be taken.
- In cases where adverse weather conditions, currents and winds are deemed to make loading/discharging unsafe, measures such as stopping the activity or even lifting the barges to the anchorage or breakwater pier will be implemented.
- Marine vessels, floating cranes and coal barges used in coal limbo and loading/unloading services are sheltered at the breakwater pier when they are not performing limbo operations in bad weather conditions.

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

Hazardous cargo is handled . This is indicated with warning signs in appropriate locations on the shore facility.

"Explosion Protection Document " within the scope of the Regulation on the Protection of Employees from the Dangers of Explosive Atmospheres published in the official gazette dated 30/04/2013 and numbered 28633 belonging to the İskenderun



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Energy Production and Inc. coastal facility. According to the explosion protection document, there are no zones designated as Zone 0 and Zone 1 in areas where hazardous cargo is handled .

The coastal facility has been certified by an inspection organization accredited by TÜRKAK regarding the suitability of adequate lighting installations, electrical components, grounding installations and lightning protection equipment.

### **Hot Work**

If hot work is to be carried out in areas where hazardous cargo is handled and temporarily stored; measurements are taken to ensure that the areas where the work will be carried out are not flammable and/or explosive environments and that there is insufficient ventilation and oxygen, and the area where the work will be carried out and the areas adjacent to it are frequently inspected . Inspections within this scope are carried out by the shore facility in the form of procedures and checklists. These issues include the following at a minimum:

- It must be ensured that hazardous loads and other flammable materials are removed from work areas and adjacent areas.
- Flammable building materials must be effectively protected against accidental ignition.
- Open pipes, pipe penetrations, valves, joints, gaps and open parts must be covered and sealed to prevent flames, sparks and hot particles from spreading from work areas to adjacent areas or other areas.
- A sign stating the permit for the hot work to be done and the safety precautions to be taken must be hung in the work area and at all work area entrances, and at least one fire extinguisher or other suitable fire extinguishing equipment, together with all its apparatus, must be kept in an easily accessible place, ready for immediate use.
- The permit and safety precautions must be easily visible and clearly understandable to those who will be doing the hot work.

### **HOT WORK PROCEDURE**

#### **1. Aim**

To ensure that necessary safety measures are taken and implemented in all hot works *within the* Sugözü Power Plant .


#### **2. Scope**

All hot works within the boundaries of Sugözü Power Plant.

Minimum safety issues regarding hot work operations and procedures are specified in ANNEX-1 Article 21 of the Directive on the Issuance of Coastal Facility Dangerous Cargo Conformity Certificate.

#### **3. Definitions**

**Hot work:** Any kind of heat treatment, drilling, cutting, grinding, soldering and any kind of welding to be performed within the borders of Sugözü Power Plant, in addition to these, hot tire coating in closed areas and their drying processes, working with

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flammable and combustible substances such as solvents in closed areas are defined as hot work.

These things create sparks , arcs , surfaces Work that causes heat to exceed 100 °C, creates open flames, causes excessive heating as a result of friction, heats materials to ignition temperature or requires fire-fighting preparation at any stage of the work. is defined.

#### 4. Responsibilities

##### **Shift Manager/Operations Engineer;**

To ensure that risks in the area where hot work will be done are eliminated and necessary safety precautions are taken.

##### **Job security Chief/Engineer/ Technician;**

- Discuss the risks in the hot work area with the employer. to evaluate,
- The precautions to be taken before and during the job are written on the hot work form and submitted to the job owner. to give,
- Checking the compliance of the hot work to be done with the scope of the work defined in the Work Permit. to do,

##### **Chief Maintenance Engineer/Maintenance Engineer/Maintenance Foreman;**

To ensure that risks in the place where hot work will be done are eliminated, necessary work safety measures are taken and continuity is ensured. To prevent work with the same Work Permit outside the scope of the work defined in the Hot Work Permit.

To ensure that all precautions specified in the hot work permit are taken and that the precautions are continued as long as the work continues.

To inspect the work area during the work period, to observe the changing environment and working conditions, and to stop the work when necessary and request additional measures from the owner of the work and other responsible persons.

Business Owner;


To take the Safety Precautions to be Taken Before Starting Work, as specified in the Hot Work Permit Form, and to ensure the continuity of these precautions as long as the work continues, not to do any work other than that specified in the Work Permit, and to comply with general work safety rules.

In addition to all these precautions, due to the potential risk of hydrogen explosion, obtain written approval from the Electrical Maintenance Chief Engineer/Electrical Maintenance Engineer and the Mechanical Group Manager or Turbine Maintenance Chief Engineer/Turbine Maintenance Engineer before starting work on hot work permits within the Turbine building.

Due to the similar risk possibility, for hot work permits in the Electrochlorination building, obtain written approval from the Flue Gas Treatment and Coal-Ash Transfer Department Manager and the Energy Planning and Reporting Department Manager or the FGD Maintenance Engineer before starting work.

##### **Field Operator;**




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- Performing hot work without a hot work permit in the area of responsibility to obstruct
- Working outside the scope and duration specified in the work permit and hot work permit prevent from being done
- All work carried out in the area of responsibility during the work permit at regular intervals throughout the shift. to inspect
- Hot work during care your team, in the region can be found other personnel And facility To report any situations that may endanger the shift manager/operations engineer and to stop the work if necessary.
- Work carried out by different teams at the same time may create Stopping work when necessary against dangers,
- Checking the suitability of the workplace at the end of the job,
- Fire inspection to make the specified field isolations to actualize


## 5. Instructions

### 5.1. Hot Work Permission

- Possible way, hot work will be prevented in the operation area, the parts and equipment on which hot work will be done will be dismantled and hot work will be carried out in the maintenance workshop. Hot Work Permit for hot work that must be done on site will be taken.
- It is essential that risks are assessed and precautions are taken for all work. precautions should be written in job-specific procedures, instructions, work method statements, work risk analyses or work permit forms and should be taken into account as a whole.
- The Work Permit informs the Shift Supervisor/Operations Engineer about the work to be done; based on this, the Shift Supervisor/Operations Engineer decides to issue the Hot Work Permit Form if necessary. The Shift Supervisor/Operations Engineer gives the blank Hot Work Permit Form to the Employer. The Employer contacts the Work Safety Supervisor/Engineer/Technician; explains the work to be done and shows the area where he/she will work to the Work Safety Supervisor/ Engineer/ Technician. The Work Safety Supervisor/Engineer makes a risk assessment regarding the work to be done specified in the Work Permit, checks the work area, decides on the safety measures he/she deems necessary to be taken before starting the work and records it in the Hot Work Permit. After checking that the safety measures he/she deems necessary to be taken are provided, he/she signs the section reserved for him/her on the Hot Work Permit Form by stating his/her name and date. The PTW number of the work to be done is stated on this document and is valid only with the relevant Work Permit. This form is prepared in 2 (two) copies. The copy remains with the Business Owner, the original remains with the PTW Office.

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- Flammable, corrosive, flammable, explosive materials near the work area must be kept away by the Business Owner. is removed / removed from the area.
- The fire prevention and fire extinguishing equipment required to be kept in the work area, as specified in the Hot Work Permit Form, are provided by the Employer and kept available throughout the work.
- To prevent the cut and worked parts from falling down when hot work is done at height. A blanket should be laid down below or a net-tarpaulin should be stretched and/or the areas where pieces may fall should be limited and entrances and exits to these areas should be prevented.
- In areas where it is not possible to completely clean the coal dust, a fire watcher is required when hot work is being done. This is stated on the Hot Work Permit form. is specified.
- Is not possible to completely clean the coal dust , water is applied before hot work is carried out. The ground must remain wet throughout the work. is provided.
- When performing hot work, in addition to the minimum PPE , personal protective equipment specified in the Hot Work Permit form (hot work clothing, high heat resistance gloves and shoes ,eye and face protection, respirator, armband, knee pads, foot protection, etc.) worn.
- If hot work is to be done in a closed area , a Closed Area Permit is also obtained. Based on this, the environment The gas concentration in the air is measured . An air suction system is arranged to draw in the welding gas that occurs during operation .
- Lighting and hand tools in the closed area where work is carried out are supplied by an insulated transformer. This is stated in the Hot Work Permit form.
- Plan due to the possibility of explosion , hot work should be carried out after taking special precautions specified in the 10405-T-28 Explosion Protection Instruction, after ventilation and sweeping operations are carried out and if gas measurement is carried out in the environment. can be done.
- After purging with CO2 and air, then hot work is done.
- Oil and fuel pipes are kept under inert gas (N2 etc. ) for hot work. is done.
- In addition to these instructions, during hot work inside the Washer Tower and rubber-lined tanks, act in accordance with the 20201- T-13 Washer Tower Working Instructions. will be done.
- When hot work is done in chemical tanks, chemical resistant personal protective equipment is used , continuous forced ventilation is provided.
- The Shift Supervisor/Operations Engineer and Occupational Safety Chief/Engineer/Technician deem necessary to be taken during hot work are specified in the Hot Work Permit Form; these precautions and measures are carried

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out by the Job Owner throughout the work, checked by the Chief Maintenance Engineer/Maintenance Engineer/ Maintenance Foreman , and followed up by the Occupational Safety Chief /Engineer/Technician.

- Fire extinguishers used during work and work safety equipment that needs to be replaced must be reported to the Work Safety Chief/Engineer/Technician and replaced with a usable one. must be provided.
- During coal discharge from the ship (while there is a coal ship), for hot work to be done on the pier, or for hot work to be done in the coal stock area, permission must be obtained from the Harbour Master.*
- At the end of the Hot Work, before the Work Permit is closed, the Job Owner notifies the Field Operator to inspect the area where the work was done and to conduct a fire inspection after the work is completed. Provides.

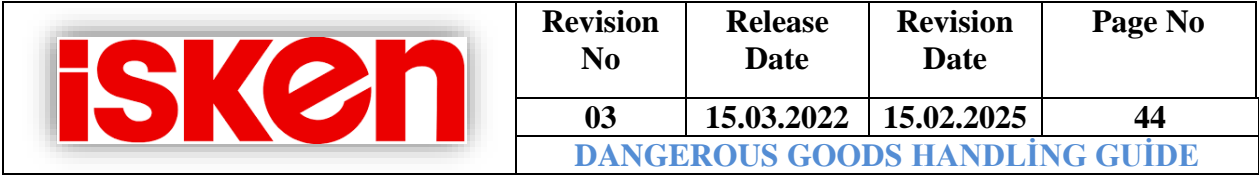
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|---|---|-----------------------------------|
| <br>ISKENDERUN ENERGY<br>PRODUCTION AND TRADE INC. | <b>HOT WORK PERMIT FORM</b><br><b>10401-T-01-F-01</b> | Page/Page No..... 42              |
|   |   | Total / Total Page .... 115       |
|   |   | Revision / Revision No.: 2        |
|   |   | App.Date/ApprovalDate: 20.02.2018 |

| JOB DESCRIPTION   |  |  |  |
|---|--|--|--|
| Work to be done:  |  |  | Work Permit Number:.....                             |
| Area and Equipment Where the Work Will Be Done:                     |  |  |  |
| Duration of the Work: (Maximum 30 days)                             | Start Date and Time                                  | End Date and Time  |  |
| TYPE OF HOT WORK  |  |  |  |
| <input type="radio"/> Oxygen Cutting                                | <input type="radio"/> Gas Welding                    | <input type="radio"/> Heating with Torch, Annealing              | <input type="radio"/> Tyre Coating, Drying           |
| <input type="radio"/> Electricity source                            | <input type="radio"/> Argon Source                   | <input type="radio"/> Heat Treatment                             | <input type="radio"/> Drilling                       |
| <input type="radio"/> Grinding, Stone Cutting                       | <input type="radio"/> Soldering                      | <input type="radio"/> Polyethylene Pipe Welding                  | <input type="radio"/> Other.....                     |
| EQUIPMENT AND TOOLS TO BE USED:                                     |  |  |  |
| FLAMMABLE MATERIALS IN THE ENVIRONMENT                              |  | IGNITION SOURCES IN THE ENVIRONMENT                              |  |
| <input type="radio"/> Coal pile                                     | <input type="radio"/> Coal dust                      | <input type="radio"/> Mechanical friction                        | <input type="radio"/> Electric current, arc          |
| <input type="radio"/> Wood, paper, fabric etc.                      | <input type="radio"/> Flammable, combustible liquids | <input type="radio"/> Static electric charge                     | <input type="radio"/> Hot slag, sparks               |
| <input type="radio"/> Flammable gases (LPG, H <sub>2</sub> , .....) | <input type="radio"/> Plastic, PVC etc.              | <input type="radio"/> Hot surfaces                               | <input type="radio"/> Open flame                     |
| <input type="radio"/> Wastes  | <input type="radio"/> Other.....                     | <input type="radio"/> Equipment that heats up while operating    | <input type="radio"/> Other.....                     |
| FIRE EXTINGUISHING METHOD TO BE APPLIED                             |  | REQUIRED FIRE FIGHTING EQUIPMENT                                 |  |
| <input type="radio"/> Choking(leaving without O <sub>2</sub> )      | <input type="radio"/> Cooling                        | <input type="radio"/> Portable CO <sub>2</sub> Fire Extinguisher | <input type="radio"/> Portable KKT Fire Extinguisher |
|   |  | <input type="radio"/> Fire hose (water / foam)                   | <input type="radio"/> Portable and fixed monitors    |
| <input type="radio"/> Fuel Cut-Off                                  | <input type="radio"/> Chemical                       | <input type="radio"/> Fire blanket                               | <input type="radio"/> Fire truck                     |
|   |  | <input type="radio"/> Mobile foam vehicle                        | <input type="radio"/> .....                          |



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| PRECAUTIONS TO BE TAKEN   | TO | H | N/A | EXPLANATIONS |
|---|----|---|-----|--------------|
| Additional work permit-PtW must be obtained. (Explain excavation, entry into confined spaces, testing, etc.)  |    |   |     |              |
| Flammable, corrosive, flammable, explosive materials in the area that may be affected by hot work must be removed. Hot work should not be done simultaneously in the same environment with these materials.             |    |   |     |              |
| The area to be worked on and areas where sparks/burrs/molten metal may splash or fall should be wetted with water.  |    |   |     |              |
| Entrances to the work area must be prevented with warning signs, safety chains or barriers.   |    |   |     |              |
| A fire blanket must be placed in certain areas. (Explain.)  |    |   |     |              |
| Welding clothing (pants, jacket, knee pads, gloves, apron, etc.) is required.   |    |   |     |              |
| General ventilation will be provided. (Explain natural or forced.)  |    |   |     |              |
| Polluted air produced due to work in a closed area will be removed. (Explain the method.)   |    |   |     |              |
| Respiratory protection will be used. (Dust mask, filtered gas mask, etc. Explain.)  |    |   |     |              |
| Positioning and work planning will be made in accordance with wind direction and intensity.   |    |   |     |              |
| Additional lighting will be provided.   |    |   |     |              |
| CO2 or air sweeping. (Explain.)   |    |   |     |              |
| Inert gas will be released into the environment. (Explain.)   |    |   |     |              |
| Gas measurement should be done in the environment. (Explain.)   |    |   |     |              |
| Ex-proof devices will be used in case of an explosive environment.  |    |   |     |              |
| Written approval from the Electrical Maintenance Department must be obtained before work.   |    |   |     |              |
| Seat belts must be worn. A lifeline system must be installed.   |    |   |     |              |
| Scaffolding / working platform must be installed.   |    |   |     |              |
| The cut piece should be fixed against falling and a net/tarpaulin should be stretched underneath.   |    |   |     |              |
| A fire watchman will be determined and assigned throughout the work. (Specify name.)  |    |   |     |              |
| After the work is completed, the site will be checked and hot objects will be allowed to cool.  |    |   |     |              |
| Fire detectors will be disabled. (Smoke, flame, heat etc. detectors)  |    |   |     |              |
| <b>Effective protection will be provided against the ignition of flammable building materials.</b>  |    |   |     |              |
| <b>Pipes, pipe transitions, valves, joints and gaps will be sealed to prevent flames and sparks from spreading to neighboring areas.</b>  |    |   |     |              |
| <b>At least one fire extinguisher and other extinguishing equipment will be kept ready for use in the work area and will be easily accessible.</b>  |    |   |     |              |
| <b>Additional safety precautions and use of PPE:</b>  |    |   |     |              |
| Hot work is appropriate provided that the above-mentioned precautions are followed and there is no change in conditions.  |    |   |     |              |
| <b>Occupational Safety Specialist</b> Name Surname:..... Date/Time:..... Signature:   |    |   |     |              |
| All conditions and measures specified in the hot work permit have been understood, accepted and implemented. I undertake that additional measures that may be specified in the daily permit renewal will also be taken. |    |   |     |              |
| <b>Accepting the Job</b> :..... Date/Time:..... Signature:  |    |   |     |              |
| Hot Work permit was given after the necessary checks and isolations were made.  |    |   |     |              |
| Permission Granting Name and Surname: ..... Date/Time: ..... Signature:   |    |   |     |              |
| <b>Department / Institution requiring additional permission:</b> .....  |    |   |     |              |
| <b>Permission Granting Name and Surname:</b> ..... <b>Date/Time:</b> ..... <b>Signature:</b>  |    |   |     |              |



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## 7. DOCUMENTATION, CONTROL AND REGISTRATION :

### 7.1 What Are All Mandatory Documents, Information And Documents Related To Dangerous Goods, Procedures For Their Supply And Control By Relevant Persons

The following documents regarding hazardous substances are kept up to date by the coastal facility .

- IMSBC CODE, International Code for Solid Bulk Cargoes Carried by Sea
- Handbook for Terminal Representatives on Loading and Discharging Solid Bulk Cargoes (IMO-MSC/Circ.1160; IMO-MSC/Circ.1230; IMO- MSC.1/Circ.1356)

The Coastal Facility to safely handle the hazardous cargo arriving at the facility and take appropriate precautions, the following documents must be obtained from the loader / ship . These documents are ;


- i. Cargo Information Form *for Solid Bulk Cargoes* )
- ii. Certificate *of Compliance of the Ship For The Carriage of Solid Cargoes* )
- iii. Loading Port Draft Survey Report *(LP Draft Survey Report)*
- iv. Load *Stowage Plan*
- v. Safety Data Sheet *(MSDS/SDS)*

#### **Solid Bulk Cargo Information Form**

The shipping documents prepared by the shipper shall include a “Signed Certificate or Hazardous Cargo Notification Document” stating that the shipment to be transported is properly packaged, marked, labeled and in suitable condition for shipment.

Ships and marine vessels carrying dangerous cargo must submit a notification document containing detailed information about their cargo to the port authority in writing through the relevant parties at least twenty-four hours before entering the port administrative area; and ships and marine vessels whose voyage time until entering the port area is less than twenty-four hours, immediately after departure from the coastal facility. In case of non-compliance with the notification obligation or if the notifications do not contain correct information, administrative action may be taken against the person making the notification and the person may lose their berthing, departure and passage order, if any.

The Dangerous Goods Notification Document is provided to the carrier via EDP (Electronic Data Processing) or EDI (Electronic Information Interchange) techniques, the shipper information shall be in a state that can be produced without delay as a printed document in the order required in this section.

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### SOLID BULK CARGO INFORMATION FORM


|  |   |
|--|---|
| BCS  |   |
| Loader   | Transport document number   |
| Buyer  | Carrier   |
| Transport Vehicle<br>Port/ Departure Point<br>Port/ Arrival Point  | Instructions or other matters   |
| Load about general information<br>( material type / grain size )   | Gross mass (kg/ton)   |
| Pouring your burden specifications , if any : Stack factor :<br>Slip angle , if any :<br>Load surface leveling Procedures :<br>Potential danger supply If yes, chemical properties *:<br>* For example , Class & UN Number or "MHB"  |   |
| Your load group<br>Group A and<br>B* Group A*<br>Group B<br>Group C<br><br>Liquefiable Loads for ( Group A and Group A and B loads )   | Portable maximum moisture In<br><br>shipment moisture percentage  |
| Your load attention to be done Other required features<br>( for example , high levels of water soluble )   | Additional certificate / certificates *<br><br>Humidity percentage And portable maximum moisture certificate<br>Ventilation certificate<br>Exceptional certificate<br>Other ( specify )<br><br>* Necessary in cases |
| Declaration<br>Enthusiasm said your burden complete And TRUE in this way explained , available my information in the light of And In my opinion available test results and other specifications will be loaded the cargo -most Good in this way representation that you did declaration I do this. | Signature owner<br>Name Surname / Position , Affiliated It is<br><br>Company / Institution Place And history<br><br>Loader on behalf of signature   |

### Ship's IMSBC Code Certificate

In accordance with the provisions of SOLAS Regulation VII/7-2.2, all ships carrying solid bulk dangerous goods shall have a special list or manifest clearly stating the dangerous goods on board and their location. In place of such a special list or manifest, a detailed loading plan shall be provided stating the classes to which all dangerous goods are carried and their location on board. available.

When transporting dangerous solid bulk cargoes, emergency instructions to be followed in case of incidents related to these cargoes are posted on board. will be found



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Certificate of Conformity when carrying dangerous solid bulk cargoes other than Class 6.2 and Class 7 on cargo ships of 500 gross tons and above constructed on or after 1 September 1984 and on cargo ships of less than 500 gross tons constructed on or after 1 February 1992, subject to SOLAS Regulation II-2/19.4 (or II-2/54.3). will be found.

### **Load Stowage Plan**

A stacking plan containing information about the loads in the holds of the ships that will be discharged to the coastal facility is obtained from the authorities before the discharge.

### **Safety Data Sheet**

In accordance with the directive on the issuance of a coastal facility dangerous cargo certificate, Article 18 of ANNEX-1, a safety data sheet for the coal cargo is provided from each ship that is planned to be discharged .

### **Loading Port Draft Survey Document**

draft indicating the weight of the cargo to be discharged from all ships at the shore facility. survey report is received.

### **Other Necessary Information And Documents**


- In some cases, specific certificates or documents will be required as specified below.
- An air corrosion certificate, as required for certain entries on the Hazardous Materials List
  - A certificate containing information on moisture content and maximum portable humidity;
  - A certificate excluding the substance, material or article from the provisions of the IMDG (see separate entries for charcoal, fish meal, seed meal, etc.);
  - Formulations of currently allocated self-reactive substances and organic peroxides , a notification by the competent authority of the country of origin of the approved classification and transport conditions.

#### **7.1.1 Documents Required To Be On Board**

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

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

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

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

### 7.1.2 Other Necessary Information And Documents

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

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

### 7.1.3 Multimodal Hazardous Substances Form

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


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

## 7.2 Procedures for Keeping Up-to-Date List of All Dangerous Goods in the Coastal Facility Site and Other Related Information Regularly and Completely

The port facility is obliged to provide information indicating the class, quantity, emergency response methods and locations of all existing dangerous cargo to the relevant parties at any time upon request.

Records of coal, which is the only dangerous cargo handled in our port, will be kept by the operations department, including the information in section 7.3. This information is kept in a way that only authorized personnel can access it and is shown when requested.

The 3-monthly dangerous goods activity report regarding the dangerous cargoes handled is submitted to the port authority by the dangerous goods security consultant.

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

Planning and operation coordinated, checking the accuracy of the following information on the dangerous cargo documents prepared by the shipper for the dangerous cargo to be accepted to the port. they do;


1. BCSN for loads listed in this Code. Secondary names in addition to BCSN available;
2. Load group (A and B, A, B or C);
3. If yes, the load IMO class;
4. If available, the UN number of the cargo, with the letters UN at the beginning will be;
5. Total load to be delivered amount;
6. Stacking factor;
7. Load level leveling conditions and surface leveling where necessary procedures;
8. If any, the shear condition of the load and the shear angle including,;
9. In the transport of concentrates or liquefiable type loads, a data sheet containing the moisture content of the load and the maximum transportable moisture content information. certificate;
10. Possibility of wet ground occurrence
11. Toxic or flammable gases, if any, that may be emitted by the load;
12. If any; flammability, toxicity, corrosivity and oxygen consumption of the load tendency;
13. Self-heating characteristics of the load and load leveling, if any need;
14. If in contact with water, it may emit flammable gases. features;
15. Radioactive properties, if any; And
16. Other requested by national authorities information.

This information is transmitted to the Tally Managers, Field Managers, Warehouse Officers, HSE and the personnel who need to know via terminals/documents, and the control of the incoming dangerous cargo. If the information received from the Operation and the cargo carry different information, the Operation is immediately informed and the Shipper is instructed to verify the information regarding the dangerous cargo and correct any missing errors. is given.

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

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

Checked that the safety data sheet (MSDS) is included with the dangerous goods for all dangerous goods to be accepted into the port .

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## **7.5 Procedures for Keeping Records and Statistics of Dangerous Goods**

Handled at our Port Facility will be reported to the Port Authority by DGSC in quarterly periods.


Statistical evaluations from the records of the dangerous goods handled annually in our port are made by the technical office.

The monthly count and control reports of dangerous goods stored in our port area are prepared by the technical office and presented to the management. Records and reports are archived by the departments in 5-year periods .

## **7.6 Information on Quality Management System**

As İskenderun Energy Production and Trade Inc., a system has been established and implemented in our facility in accordance with the standards and conditions of ISO 9001:2015 Quality Management System, ISO 50001 Energy Management System, ISO 45001 Occupational Health and Safety Management System and ISO 14001-2015 Environmental Management System.

Internal audits conducted with the "Quality Management System Form on Handling of Dangerous Goods", which specifies the requirements within the scope of the "Regulation on the Transport of Dangerous Goods by Sea and Loading Safety" and the "Directive on the Dangerous Goods Conformity Certificate of Coastal Facilities" regarding the dangerous goods conformity certificate at the coastal facility, have been integrated into the quality management system and are conducted under the supervision of the Dangerous Goods Safety Advisor and the facility manager.

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## **8. EMERGENCIES, EMERGENCY PREPAREDNESS AND RESPONSE**

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

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

For this purpose, an Accident Prevention Policy (APP) has been prepared in order to prevent accidents that may be caused by dangerous substances in our port facility. The following issues will be taken into account in creating the emergency strategy at the coastal facility.


- Prevention of Accidents
- Preparation of Emergency Action Plan
- Implementation and Practice of Emergency Procedures
- Regular Checking of Emergency Equipment
- Implementation of the Plan When an Emergency Occurs
- Analyzing and reporting the incident thoroughly to prevent recurrence

Intervention to Hazardous Situations that pose/may pose a risk to life, property and/or the environment in our facility will be carried out according to the Emergency Action Plan prepared by our facility.

### **8.2 Information on the Opportunity, Capability and Capacity of the Coastal Facility to Respond to Emergency Situations**

#### **Capacity to Interfere with Fire**

- 2 Storage Tanks (800 m<sup>3</sup> and 1000 m<sup>3</sup>)
- Seawater suction connection.
- 1 Piece Diesel Pump
- 3 Electric Pumps
- 3 Boiler Fire Pumps
- Fire Circuit Pressure 9 to 14 Bar
- 1256 m DN200 Fire pipeline
- 3978m DN150 Fire pipeline
- 136 m DN80 Fire pipeline
- 95 external hydrants and fire cabinets
- 138 interior hydrants and fire cabinets
- 492 Pieces 6 Kg. Dry Chemical Powder

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- 173 Pieces . CO<sub>2</sub> Cylinder
- 6 Pieces 50 Kg Foam, with trolley
- 1 Fire Truck

| VEHICLE INFORMATION       |  | EXTINGUISHING EQUIPMENT INFORMATION |   |
|---------------------------|--|-------------------------------------|---|
| <b>Brand</b>              | MERCEDES-BENZ  | <b>Manufacturer</b>                 | VOLKAN FIRE   |
| <b>Year of production</b> | 2013   | <b>Pump</b>                         | 3200 lt / min at 10 bar   |
| <b>Chassis Number</b>     | NMB37530312132095  | <b>Water tank</b>                   | 5000 liters   |
| <b>Engine No.</b>         | 902915C1027187   | <b>Foam Tank</b>                    | 500 liters  |
| <b>Number plate</b>       | 06 FE 0756   | <b>KKT Tank</b>                     | 250 kg  |
| <b>Loading</b>            | Maximum vehicle mass: 11750 kg<br>Max Check. mass : 18000 kg | <b>Monitor</b>                      | <ul style="list-style-type: none"> <li>• It can move down 20°, up 70°, horizontal 360°.</li> <li>• 2000 lt / min at 10 bar , 65 m water discharge, 40 m foam throw height.</li> </ul> |

## Leakage and Spill Opportunity , Capability and Capacity


Hazardous material handling in our facility are experienced personnel who have received all necessary training. It is acted according to the safety data sheet and international contract codes against leakage and spillage. Marine pollution due to leakage or spillage Communication is provided with the company with which an agreement has been made against marine pollution.

### 8.3 Arrangements Regarding First Responding to Accidents Involving Dangerous Goods

Accidents that can be caused by dangerous substances in our port facility are in the form of Fire and Spill / Leakage / Spill. Their first response procedures are described in headings 8.3.1 - 8.3.2 and 8.4 .

#### 8.3.1 Against Fire Caused By Hazardous Substances

- Handled at the port facilities , the Emergency Plan (EMS) attached to the IMDG CODE will be taken into account.
- The measures to be applied in the emergency plan for fire are generally as follows.
  - FA (General Fire Plan)
  - FB(Explosives and objects)
  - FC(Non-Flammable Gases)
  - FD(Flammable Gases)
  - FE (Flammable Gases that do not react with water)
  - FF(Temperature Controlled Self-Reactants and Organic Peroxides)
  - FG(Substances Reacting With Water)
  - FH(Oxidizing Substances with Explosive Potential)
  - FI (Radioactive Substances)
  - FJ(Self-Reactants and Organic Peroxides With Uncontrollable Temperature)
- Of the cargo handled in our port facility and in case of fire, the IMDG Code and IMSBC Code additional tables to be taken into account are as follows

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| <b>FAME</b> | <b>NAME AND DESCRIPTION</b> | <b>EMS (FIRE)</b>                               |
|-------------|-----------------------------|---|
| -           | COAL                        | Respond to fire according to IMSBC Code Annex-1 |

### 8.3.2 Precautions To Be Taken Against Spillage/Leakage/Spill That May Be Caused By Dangerous Goods


Accidental spillage/leakage/spill involving dangerous goods handled at the port facilities In case of emergency, the Emergency Plan (EMS) attached to the IMDG CODE will be taken into account.

• The measures to be applied in the emergency plan for spillage/leakage/spill are generally as follows.

- SA ( Toxic substances)
- SB( Corrosive Substances)
- SC ( Flammable, Corrosive Liquids)
- SD(Flammable Liquids)
- SE(Flammable Liquids, Floatable)
- SF(Water-soluble Marine Pollutants)
- SG(Flammable Solids and Self-Reacting Substances)
- SH(Flammable Solids "Flammable Substances")
- SI ( (Flammable Solids “Repackaging Possible”)
- SJ(Wet Explosives, Some Self-Heating Substances)
- SK(Temperature Controlled Self-Reacting Substances)
- SL(Substances that Burn Quickly and React with Water)
- SM(Sudden Burn Damage)
- SN(Substances Actively Reacting with Water)
- SO(Substances Hazardous When Wet “Materials that cannot be collected”)
- SP(Substances Hazardous When Wet “Collected Substances”)
- SQ(Oxidizing Substances)
- SR(Organic Peroxides)
- SS (Radioactive Substances)
- ST (Biological Hazardous Hazardous Substances)
- WATER ( Flammable, Toxic and Corrosive Gases)
- SV(Flammable and Non- Toxic Gases)
- SW(Oxidizing Gases)
- SY(Explosive Chemicals)
- SZ( Toxic Explosives)

Handled at our port facility is involved in an accident and spills/leaks/spills, the following should be considered from the IMDG CODE Annex tables: like this.

| <b>FAME</b> | <b>NAME AND DESCRIPTION</b> | <b>EMS LEAK / SPILL</b> |
|-------------|-----------------------------|-------------------------|
| -           | COAL                        | IMBSBC ANNEX-1          |

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### 8.3.3 Medical First Aid Guide (Mfag) Will Be Used In Accidents Involving Dangerous Substances

The Points to Be Considered While Using the Guide are as follows.

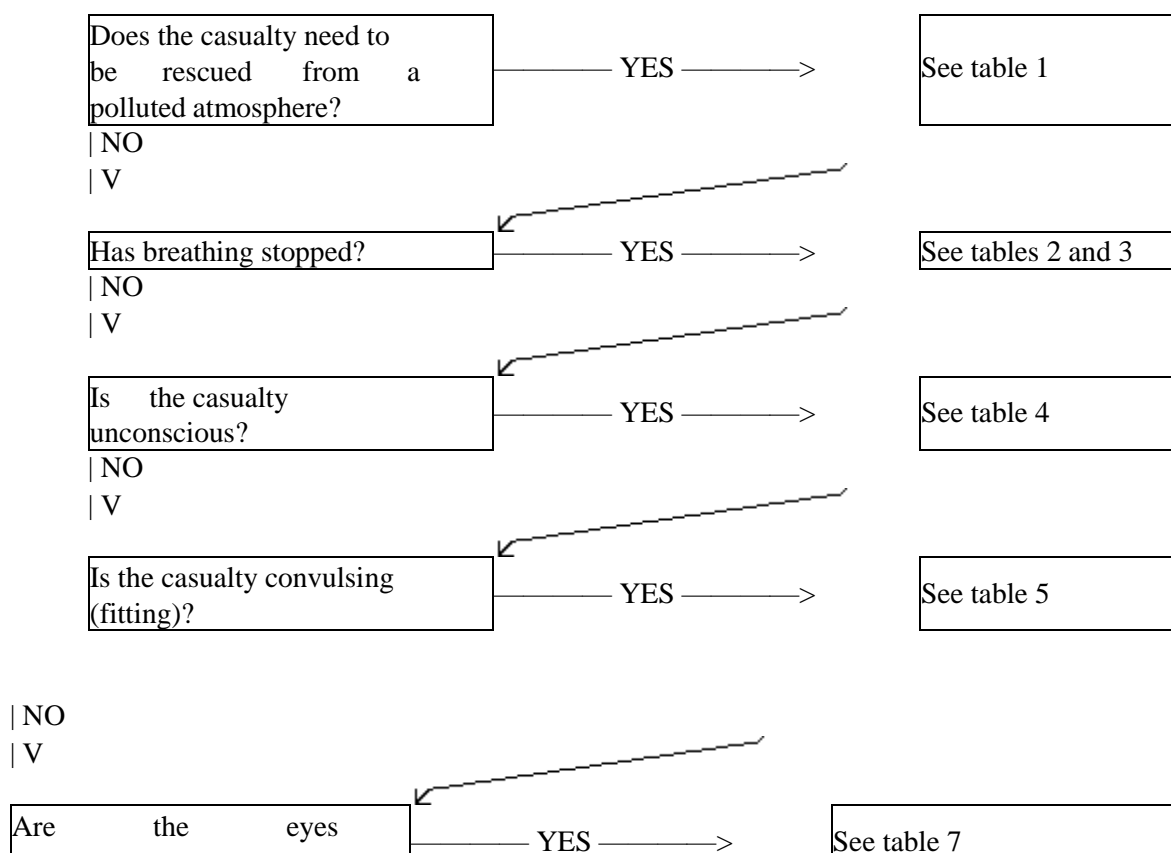
The workplace health unit (infirmary) in our facility carries out the necessary first aid activities in emergencies. The necessary materials/ equipment for first aid are available in the workplace health unit and on the sea vehicles.

It is necessary to use the first aid guide in emergency situations involving dangerous substances. The points to be considered while using the guide are as follows.

- When exposed to dangerous substances, the first thing to do is to respond immediately.
- Medical first aid guide in 3 steps will be applied.

1. Step : Emergency response and Diagnosis Here Start
2. Step : Tables consideration get. Tables special short for occasions instructions  
It contains.
3. Step : Attachments consider Supplements drugs and to be exposed  
Contains detailed information about chemicals .

### Emergency Response Chart







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contaminated?

| NO

| V

Is the skin contaminated?

| NO

| V

Has the chemical been  
inhaled?

| NO

| V

Has the chemical been  
ingested?

| NO

| V

Is there severe pain?

| NO

| V

YES ———>

YES ———>

YES ———>


YES ———>

See table 8

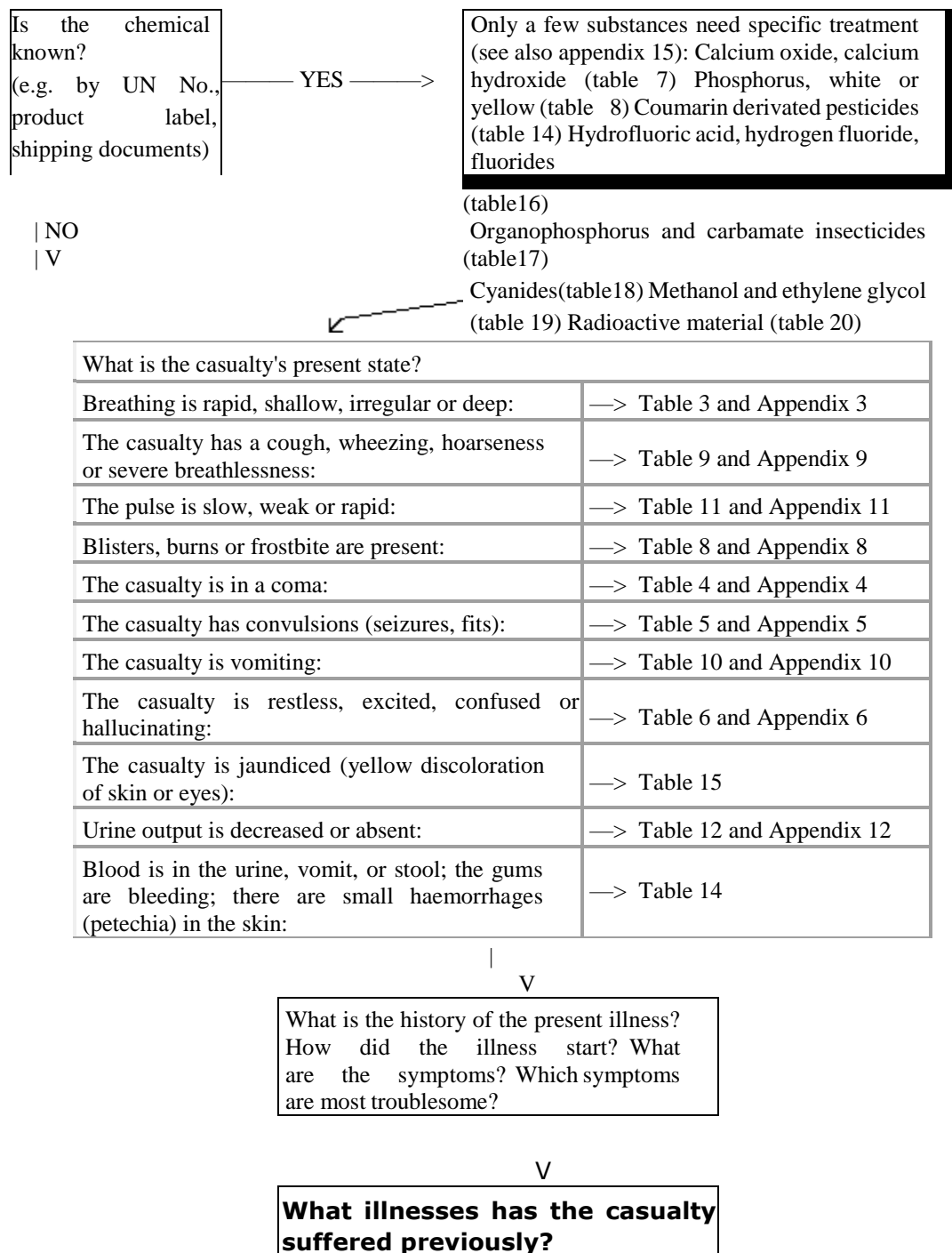
See table 9

See table 10

See table 13


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## Diagnostic Chart



## Conditions Caused by Coal and Requiring Medical First Aid

**Respiratory:** If there is irritation of the nose and throat or cough as a result of inhalation of gas, the affected person should be moved to fresh air. If necessary, artificial respiration and heart massage should be applied, oxygen should be given if available

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and the person should be taken to a doctor. In case of excessive exposure to coal dust, inhalation of high levels of dust may cause irritation to the respiratory system. If breathing is irregular, if methane and/or carbon monoxide is inhaled or has stopped, begin resuscitation, give oxygen if available and if the problem persists, call a doctor. Acute inhalation of dust may cause irritation of the nose, throat and upper respiratory tract. Symptoms may include discomfort, cough, tingling sensation, sneezing and/or shortness of breath and wheezing. If symptoms persist, the person should be taken to a doctor.

**Skin Contact:** Wash thoroughly with plenty of soap and water. Remove contaminated clothing and wash the affected skin. If there is redness and pain on the skin, seek medical attention. Wash the affected area thoroughly with plenty of soap and water. Remove contaminated clothing and shoes. Clean abrasive coal particles and dust from open wounds. If irritation persists, seek medical attention.

**Eye contact:** Rinse with plenty of water, keeping eyelids open. If there is redness or pain, consult a doctor. Rinse with fresh/pure water until irritation disappears. If irritation persists, consult a doctor.

**Ingestion:** Take the victim to a doctor without inducing vomiting. If swallowed, do not induce vomiting, call a doctor immediately. If the victim is conscious, give 2-4 glasses of milk or water.

**Most important symptoms and effects, both acute and delayed:** Dust may irritate eyes and respiratory system.


**Indication of any immediate medical attention and special treatment needed:** In case of shortness of breath, give oxygen. Keep patient warm.

### Poisoning

To the body toxic (toxic) One matter Entering result normal functions is the breakdown. To the body Some foreign substances entering from outside are considered poisonous (toxic) because they can harm the vital functions of the body.

### Ways of Poisoning

- **Digestive by:** Most chic Common poisoning is the way. Digestive by taken poisons Generally house or chemicals used in the garden, poisonous mushrooms, spoiled food, medicine and excessive alcohol.
- **Inhalation:** Occurs when a poisonous substance is inhaled. Usually carbon monoxide (gas cylinder) fugitives, water heater, butane gas stoves), sewer pit or in the rocks Accumulating carbon dioxide, It is formed by substances such as chlorine, adhesives, paints and household cleaners used in pool hygiene.
- **Through the skin:** The poisonous substance enters the body directly through the skin. Poisonings that occur this way include insect bites, animal bites, medicine injections, hair paints, agricultural drugs like toxic substances occurs by absorption through the skin.

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## **In poisonings General Symptoms**

**Digestive system disorders** : Nausea, vomiting, your wife pain, gas, swelling, diarrhea

**Border system disorders** : Consciousness loss, transfer, discomfort sentimental, in the muscles pain, contraction, incoordination of movements, signs of shock

**Respiratory system disorders** : Breath narrowness, respiratory stop, head pain, head turning, tinnitus, skin redness and bruising due to lack of oxygen

**Circulation system disorders:** Pulse disorder, head pain, cold sweating, heart stop

### **What should be the first aid in case of poisoning through inhalation?**

The patient is taken out into fresh air or the environment is ventilated by opening windows and doors.

- Vital signs are evaluated (ABC),
- It is kept in a semi-sitting position,
- If the person is unconscious, the coma position is given,
- Medical assistance is requested (112),
- The first aider must take the necessary precautions to protect himself and his surroundings during the intervention,
- A mask or wet cloth is used to protect breathing,
- Electric switches and other electrical appliances and lighting devices are not used,
- If there is heavy smoke, a rope should be used to take the patient outside.
- The fire department is immediately notified (112)

## **Carbon Monoxide Poisoning**


Carbon monoxide colorless, odorless, from the air light And uncomfortable  
It is a non-aggressive gas. Its binding capacity to hemoglobin is 280 times greater than oxygen.

### **Carbon monoxide Poisoning Symptoms**

- Extreme fatigue, unrest,
- Flu symptoms,
- Nausea- vomiting, head turning, tingle,
- Skin And on the nails short periodic cherry red colour change,
- Chest pain, palpitation sentimental, blood pressure low,
- Respiratory stop, heart stop, coma

### **Carbon monoxide In poisoning First Aid**

- Person from the environment is removed,
- Movement is not allowed,

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- Life findings is evaluated ,
- Weather way openness is provided.
- Medical help desired (112)

#### 8.3.4 Locations of First Aid Supplies in the Facility and Contents

The health center (infirmary) located in our facility carries out first aid activities in case of necessary emergencies. The necessary contents for first aid are available in the health center and on the sea vessels.

There are first aid kits on the shore facility, on the transporters, barges and tugboats. Their contents are as follows.


|            |                     |
|------------|---------------------|
| Patch      | Eye Wash Goblet     |
| Band-Aid   | Sterile eye pads    |
| Tourniquet | Glove               |
| Cotton     | Triangular bandage  |
| Bandage    | Scissors&Safety pin |
| Gauze      | Spanx               |

#### 8.4 Notifications To Be Made Inside And Outside The Facility In Case Of Emergency.

As in ANNEX-3. The flow chart regarding notifications to be made in emergency situations and the matters to be done are as in the Emergency Action Plan.

#### 8.5 Accident Reporting Procedures

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

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## 8.6 Coordination, Support and Cooperation Method with Official Authorities

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

## 8.7 Emergency Evacuation Plan For The Removal Of Ships And Vessels From The Shore Facility In Case Of Emergency

### Procedure for Departing Ships from Port in Case of Emergency

The purpose of this procedure prepared for the departure of sea vessels from the coastal facility is to explain the determination of the order of the necessary operations and the determination of responsibilities for the most appropriate departure of ships from the port facility in the emergency situations specified below. The Emergency Evacuation Plan has been approved by the Ceyhan Regional Port Authority.

**Facility Information Form :** Dangerous Cargo Handling Guide is located in section 1.1.

**Coordinates of Harbour Master Administrative Areas, Anchorage Areas, Pilot Pick-up and Drop-off Areas:** It is included in ANNEX-13.

### Emergency Conditions

Conditions requiring the urgent departure of ships connected to the Port Facility Marine systems are stated below.


- Weather conditions
- Conditions requiring fire or emergency on board
- Conditions requiring fire or emergency on the Port Facility site

#### Other Reasons

- Fire breaks out on a ship or in a facility located in other facilities
- Terrorist acts
- War Situation
- Natural Disasters
- Situations deemed necessary by official institutions
- Pollution
- Disturbance of ship position
- Malfunction on board
- Medical problems

### Air Opposition

In İskenderun Energy Production and Inc. coastal facilities, coal, which is a solid bulk cargo, is loaded from the coal ship to the barges by means of a transshipper in the open sea (limbo area) . The barges are docked to the coal discharge pier by means of tugboats . *The coal loaded onto the barges is transferred* to the hoppers located at the

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coal discharge pier by means of a closed conveyor system and from there, finally to the coal stock area by means of closed conveyor systems.

In case of an emergency due to adverse weather conditions during handling , the Transshipper Captain and the Port facility representative may decide to safely hold the discharge for a certain period of time or to stop it completely, detach the barges from the coal discharge pier and pull them to the breakwater pier.

### **Conditions Requiring Emergency Situation in Ships, Transshippers and Barges**


Iskenderun Energy Production and Inc. coastal facilities require emergency conditions Transshipper , Arkad 4, Arkad 5 and covers the emergency conditions in Section 3 that may occur on ships.

A fire that may occur in marine vessels connected to marine systems and may grow and get out of control even if it is fought, is a situation that requires the operation to be stopped immediately and the vehicles to be separated. In addition, in cases where there is a breakage, rupture, or unstoppable leakage/spillage into the atmosphere in any ship tank or pipeline, the ship connected to marine systems must be removed from the marine systems immediately in order to prevent damage to the port facility and its surroundings.

### **Evacuation Ship Separates from Transshipper**

- The Transshipper Operations Manager is responsible for the maneuvering of the Transshipper .
- When information is obtained that there will be an emergency due to adverse weather conditions, the ship captain is contacted and informed that the Transshipper will be leaving the ship.
- The ship's personnel are required to be ready at the fore and aft maneuvering areas as soon as possible.
- The shift manager of Isken Thermal Power Plant is contacted and informed about the situation of leaving the ship due to emergency. If necessary, a report is requested.
- A count is made at the transshipper to check that all personnel are complete.
- Tugs ARKAD1 and ARKAD2 swing their ropes to the starboard pontoon bow and stern of "ISKEN" .
- The transshipper chief officer and/or the watchkeeping deck officer are sent to the ship to ensure coordination with the ship's personnel during disembarkation.
- Sea nets are made for cargo handling equipment such as cranes and loaders, as well as materials, equipment, etc. that can move on the deck .
- When the personnel are ready at the maneuvering areas, the ropes given to and taken from the ship are taken to a break.
- The transshipper leaves the ship and moves to the anchorage or berth within the breakwater at a safe distance, taking into account the emergency situation.

### **Barges Separation from Transshipper**

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- The barge captain is responsible for the manoeuvring of the barges . This responsibility does not relieve other people who help in an emergency. Everyone will do their best using their experience.
- In case of emergency, the barge captain, the port facility manager and the Iskolden Operations manager will be in close coordination and cooperation .
- the transshipper is on board and the barge is being loaded, it is stopped and all equipment is cleared from the sea ; the barge is prepared for maneuver.
- Personnel count is carried out. Barge personnel are requested to be ready at the fore and aft maneuvering areas as soon as possible.
- The Transshipper personnel on duty proceed to the maneuvering areas.
- Tugs ARKAD 1 and ARKAD 2 lash their lines to the bow and stern of the barge .
- Tugs report that they are ready. When the personnel are ready at the maneuvering areas; the ropes given from the Transshipper are paused.
- Barge It separates from the transshipper ; considering the emergency situation, it moves to the berth within the breakwater or to the anchorage at a safe distance.
- the barge is safely moored or anchored within the breakwater, the situation is reported to the relevant parties.
- Unless there is an extraordinary situation, the barge will be taken to the breakwater or anchorage area using the tugboats Arkad 1 and Arkad 2 .
- In case of fire, if the barge cannot control the fire with its own means, one or more tugboats equipped with fire extinguishing equipment will be requested.


### **Fire or Emergency in the Terminal Area**

In cases where a similar fire, uncontrollable leaks or emergency conditions may occur within the Port Facility, the ship is urgently removed from the marine systems for the purpose of ship and environmental safety. Fires and leaks that will not affect the operation within the port facility and can be easily extinguished will be evaluated by the Emergency Management Center and the decision to leave the ship in the marine systems will be made.

#### **1 ) Barge Arkad 4&Arkad 5 Dock Emergency Evacuation Conditions**

- barge captain is responsible for the manoeuvring of the barges . This responsibility does not relieve other crews who assist in the emergency response.
- In case of emergency, the barge captain, the port facility manager and the Iskolden operations manager will be in close coordination and cooperation .
- The evacuation operation is stopped, all equipment is cleared from the sea ; the barge is prepared for maneuver.
- Personnel count is carried out. Barge personnel are requested to be ready at the fore and aft maneuvering areas as soon as possible.



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- The barge should not leave the pier unless deemed necessary. The barge should be maneuvered to leave the pier , taking into account the nature of the emergency .
- A plan is made to break the barge ropes at the dock . The auxiliary personnel on the tugboats and/or the persons assigned by the port facility manager are ready for this task.
- Ceyhan Regional Harbour Master will be contacted and the emergency situation will be reported. If the barge will leave the discharge pier and will not berth within the breakwater, approval for the anchorage will be obtained from the Harbour Master.
- Unless there is an extraordinary situation, the barge will be taken to the breakwater or anchorage area using tugboats ARKAD 1 and ARKAD 2. Only in case of fire, if the barge cannot control the fire with its own means, one or more tugboats equipped with fire extinguishing equipment will be requested.
- Tugs ARKAD 1 and ARKAD 2 lash their lines to the bow and stern of the barge .
- Tugs report that they are ready. When the personnel are ready at the maneuvering areas; the lines given to the shore are paused.
- The barge leaves the discharge pier; considering the emergency situation, it moves to the pier within the breakwater or to the anchorage at a safe distance.
- the barge is safely moored or anchored within the breakwater, it is reported to the relevant parties .


#### **Abandonment of Barges at the Dock**

- The Captain gives the Abandon Ship alarm.
- Inflatable boats are called in urgently when necessary.
- In case of need, an ambulance and the workplace doctor are called.
- A personnel count is carried out and a search is made in case of missing personnel.
- The life rafts used to abandon the barges are prepared and thrown into the sea.
- If possible, valuable documents are taken.
- the barge safely board the life rafts.
- Life rafts are moved away from the ship and safely landed.
- People who need treatment are sent to the nearest health institutions by ambulance.

#### **2) Watercraft And Tugboats Emergency Evacuation Plan from the Breakwater**

Transshipper when cargo handling is not done , The water vehicles and tugboats named Arkad 1, Arkad 2, Arkad 3, Arkad 4 and Arkad 5 are safely moored at the berth in the breakwater allocated for them.

As is known, the safest place for these units is the dock inside the breakwater built as a shelter. Depending on the nature of the emergency, the priority is for the units to remain in this dock as long as possible.

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In emergency situations, if there is an external threat that does not originate directly from the units, the procedure for the units to leave the breakwater quay is applied as follows :

- The emergency situation is reported to the necessary authorities. If the severity and nature of the emergency situation requires taking precautions first, the emergency is intervened; then the necessary notifications are made as soon as possible.

- Communication between the Shift Manager of Isken Thermal Power Plant and Iskolden Operations Manager is provided via mobile phone / landline or VHF channel 15. The necessary preparations are made by agreeing on the emergency evacuation of the marine units and the relevant authorities are informed.

- Instructions regarding the anchorage area are awaited from the Ceyhan Regional Harbour Master. If the nearest anchorages No. 2 and 4 are available, permission is requested to anchor in one of these areas.

- If necessary, an audible alarm is given by the Isken Thermal Power Plant and/or marine vessels.

- The units mentioned above are equipped with sufficient personnel day and night to be ready for maneuver as soon as possible in the event of an alarm.

- If the emergency occurs during daytime working hours, the work being done is stopped and an abandon ship alarm is given, asking the personnel to gather at the relay stations. In the event of an emergency at night, the same alarm is given, ensuring that the personnel gather at the abandon ship location.

- Unit managers conduct a personnel count of their units and report to the Operations Manager. If there are missing personnel, a search is conducted and the situation is reported to the authorities.


- All equipment and materials on deck are cleared of sea water ; units are prepared for maneuver.

- Arkad 1 and Arkad 2 tugboats will be used for emergency evacuation of water vehicles . The mooring ropes provided to the dock will be broken by Iskolden personnel.

- Emergency evacuation of units from the breakwater area will be carried out in the following order:

- 1- Barge inside Transshipper “ISKEN ”
- 2- Transshipper “ISKEN ”
- 3- Barge and Arkad 1/ Arkad 2 tugboats at the outer berth
- 4- Arkad 3 Service Engine

- The units will anchor in the location deemed appropriate by the Port Authority, following the procedures in the Barge Emergency Evacuation Plan from the Dock and the Transshipper Emergency Evacuation Plan , and report the situation to the relevant authorities.

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### Other Reasons

In such cases, where the ship is not directly caused by the ship or the port facility but there is a possibility of damage to the ship indirectly,

- A fire or explosion occurs on a ship or facility located in other facilities,
- Terrorist acts
- War situation
- Natural disasters
- Situations deemed necessary by the state.
- Pollution
- Disturbance of the ship's position
- Occurrence of mechanical failures on the ship side
- In case of medical problems that may affect the ship or the port facility, the ship is immediately removed from the marine systems to which it is connected.

### Communication

In case of emergency situations mentioned above or occurring on the Port Facility and the Ship, fast, safe and uninterrupted communication between the port facility, the ship and the relevant authorities will be provided by the following means of communication.

UHF Radio


VHF Radio

Mobile Phone

Landline Phone

Reporter / Liaison staff

| <b>Reason for Alarm</b>     | <b>Alarm Tool</b> | <b>Sound Warning</b>                |
|-----------------------------|-------------------|-------------------------------------|
| Fire in the facility        | Radio / Telephone | Fire in the facility                |
| Fire breaks out on the dock | Radio / Telephone | Fire at the Dock                    |
| Power Cuts                  | Radio / Telephone | Attention power outage              |
| Emergency                   | Radio / Telephone | Attention Shutdown System activated |

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## Emergency Separation System Preparation

Preparation stages in the emergency separation system ship, It is valid for transshippers and barges, all emergencies must be reported to the Harbour Master authorities. If it is decided that the ship will be urgently separated, the safe places where the ship can be moved under controlled conditions must be specified by the Harbour Master.

In cases where emergency separation is required, the ship captain and the port facility will initiate the emergency separation process by mutual agreement and report the situation to the harbour master as soon as possible. In cases where the severity of the emergency and time permits, a representative from the harbour master's office or the harbour master, harbour manager/operating officer, ship captain, and pilot will agree on the time and method of separation before the emergency separation process is carried out.

The ship's equipment will be made ready for immediate use . All cargo discharge and ballasting operations will be stopped and preparations will be made for separation.

Water will be pumped into the ship's fire line and water mist will be used for strategic areas. If a vent to the atmosphere is required, engine room personnel must be ready, all unnecessary receiver entrances must be closed, all safety precautions related to normal operations must be taken and a warning notice must be issued.

all emergencies, if the necessary intervention exceeds the terminal facilities, the local security forces and/or fire department will be notified immediately. The decision to remove the ship under control is based on the principle of life safety and will also include the following conditions.

- Adequacy of tugboats
- The ship's ability to take off under its own power
- Availability of safe places to which a Vessel in distress can proceed or withdraw.
- Firefighting competence
- Proximity of other ships
- Fire Lines


## Emergency Separation Takes Place

If all the above preparations are examined and deemed appropriate, the urgent removal of the marine vehicles will begin.

Cooperation between the port facility, marine vessels and the port authority is required at each stage .

### EMERGENCY SEPARATION PROCESS ORDER

|   |   |
|---|---|
| 1 | Alarming  |
| 2 | VHF, telephone by about emergency information to be given   |
| 3 | Ship captain , port facility Initial situation assessment between the authorized persons to be done |

|   |                                       |                     |                      |                |
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|-----------|---|
| <b>4</b>  | The operation to be stopped   |
| <b>5</b>  | Port facility and ship emergency plan measures to implement insertion   |
| <b>6</b>  | Available situation abuse go away And above stated urgent separation conditions of availability .             |
| <b>7</b>  | Ship captain , port facility re- evaluation of the situation between the authorized persons to be done        |
| <b>8</b>  | Urgent separation decision to be given  |
| <b>9</b>  | Surrounding facilities informed to be done  |
| <b>10</b> | Tugs around the ship urgent separation for deployment , preparations to complete And ready is to indicate     |
| <b>11</b> | The ship's captain with the ship relating to preparations to complete And ready is specification .            |
| <b>12</b> | Official person by free left of ropes from fathers by removing to the sea to be released approval to be given |

Emergency separation of the ship should be considered as a last resort and the ship ropes should not be released until all precautions have been taken and the above conditions have been met .

#### **After Emergency Separation**

- After the separation process, the sea vehicles are towed and the location to be taken is decided and declared,
- of sea vehicles to the allocated area accompanied by tugboats or with their own machinery,
- Inspection of the port facility to detect any possible damage or deficiency,
- the ship and port facility will be ready to handle cargo again,
- Sharing any negative situations that may occur during emergency separation,
- Agreement between the pilotage and tugboat organization and the coastal facility authorities regarding fire, explosion and similar emergencies that may occur during loading/unloading ,
- The weather and sea conditions , a tugboat with sufficient traction power and in sufficient numbers will quickly move the ship away from the facility and tow it to a safe point.

**Internal and External Facility Communication List :** It is included in ANNEX-3.


**Hazardous Material Incident Reporting Form:** It is included in ANNEX-16.

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

Is handled in bulk, it does not fall into the status of damaged load. The procedures regarding the handling and disposal of waste that may be contaminated by the load are carried out by the Environmental Unit.

### **8.9 Emergency Drills and Their Records**

**Practice Practices;** In order to be prepared for emergencies within the facility, the

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personnel in the emergency organization should be prepared for their duties with various drills. The drills should be carried out with the support of specialist organizations when necessary. Performing and implementing the drills to test the adequacy of the emergency plans and to be prepared for real situations, according to the worst scenarios that may occur in the facility will be planned.

**Training Scenarios; In the exercise planning** , the worst scenario is foreseen as a single event or a combination of events that the port may encounter. Implementation of exercises in the fastest and most effective way in line with the prepared scenarios is provided.

#### **Emergency within the Port Facility Practices;**

- The port is included in the annual training plans. should be specified.
- In the form of local or general intervention can be planned,
- Safety, spill etc. exercise scenarios in
- Drills with or without notice can be done.
- The drills apply to various emergency scenarios. relies on.
- The drills can be done practically, as well as at the desk, seminar
- Different time, day, season and event for each drill scenarios

### **8.10 Procedures for Approval, Inspection, Testing, Maintenance and Availability of Fire Protection Systems**


Our facility has fire pumps, storage tanks, hydrants , fire trucks, and portable fire extinguishers as part of its fire protection systems. Information on fire protection systems is provided in section 8.2.

#### **PUMPS**

The pumps connected to the fire water system are as follows;

- 00SGA01 AP001 Electric Jockey Fire Pump
- 00SGA02 AP001 Electric Fire Pump
- 00SGA03 AP001 Diesel Fire Pump
- 00SGA04 AP001 Electric Jockey Fire Pump
- 10/20SGA51 AP001/002/003 Boiler Fire Pumps

| Pump Name                 | KKS           | Working Capacity      | Working Pressure Range |
|---------------------------|---------------|-----------------------|------------------------|
| Electric Jockey Fire Pump | 00SGA01 AP001 | 8.2 m <sup>3</sup> /h | 9.5-10                 |
| Electric Fire Pump        | 00SGA02 AP001 | 454 m <sup>3</sup> /h | 8.2-10                 |
| Diesel Fire Pump          | 00SGA03 AP001 | 454 m <sup>3</sup> /h | 7-10                   |
| Electric Jockey Fire Pump | 00SGA04 AP001 | 52 m <sup>3</sup> /h  | 9-10                   |
| Boiler Fire Pump          | 10SGA51 AP001 | 150 m <sup>3</sup> /h | 11-14                  |
| Boiler Fire Pump          | 10SGA51 AP002 | 150 m <sup>3</sup> /h | 11-14                  |
| Boiler Jockey Fire Pump   | 10SGA51 AP003 | 1.8 m <sup>3</sup> /h | 10.5-14                |
| Boiler Fire Pump          | 20SGA51 AP001 | 150 m <sup>3</sup> /h | 11-14                  |

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|-------------------------|---------------|------------------------|---------|
| Boiler Fire Pump        | 20SGA51 AP002 | 150 m <sup>3</sup> / h | 11-14   |
| Boiler Jockey Fire Pump | 20SGA51 AP003 | 1.8 m <sup>3</sup> / h | 10.5-14 |

## INSTALLATION

The lengths and diameters of the lines forming the 00SGA fire water network, which includes the power plant production area, the breakwater area, the warehouse area, the coal stock area and the power plant entrance control area, are briefly as follows;

1,256 meters long DN200,

DN150 with a length of 3,978 meters,

136 meters long DN80.

Fire water is supplied to 00SGA10 main outer hydrant ring.  
external hydrants ;

- Quantity: 95
- Inlet: DN100
- Output: DN65, 2 pcs
- Hose connection union: Type B ( 2.5 ”)
- Flow required for each hydrant : 946 l/ min
- Hydrant outlet pressure: minimum 4.5 bar
- Fire cabinet contents: 2 \* 25 meters hose, 2 hose wrenches, 1 intervention lance with valve , 1 hydrant key, I and warning sign
- Internal hydrants ;
- Quantity: 138
- Output: DN50
- Flow required for each hydrant : 200 l/ min
- Hydrant outlet pressure 4.5 bar


Fire cabinet contents: 20 meters of 1” plastic hose, drum, and warning sign

## 8.11 Procedures for Approval, Inspection, Testing, Maintenance and Readiness for Use of Fire Protection Systems

In our facility, the fire equipment, facility type, the characteristics and number of ships and marine vessels to be berthed, the type and amount of dangerous cargo to be handled and stored, the capacity and characteristics of the facility are taken into consideration and equipment selection is made in accordance with the foreseen standards. A fire plan approved by a mechanical engineer registered with the Chambers of the Union of Chambers of Turkish Engineers and Architects is prepared and approved.

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




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## 8.12 Precautions To Be Taken In Cases Where Fire Protection Systems Do'nt Work

In the event that fire protection systems in our port facility do not work, firstly the possibilities of using the facilities of the neighboring facility are investigated and then the local fire department in our region is notified. Support is requested from the contracted tugboat companies and all the facilities of the region are used to intervene in the incident.

## 8.13 Other Risk Control Equipment

Other risk control equipment is identified in the emergency plan.

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## 9. Occupational health and Safety

### 9.1 Occupational Health and Safety Measures

We can list the objectives of occupational health and safety studies in our facility as follows;

- **Protecting Employees**

The main purpose of occupational health and safety studies is to protect employees. In this context, it is aimed to ensure mental and physical integrity by protecting employees against work accidents and occupational diseases.

- **Ensuring Production Safety**

Ensuring production safety in a workplace is especially important from an economic point of view, as it will result in increased work efficiency.

- **Ensuring Business Security**

With the measures to be taken in the workplace, operational safety will be ensured, as situations that may endanger the business such as machine malfunctions and shutdowns, explosion, fire, which may arise due to work accidents or an unsafe and unhealthy working environment.

Document” prepared within the scope of Occupational Health and Safety at our facility will be taken into account.

#### **Job Health Security Education**


- All newly recruited employees are informed about the area where they will work (port facility, etc.) and the job, with initial training.
- All employees receive 16 hours of Basic Occupational Health and Safety Training every year. Topics include;

##### **1. General topics**

- a) Information on labor legislation,
- b) Legal rights and responsibilities of employees,
- c) Workplace cleanliness and order,
- d) Legal consequences arising from work accident and occupational disease,

##### **2. Health issues**

- a) Causes of occupational diseases,
- b) Application of disease prevention principles and prevention techniques,
- c) Biological and psychosocial risk factors,
- d) First Aid,
- e) Harms and passive exposure of tobacco products ,

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### 3. Technical issues

- Chemical, physical and ergonomic risk factors,
- Manual lifting and handling,
- Protection from flash, explosion, fire and fire,
- Safe use of work equipment ,
- Working with display tools,
- Electricity, its hazards, risks and precautions,
- The causes of work accidents and the application of protection principles and techniques,
- Safety and health signs,
- Use of personal protective equipment,
- Occupational health and safety general rules and safety culture,
- Evacuation and rescue,

### 4. Other Issues (Working At Height Specific To The Employee's Job, Working In A Closed Environment, Working In Environments Where There Is A Risk Of Radiation, Working With Welding, Working With Equipment Bearing Special Risks , Possible Health Risks Caused By Carcinogenic Substances, Etc. )

Applied and theoretical trainings for emergency workers (fire response, search and rescue, chemical response training, first aid training, etc.),

- And operation instructions for employees involved in the chemical transfer operation in the field ,
- Internal and external trainings (working indoors, working at heights, working safely with electrical equipment , etc. ) being carried out.
- By department managers and employees of the occupational health and safety department, and employees are provided with additional training.
- Training records are in the Human Resources Department is stored.

### Health Considerations


All employees are subjected to a recruitment examination, a periodical examination is carried out at least once a year, and continuous health surveillance activities are carried out.

### Field Security

Occupational safety experts from both the main employer and subcontractor companies are assigned in the field for all situations that may endanger field safety. Occupational safety experts create field audit reports about the deficiencies/nonconformities they detect in the field, notify them to the relevant departments and follow up. In addition, site inconsistencies/deficiencies are reported and conveyed to the relevant departments through periodic field inspections organized every week according to the annual field inspection plan, which is planned by dividing the operation field into regions and covers the entire field.

### Risk Analysis

Occupational health and safety department records all risks and existing measures that may endanger employees and operational safety within the scope of the "Occupational

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Health and Safety Risk Assessment Form", and determines additional actions in cases where the current measures are insufficient and minimizes the risks.

Risk assessment studies are announced to all employees and is published.


### **Periodic Controls**

Lifting equipment (ceiling crane, sling, etc.), high access equipment, grounding equipment, fire extinguishers, fire hydrants etc. in the field are checked/have them checked within the legal frameworks and their records are kept.

The deficiencies/non-conformities detected during the periodic controls are coordinated with the relevant departments as soon as possible.

### **Dangerous Business Permissions**

For each work to be carried out in the facility, the owner maintenance worker applies to the Occupational Health and Safety Department for the Risk Control Form, which is the annex of the work permit to be obtained according to the Work Permits Procedure. Depending on the scope of the work to be done, additional permits (hot work, indoor work, excavation work, etc.) may be required in addition to this form. All works to be carried out in the field are subject to this procedure and work does not start before the approvals are completed.

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## Legal Conditions

Legal regulations on occupational health and safety are followed and implemented by the Occupational Health and Safety Department.

## Near To Accident Their Status

Necessary actions are taken for near miss situations that are noticed by the employees at the facility and reported to the Occupational Health and Safety Department. The employee who made the notification is informed at every stage.


## Subcontractor Management

Occupational health and safety requirements are controlled by the Occupational Health and Safety Department within the scope of subcontracted activities carried out within its structure. In this context;

- ISG experts of the relevant companies works in coordination by keeping in constant communication ,
- The relevant records of the companies (risk analyzes, emergency plans, etc.) are kept in the facility and their constant control is ensured,
- to correct the necessary deficiencies ( training, PPE, etc.),
- Establishing OHS boards is provided.

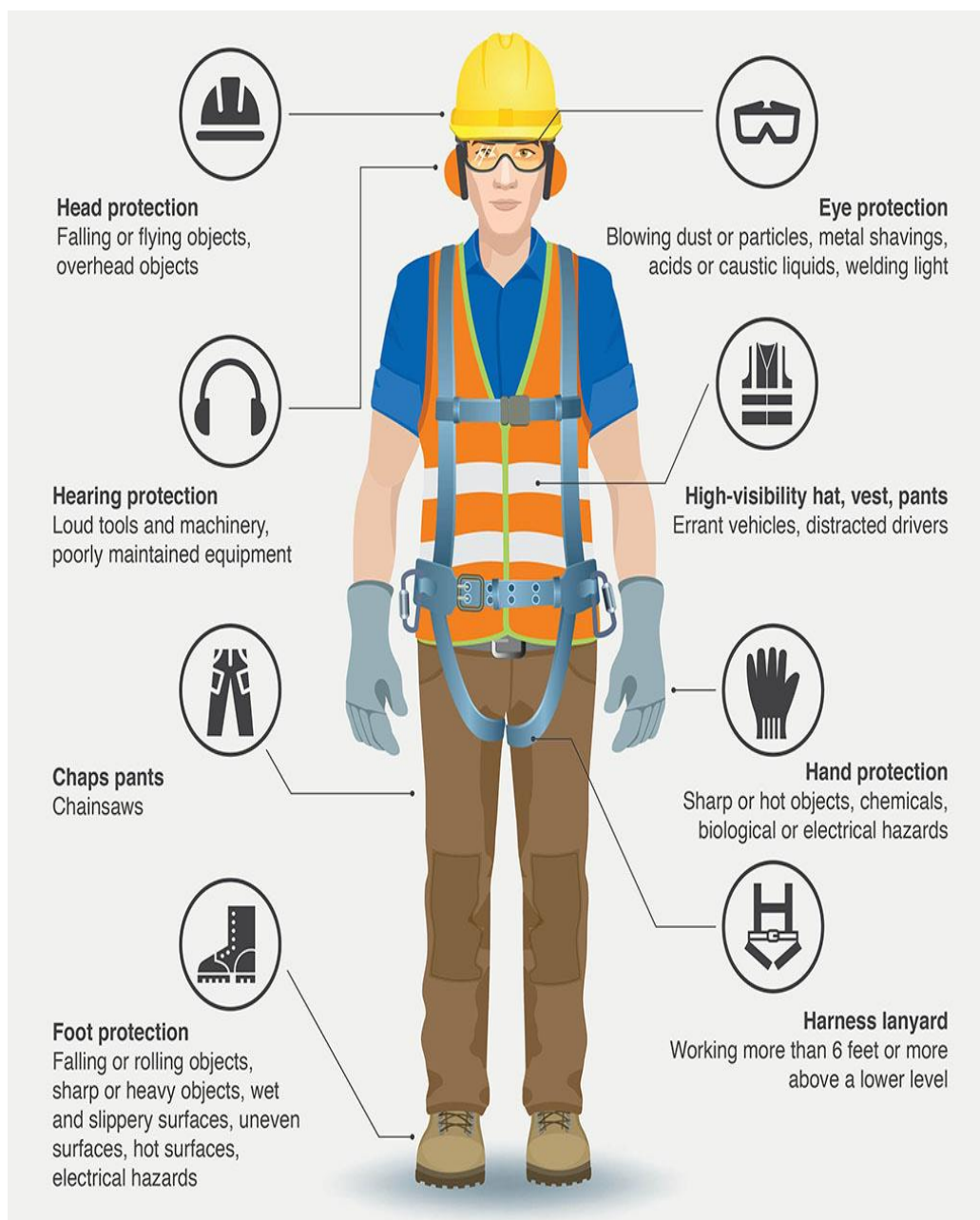
## First Aid Cabinet Location and Contents


The workplace health unit (infirmary) in our facility carries out the necessary first aid activities in case of emergency. Materials/equipment required for first aid are available in the workplace health unit and on the marine vessels.

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## 9.2 Information on Personal Protective Clothing and Procedures for Their Use

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




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### 9.3 Closed Space Entry Permit Precautions and Procedures

In the areas where dangerous cargo (coal) is handled at the coastal facility of Isken, there is no enclosed space as defined in the Article 4, clause (ö) of the Directive on the Preparation of the Coastal Facility Dangerous Cargo Conformity Certificate. In addition, temporary storage of dangerous cargo (coal) is carried out in the open storage area, which is located outside the shore facility and does not have a closed area feature.



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## 10. OTHER MATTERS

### 10.1 Validity of Dangerous Goods Conformity Certificate


Applied to the Ministry of Transport and Infrastructure General Directorate of Maritime for obtaining a Hazardous Substance Conformity Certificate .

### 10.2 Duties Defined for Dangerous Goods Safety Advisor

Requirements for the carriage of dangerous goods suitability tracks . In the transport of dangerous goods, the coastal facility operator Prepares reports to the coastal facility on activities (Annual reports are kept for 5 years and submitted to the Administration upon request). Suggestions to the coastal facility regarding the transportation of dangerous goods presents.

#### Check The Practices And Methods Mentioned Below It Does

- Monitors compliance with the requirements for the transport of dangerous goods .
- Dangerous It offers suggestions to the coastal facility on the transportation of goods.
- Procedures for controlling that the dangerous goods arriving at the facility are properly identified, the correct shipping names of the dangerous goods are used, certified, packaged, labeled and declared, loaded and transported safely to the approved and legal packaging, container or cargo transport unit, and reporting the control results .
- Procedure for handled and temporarily stored dangerous goods ,
- Including the changes made in the legislation, and whether these training records are kept,
- Determining the necessary measures against the reoccurrence of accidents, incidents or serious violations and evaluating the implementation,
- To what extent the rules regarding the selection of subcontractors or 3rd parties and the transportation of dangerous goods are taken into account,
- Operational operations of employees in the transport, handling , storage and loading / evacuation of dangerous goods determining whether they have detailed knowledge of procedures and instructions.
- Handling , storage and loading/unloading of dangerous goods
- Procedures for all mandatory documents, information and documents related to dangerous goods.
- Procedures for the safe berthing, mooring, loading/discharging, sheltering or anchoring of ships carrying dangerous goods to the shore facility day and night .
- Procedures regarding additional measures to be taken according to seasonal conditions for the loading, unloading and limbo operations of dangerous goods .
- Procedures for fumigation , gas measurement and degassing operations . Procedures for keeping records and statistics of dangerous goods ,
- Accuracy of the issues regarding the possibility, capability and capacity of the coastal facility to respond to emergencies ,
- The suitability of the regulations for the first interventions to be made for the accidents involving dangerous substances,
- Procedures for the handling and disposal of damaged dangerous goods and waste contaminated by dangerous goods ,


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

- Transport Document
- Dangerous Goods Transport Driver Training Certificate (SRC-5),
- Picture identification document (ID card, driver's license or passport) for each personnel on duty in the vehicle,
- Written instruction prepared by the carrier to be given to the driver,
- Multi -Mode Dangerous Goods Transportation Form for dangerous goods transported by more than one mode ,
- Valid ADR certificate of conformity for vehicles
- Photocopy of the transport permit obtained from the relevant/authorized authorities for the transport of dangerous goods,
- Dangerous Goods and Hazardous Waste Compulsory Liability Insurance policy for vehicles carrying dangerous goods

#### **Equipment and Equipment that Vehicles Must Have**

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

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## Limits In The Port Area

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

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

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

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

### **Cold and Hot Working Procedures in Ships Located in Coastal Facilities and Carrying Dangerous Cargoes**


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

The principles of hot work to be carried out on ships carrying dangerous cargo in coastal facilities are given below and the procedure is also explained in chapter 6.

### **10.5 Additional Issues to be Added by the Coastal Facility**

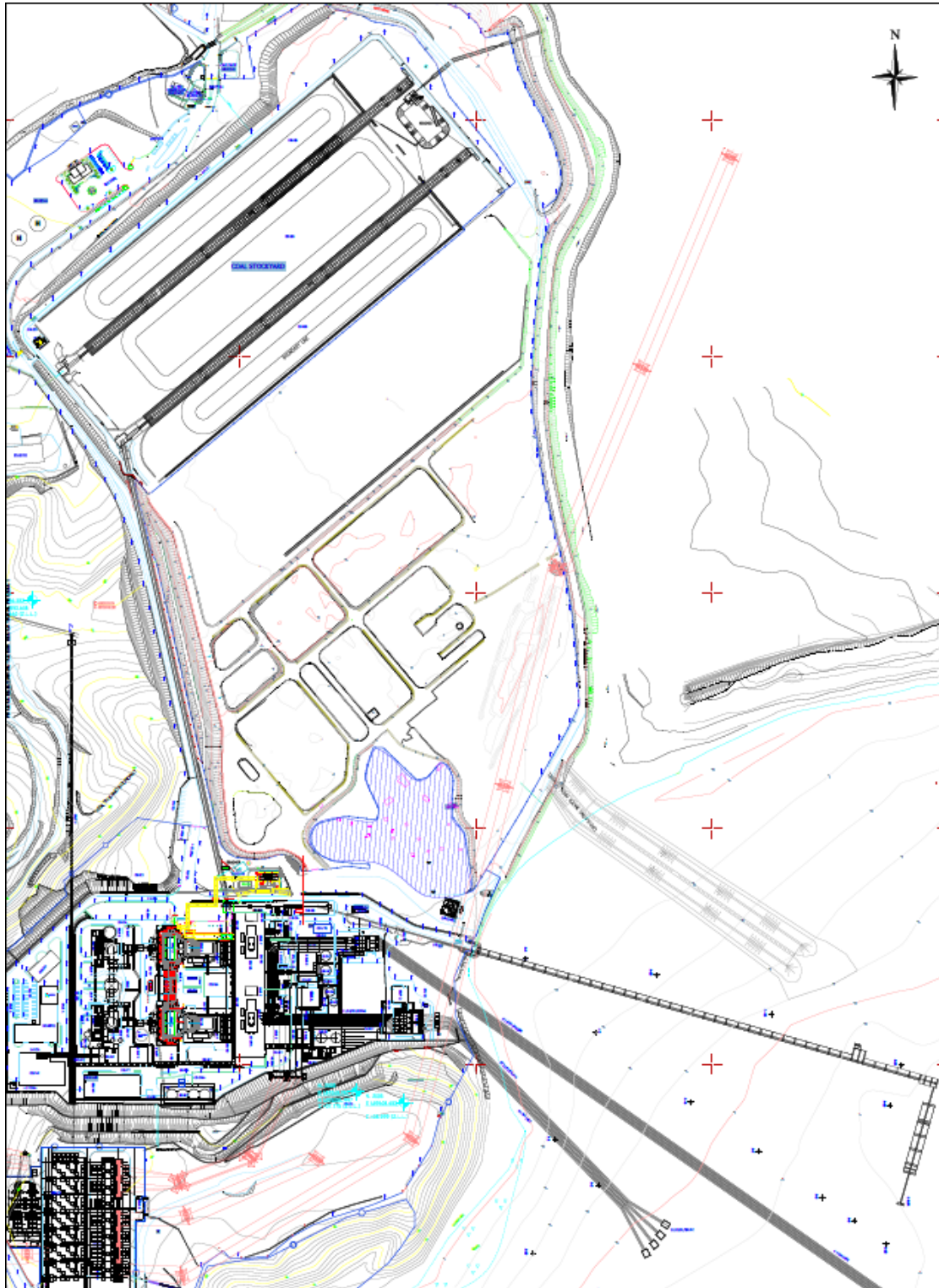
The Dangerous Goods Handling Guide has been prepared within the framework of the “Dangerous Cargo Handling Guide Implementation Instruction No. 281879 dated April 20, 2022”.

The guide is published on the website of the coastal facility ([www.isken.com.tr](http://www.isken.com.tr)) to be accessible and accessible to the relevant facility personnel, public authorities and facility users.


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## 11. ANNEXES

## ANNEX-1 GENERAL LAYOUT OF SHORE FACILITY






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## ANNEX-2 PHOTO OF GENERAL APPEARANCE OF SHORE FACILITY









|   |                                       |                     |                      |                |
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### ANNEX-3 EMERGENCY CONTACT POINTS AND CONTACT INFORMATION

| <b>Name/Last Name</b>       | <b>Mission</b>                    | <b>Contact information</b> |
|-----------------------------|-----------------------------------|----------------------------|
| <b>Mehmet Aras</b>          | Operations Manager                | 0322 355 24 55             |
| <b>Enis Bayar</b>           | Deputy Director of Operations     | 0322 355 24 55             |
| <b>Mehmet Tontu</b>         | Shift Manager                     | 0322 355 24 55             |
| <b>Ahmet Saliver</b>        | Shift Manager                     | 0322 355 24 55             |
| <b>M.Eren Erdoğan</b>       | Shift Manager                     | 0322 355 24 55             |
| <b>Ömer Barak</b>           | Shift Manager                     | 0322 355 24 55             |
| <b>Varol Durhasan</b>       | Operations Eng.                   | 0322 355 24 55             |
| <b>Muhsin Emre Baltalı</b>  | Operations Eng.                   | 0322 355 24 55             |
| <b>Ufuk Akbayrak</b>        | Operations Eng.                   | 0322 355 24 55             |
| <b>Lütfü Talay</b>          | Transshipper Operations Manager   | 0533 749 67 80             |
| <b>İsa Levent</b>           | Transshipper Operations Manager   | 0533 749 67 80             |
| <b>Cenk Çöloğlu</b>         | Transshipper Technical Manager    | 0533 749 67 84             |
| <b>Ziya Korhan Elkatmış</b> | Transshipper Technical Manager    | 0533 749 67 82             |
| <b>Baran Mehmet Gürbüz</b>  | Transshipper 2nd Captain          | 0533 749 67 86             |
| <b>Hasan Akdemir</b>        | Dangerous Goods Safety Consultant | 0534 368 73 75             |

|   |                                       |                     |                      |                |
|---|---------------------------------------|---------------------|----------------------|----------------|
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| <b>Appellation/ Unit</b>                      | <b>Radio Channel</b> | <b>İnternal</b> | <b>When You Receive Notification</b>   |
|---|----------------------|-----------------|--|
| Security Shift Supervisor                     | <b>6</b>             | <b>1651</b>     | Announces the emergency to All Security Points (to all security officers) by radio. It sends a messenger to convey the announcement to the personnel in the Marine Vessels Shelter, Warehouse and Contractor offices without radio access. |
| Security Nizamiye Registration Center Officer | <b>6</b>             | <b>2222</b>     | Announces the emergency to All Security Points (to all security officers) by radio.  |
| Boiler Operator                               | <b>2</b>             | <b>-</b>        | Announces the Emergency to those in Kazan Region.  |
| Turbine Operator                              | <b>2</b>             | <b>-</b>        | Announces the Emergency to those in the Turbine Zone.  |
| FGD Operator                                  | <b>2</b>             | <b>-</b>        | Announces the Emergency to those in the FGD Area.  |
| Shift Electrical Technician                   | <b>2</b>             | <b>3841</b>     | Announces the Emergency to the field where it is located.  |
| Vardiya I&C Technician                        | <b>2</b>             | <b>3831</b>     | Announces the Emergency to the field where it is located.  |
| Health Officer                                | <b>2</b>             | <b>1500</b>     | She stands by her duty station and announces the emergency to the Infirmary Building.  |
| Ash Coal Operator                             | <b>1</b>             | <b>-</b>        | Announces the Emergency to those in the CoalStock Field.   |

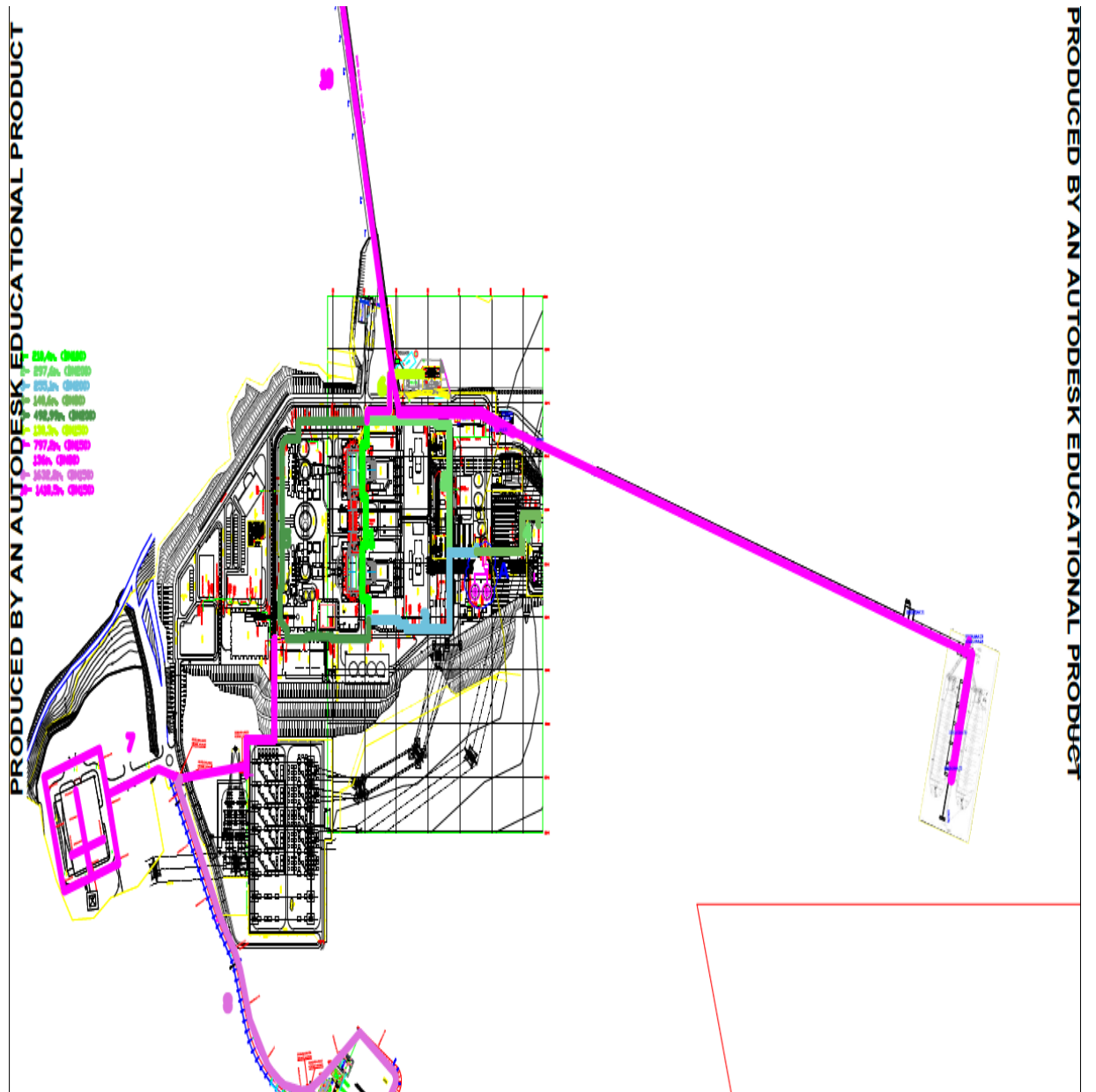
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## OFF FACILITY

| ORGANISATION   | PHONE                       |
|--|-----------------------------|
| <b>FIRE-FIGHTING</b>                                       | <b>110</b>                  |
| <b>EMERGENCY</b>   | <b>112</b>                  |
| <b>GENDARME</b>  | <b>156</b>                  |
| <b>ADANA GENERAL REGIONAL COMMAND</b>                      | <b>0 322 323 32 73</b>      |
| <b>COAST GUARD</b>   | <b>158 / 6142311</b>        |
| <b>ISKEN THERMAL POWER PLANT</b>                           | <b>0322 3552455</b>         |
| <b>BOTAŞ</b>   | <b>0322 6392465</b>         |
| <b>CEYHAN REGIONAL PORT AUTHORITY</b>                      | <b>0322 639 2140</b>        |
| <b>BOTAŞ FIRE OFFICE</b>                                   | <b>0322 639 2465</b>        |
| <b>YUMURALIK MUNICIPALITY</b>                              | <b>0322 6712017</b>         |
| <b>CEYHAN MUNICIPALITY</b>                                 | <b>0322 6134020</b>         |
| <b>CEYHAN PUBLIC HOSPITAL</b>                              | <b>0322 6131362</b>         |
| <b>CEYHAN DISTRICT POLICE MANAGER</b>                      | <b>0322 6138242</b>         |
| <b>YUMURTALIK DISTRICT POLICE MANAGER</b>                  | <b>0322 6712717</b>         |
| <b>BALCALI PUBLIC HOSPITAL</b>                             | <b>0322 3386295</b>         |
| <b>CEYHAN DISTRICT GOVERNOR</b>                            | <b>0322 6139090-6139191</b> |
| <b>ADANA GOVERNORSHIP</b>                                  | <b>0322 4592743</b>         |
| <b>ADANA PROVINCIAL POLICE DIRECTORATE</b>                 | <b>0 322 435 8477</b>       |
| <b>CIVIL DEFENSE TEAM CALL</b>                             | <b>0322 3943674</b>         |
| <b>RECOVERY UNITY DIRECTORATE ADANA</b>                    |                             |
| <b>ADANA PROVINCIAL DISASTER AND EMERGENCY DIRECTORATE</b> | <b>0322 227 28 54-55</b>    |
| <b>ADANA METROPOLITAN MUNICIPALITY</b>                     | <b>0322 455 35 00</b>       |



## ANNEX-5 FIRE PLAN OF FIELD THAT DANGEROUS GOODS HANDLED





PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT

PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT


AK DENİZ

Sarımsaklı (Yellow)

Sarımsaklı (Blue)

| Area  | Color                          | Area (m²) | Volume (m³) | Weight (kg) | Weight (ton) |
|---|--------------------------------|-----------|-------------|-------------|--------------|
| Sarımsaklı (Yellow)                         | Yellow                         | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Blue)                           | Blue                           | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Green)                          | Green                          | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Red)                            | Red                            | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Purple)                         | Purple                         | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Orange)                         | Orange                         | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Brown)                          | Brown                          | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Grey)                           | Grey                           | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Black)                          | Black                          | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (White)                          | White                          | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Pink)                           | Pink                           | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Blue)                     | Light Blue                     | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Green)                    | Light Green                    | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Red)                      | Light Red                      | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Purple)                   | Light Purple                   | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Orange)                   | Light Orange                   | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Brown)                    | Light Brown                    | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Grey)                     | Light Grey                     | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Black)                    | Light Black                    | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light White)                    | Light White                    | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Pink)                     | Light Pink                     | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Light Blue)               | Light Light Blue               | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Light Green)              | Light Light Green              | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Light Red)                | Light Light Red                | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Light Purple)             | Light Light Purple             | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Light Orange)             | Light Light Orange             | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Light Brown)              | Light Light Brown              | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Light Grey)               | Light Light Grey               | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Light Black)              | Light Light Black              | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Light White)              | Light Light White              | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Light Pink)               | Light Light Pink               | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Light Light Blue)         | Light Light Light Blue         | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Light Light Green)        | Light Light Light Green        | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Light Light Red)          | Light Light Light Red          | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Light Light Purple)       | Light Light Light Purple       | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Light Light Orange)       | Light Light Light Orange       | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Light Light Brown)        | Light Light Light Brown        | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Light Light Grey)         | Light Light Light Grey         | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Light Light Black)        | Light Light Light Black        | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Light Light White)        | Light Light Light White        | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Light Light Pink)         | Light Light Light Pink         | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Light Light Light Blue)   | Light Light Light Light Blue   | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Light Light Light Green)  | Light Light Light Light Green  | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Light Light Light Red)    | Light Light Light Light Red    | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Light Light Light Purple) | Light Light Light Light Purple | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Light Light Light Orange) | Light Light Light Light Orange | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Light Light Light Brown)  | Light Light Light Light Brown  | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Light Light Light Grey)   | Light Light Light Light Grey   | 10.000    | 10.000      | 10.000      | 10.000       |
| Sarımsaklı (Light Light Light Light Black)  | Light Light Light Light Black  | 10.000    | 10.000      | 10.000      | 10.000       |

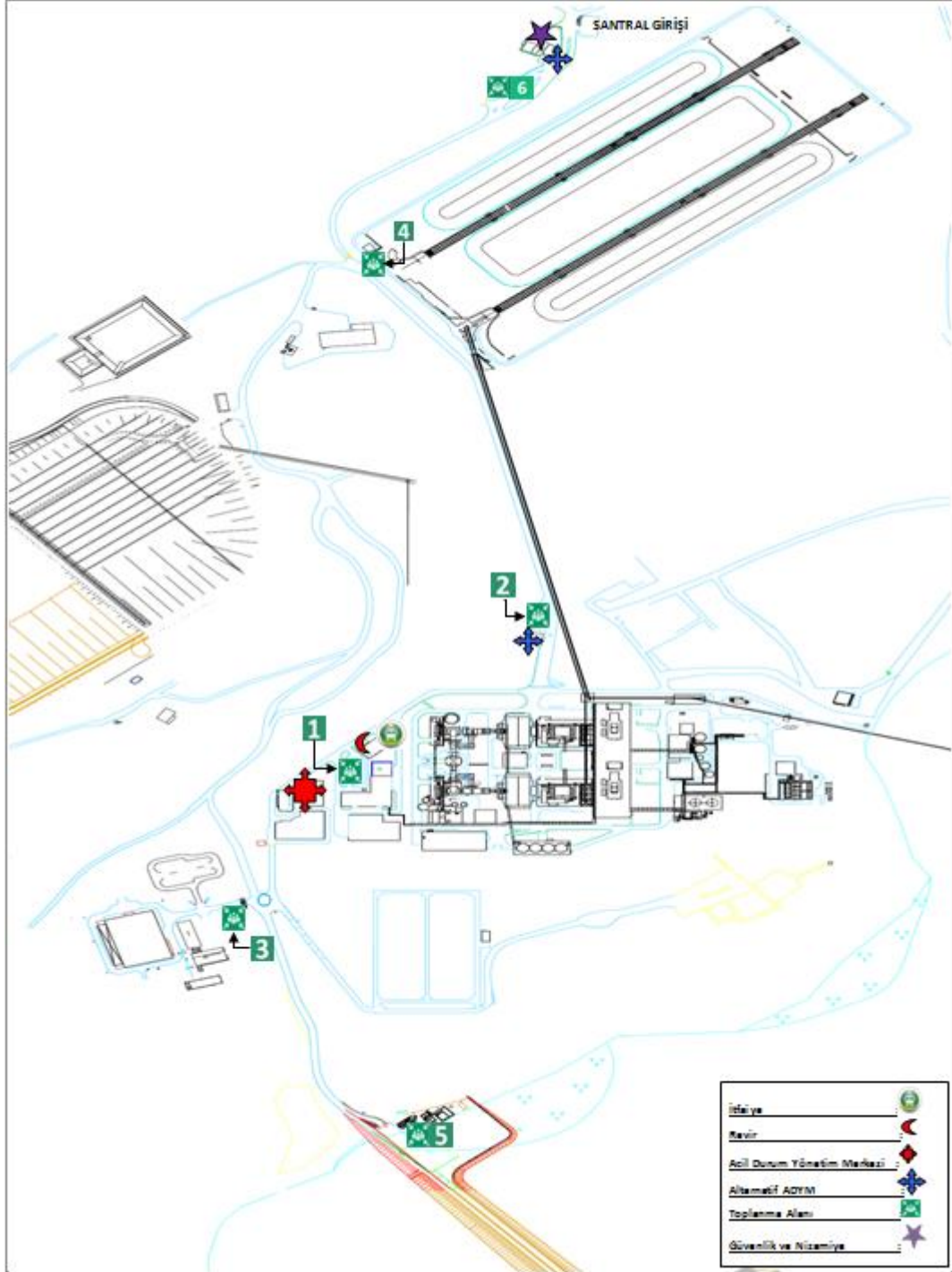


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## **ANNEX-7 EMERGENCY ACTION PLAN**

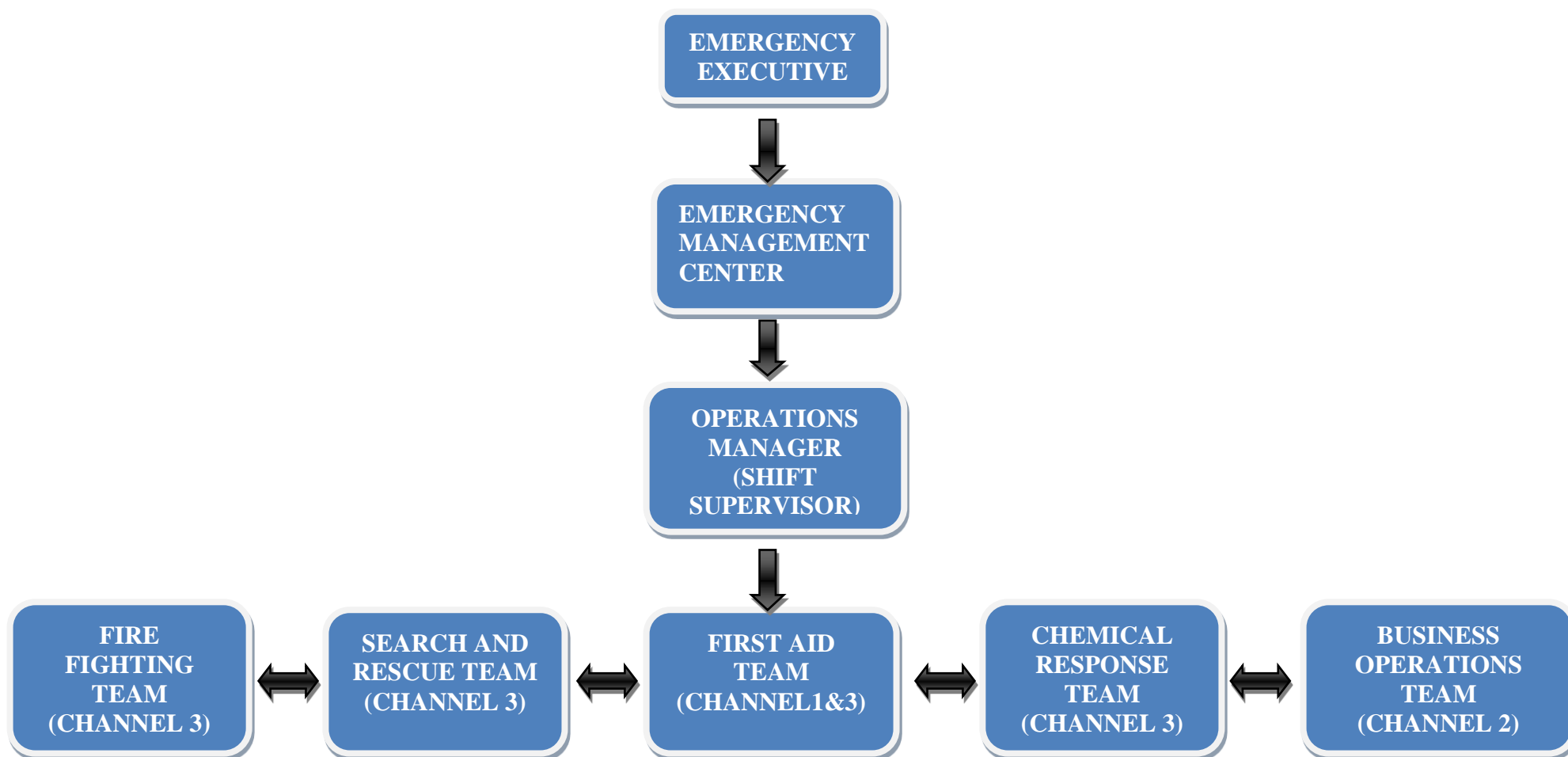
**İSKENDERUN ENERGY AND PRODUCTION TRADE.  
IN AN EMERGENCY ACTION PLAN IS LIKE THAT**


## ANNEX-8 EMERGENCY MEETING POINT PLAN



|              |                                       |                     |                      |                |
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## ANNEX-9 EMERGENCY MANAGEMENT DIAGRAM



|   |                                       |                     |                      |                |
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## ANNEX-10 HAZARDOUS GOODS HANDBOOK



# ISKENDERUN ENERGY AND PRODUCTION INC.

## Contents

DANGEROUS SUBJECT TO IMGD CODE MATTER CLASSES

DANGEROUS LOAD SIGNS

EMERGENCY MEETING PLACES AND FIRE PLAN

WHAT TO DO IN AND OUT OF THE FACILITY IN EMERGENCIES  
NOTICES

COAL HANDLING RULES


SAFE HANDLING OF HAZARDOUS SOLID BULK LOADS  
OPERATION PROCEDURE

EMERGENCY RESPONSE ORGANIZATION DIAGRAM

FIRE MANUAL

EMERGENCY FLOW DIAGRAM

CAUTION DURING GENERAL HANDLING TO BE REQUIREMENTS

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## DANGEROUS GOODS CLASSES SUBJECT TO IMDG CODE

### Hazardous Substance Classes According To IMDG CODE Are As Follows

**Class 1** Explosives And Objects

**Class 2** Gases

**Class 3** Flammable Liquids

**Class 4.1** Flammable Solids, Self-Reacting Substances, Polymerizing Agents and Solid Attenuated Explosives

**Class 4.2** Substances liable to spontaneous combustion

**Class 4.3** Substances which, in Contact with Water, Emit Flammable Gases

**Class 5.1** Oxidizing (Oxidizing) Substances

**Class 5.2** Organic Peroxides

**Class 6.1** Toxic Substances

**Class 6.2** Infectious Substances






















**Class 7** Radioactive Materials


**Class 8** Corrosive Substances

**Class 9** Miscellaneous Hazardous Substances and Articles













## DANGEROUS LOAD LABELS AND SIGNS

|  |   |  |   |
|--|---|--|---|
| <b>CLASS 1</b><br>Explosive<br>Materials               |    |    |    |
|  |    |    |    |
| <b>CLASS 2</b><br>Dangerous gases                      |    |    |    |
| <b>CLASS 3</b><br>Flammable liquids                    |   |  |   |
| <b>CLASS 4</b><br>Flammable solids                     |  |  |  |
| <b>CLASS 5</b><br>Oxidizer<br>Materials                |  |  |   |
| <b>CLASS 6</b><br>Toxic Materials                      |  |  |   |
| <b>CLASS 7</b><br>Radioactive<br>Materials             |  |  |   |
| <b>CLASS 8</b><br>Caustic<br>Materials                 |  |  |   |
| <b>CLASS 9</b><br>Miscellaneous<br>Dangerous Materials |  |  |   |

|   |                                |              |               |         |
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### DANGEROUS LOAD SIGNS

|                                    |   |   |  |   |
|------------------------------------|---|---|--|---|
| High school in temperature         |    |   | To the environment Damaging                    |    |
| LQ Immunity                        |    |  | Arrow aspects(Download while doing )           |    |
| Orange Number plate                |    |   | TM. Loaded can't enter                         |    |
| BM Packaging symbol                | FAME  | FAME  | TM. Loaded To Water Resources can't come close |   |
| Exceptional in quantities Packaged |  |   | Sample Tunnel sign                             |  |

This End Up



Handle With Care



Perishables



Keep Dry



Keep Away From Heat



Fragile


### Emergency Assembly Places and Fire Plan

The plan showing the meeting places in case of emergency is included in Annex-8 of the guide. Fire plans are listed in APPENDIX-5 for the areas where dangerous goods are handled, and in ANNEX-6, the general fire plan is in the relevant section.

### Notifications to be Made Inside and Outside the Facility in Emergency Situations

In case of an emergency, the contact numbers with notifications to be made inside and outside the facility are included in ANNEX-3.



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## COAL HANDLING RULES

### **During Coal Handling:**

For additional information on coal, the relevant section of the IMSBC Code should be consulted.

They are black, finely chopped residues of petroleum refining in the form of powder and small particles. The conditions specified in this section should not be sought for materials with a temperature below 55°C when loading.

- All personnel in charge of coal handling keep their protective clothing and equipment fully ready for use. These;


**Eyes:** In case of excessive dusting, goggles should be used.

**Skin:** Gloves should be used.

**Inhalation:** Avoid breathing dust / smoke / gas / mist / vapor. Have a dust mask ready in case of dusting.

- Additional protective equipment and equipment for coal for emergencies are kept ready in the handling area.
- It is ensured that the team in charge of responding to emergencies receives the necessary training in line with their duties. Personnel who are not informed about the emergency plan and medical first aid guide and who are not trained in how to use this guide will not be assigned to this operation.
- Personnel who do not have the necessary training and information about coal handling are not assigned to this operation.
- All port personnel should be warned against the risks of carbon monoxide gases that will occur in the warehouses and handling should be started after the warehouses are ventilated upon arrival of the ship.
- Employees in charge of the operation should not enter the void spaces between the warehouses for whatever reason.
- In the port and in the transporter, side cooling system (pressurized water extraction), breathing devices (excavators to work in the warehouse) and first aid materials should always be available.
- After the holds have been ventilated for a sufficient period of time, the necessary gas measurements must be made by the ship's personnel and access to the holds should be made within the knowledge of the ship's personnel. Protective clothing to be used for emergencies (fire resistant boots, gloves, overalls, hood equipment and gas masks should be available in the administrative building and on the transshipper).
- Communication with the machine operator or employees should never be interrupted while inside the warehouse. There is constant radio communication with both the construction equipment operators and the other personnel who will work in the warehouse.
- Eating, drinking and smoking are strictly prohibited during handling. Remove the deformed and excessively contaminated personal protective materials after the operation, wash them before reuse or inform the operation chief to provide a new one.



|   |                                       |                     |                      |                |
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### **Important Points To Consider;**

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

- Coals can produce methane, a flammable gas. Methane/air mixtures containing 5% to 16% methane are explosive, sparks or open flames such as electrical or frictional sparks, striking a match or lighting a cigarette may be sufficient to cause an explosion. Methane is lighter than air and therefore accumulates at high points in cargo volumes or other confined spaces. If cargo volumes are not tightly sealed, methane may leak into confined spaces adjacent to the cargo volume.
- Coals can oxidize, causing depletion of oxygen in the cargo volume and an increase in carbon dioxide or carbon monoxide concentrations. Carbon monoxide is an odorless gas slightly lighter than air, its mixtures with air between 12% and 75% by volume are flammable. Toxic by inhalation, 200 times more hemoglobin in blood than oxygen is connected.
- Some coals can self-heat in the load volume and self-heating can lead to self-combustion. Various flammable and toxic gases, including carbon monoxide, are produced. may come out.
- Some coals can react with water to release acids that can cause corrosion. Various flammable and toxic gases, including hydrogen, may be produced. Hydrogen is an odorless gas, lighter than air and mixes with air from 4% to 75% by volume. it is flammable.
- Port personnel should be reminded of the smoldering feature of coal, especially as a result of contact with water during transportation.
- Port personnel should be reminded of the coal's ability to produce METHANE gas and the risk of POISONING, DEATH and explosion as a result.
- Since the start of combustion in the warehouse will cause the formation of CARBON MONOXIDE, the port personnel should be reminded that the amount of carbon monoxide above 50 ppm indicates combustion in the warehouse and that there is not enough oxygen.
- Before the start of the ship evacuation operation, Cargo Information from the captain and the gas and temperature measurements (Gas Monitoring- CH<sub>4</sub> - Temperature) that the ship personnel measure daily during the cruise should be given to us.
- Ship evacuation plan (discharging plan) is made by us together with the ship official.
- Before evacuation, hatch covers will be opened and ventilation will be performed.

| <b>SLIP ANGLE</b>          | <b>BULK DENSITY(kg/m<sup>3</sup>)</b> | <b>STACKING FACTOR (m<sup>3</sup>/t)</b> |
|----------------------------|---------------------------------------|--|
| Valid Not                  | 654-1256                              | 0.79-1.53                                |
| <b>MATERIAL DIMENSIONS</b> | <b>CLASS</b>                          | <b>GROUP</b>                             |
| 50mm. It can go up         | MHB                                   | B ( and A)                               |

### **Hazards:**

|   |  |                     |                      |                |
|---|--|---------------------|----------------------|----------------|
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Coal can create flammable atmospheres, self-heat, cause oxygen depletion, metal structures can cause corrosion. Liquefaction may occur in coal loads if particles smaller than 5 mm are present at a rate of 75% or more.

### **Stacking and Separation Conditions:**

More than one dangerous solid bulk cargo is not stored in our port facility, which will create the conditions for stacking and segregation at the same time.

### **Against Ventilation Conditions Measures:**

Dangerous Solid Bulk Cargoes that will require ventilation conditions are not handled and stored in our port facility. It is not allowed to store coal cargo in closed area. is not done.

If the coal load is carried on the ship or if the loading operation takes place, the ventilation conditions in the IMSBC code provisions will be complied with.

### **Emergency Response Organization Chart**

Emergency organization chart is included in Appendix-9.

## **FIRE MANUAL**

### **FIRE TYPES**

#### **1. Type A Fires (Solid Matter Fires)**

Combustible simple solid materials fire. (For example; wood, coal, paper, grass, fabric, etc.) Their main feature is that they form embers. The basic extinguishing principle of such fires is cooling, the main extinguishing agent is water.


The core is the heat emitter in all Class A fires. These fires are easier to respond to. It may be sufficient to cover the burning surface with an extinguishing agent and to cut off its relationship with oxygen. Waste remaining in some of the fires may be internal combustion, as in cotton and coal. The most effective and most widely used extinguisher in extinguishing such fires is water. In addition to the cooling effect, according to the characteristics of the fire, extinguishers that act as cutting off the relationship with the oxidizing environment that will surround the surface, reducing the oxygen concentration and breaking the chain reactions are used.

#### **2. Type B Fires (Liquid Fires)**

It is a fire of flammable liquid materials. (eg gasoline, benzol, machine oils, lacquers, oil paints, solvent, tar etc.). Their main features are their charless, flaming burning. The basic extinguishing principle of such fires is suffocation, the basic extinguishing agent is foam and BC type Dry Chemical Powder.

Liquid combustible materials can be divided into three classes. These:

1- Liquid combustibles that do not mix with water: Petrol, gasoline, oils, paints, etc. Since their specific gravity is lighter than water, they always rise above the water and their combustion is above the water. In such fires, it is important to break the chain reactions and disconnect the surface from the oxidizing environment or dilute it.

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2- Heavy oils such as tar, asphalt, grease. Effective extinguishers are used for cooling, suffocating and breaking chain reactions in their fires.

3- Liquid combustibles miscible with water: Alcohols. In fires caused by these, effective extinguishers are used to cool, suffocate, reduce their concentration, and break chain reactions. Foam is the most ideal extinguisher for liquid fires. However, CO<sub>2</sub> and KKT can be used for initial and small fires.

### 3. Type C Fires (Gas Fires)

It is a fire of flammable gas materials. (For example, methane, propane, butane, LPG, acetylene, coal gas, natural gas and hydrogen etc.) Its basic features are explosion. The basic extinguishing principle is suffocation, the basic extinguishing agent is BC type Dry Chemical Powder.


### 4.D Type Fires (Light Metal Fires)

Combustible light metals fire. (For example, aluminum, magnesium, titanium, zirconium, lithium, zinc, sodium, potassium and calcium, etc.) Their main features are their burning, flameless and high temperature burning. The basic extinguishing principle is suffocation. A, B, C type extinguishers are useless. Water should never be used. Special D type extinguishing powders are used. When D powder is not found, it is extinguished by covering it with dry sand.

D-type flammable materials are more dangerous in powder form. Suitable mixtures of combustible metal powders with air can cause powerful explosions when they reach the ignition temperature. The extremely high temperatures of some combustible metals counteract the effectiveness of water and other common extinguishers. Some flammable metals react with water to produce Hydrogen and Acetylene gases. This leads to further fire and explosions. There is no general extinguishing agent for Class D fires. There are special extinguishers that can control the fire associated with each of the combustible metals and bear their sign. These extinguishing agents serve to cover the burning metal and suffocate the fire.

### Use of Extinguishing Agents According to Fire Types

| Extinguishing Agent    | A | B | C | D | Electricity up to 1000V |
|------------------------|---|---|---|---|-------------------------|
| This                   | x |   |   |   |                         |
| Torn                   | x | x |   |   |                         |
| ABC Powder             | x | x | x |   |                         |
| BC Powder              |   | x | x |   | x                       |
| CO <sub>2</sub>        |   | x | x |   | x                       |
| Halon and Alternatives |   | x | x |   |                         |
| D Powder               |   |   |   | x |                         |


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### EMERGENCY FLOW DIAGRAM

| <b>ACTIONS TO BE TAKEN</b>   | <b>Relating to chapters</b>        |
|--|------------------------------------|
| <b>EXCITATION:</b> Urgent and unexpected your situation occur that you came / don't come the probability of that you rise notification                 | All Employee and Boat              |
| <b>CALL HELP:</b> Relating to to institutions reach and necessary information transferring   | All Employee                       |
| <b>INTERVENTION :</b> Urgent to the situation in plan determined TRUE equipment and trained employee with the shortest in time intervention to be made | Intervention teams                 |
| <b>FIRST AID:</b> Professional support teams until you reach much last first aid in time activities in its place bringing in                           | First aid Educated<br>All Employee |
| <b>RECOVERY:</b> Port to your facility belonging Material , tool , information , document and other important your document rescuing                   | First Help staff                   |
| <b>PROTECTION:</b> recovered Material , tool , information , document and other important your document protection under receiving                     | Security staff                     |
| <b>INFORMATION :</b> To customers and work in the relationship found other person and Per necessary your statements sending                            | Management                         |
| <b>MANDATORY NOTICES:</b> Legislation in accordance with public to the authorities to be done required your notifications sending                      | Management                         |


### GENERAL THINGS TO CONSIDER DURING HANDLING

- Consider what to do in an emergency for possible risks in line with the training provided!
- Beware of any risk of accident be.
- Inform your supervisor in jobs and situations that you deem risky.
- In case of emergency, notify your supervisor first. give.
- In case of fire, abandon ship. fire response don't!
- Be sure to wear your personal protective equipment use it!
- It is forbidden to eat food, drink and smoke tobacco products during handling.
- Fire sources (such as matches, lighters) are on you do not keep.
- In a place other than your place of duty don't be found
- It is strictly forbidden to enter confined spaces on board. it is forbidden!
- No one is alone while work is being done on the ship. will not be released.
- Before starting work, make sure that the necessary warning signs are at the ship entrances . be.

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## **ANNEX -11 LEAKAGE AREAS AND EQUIPMENT FOR CTU AND PACKAGES**

İskenderun Energy Production and Trade. Inc. Since CTU and packaged hazardous products are not handled in the coastal facility, there is no leakage area and equipment.

|   |                                       |                     |                      |                |
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## ANNEX-12 INVENTORY OF PORT SERVICE SHIPS

İskenderun Energy and Production Trade. There are 6 sea vehicles in the ship inventory of INC. The list and features of the marine vehicles are as follows.

### TRANSSHIPPER (Floating PLATFORM)

|                                 |                                     |
|---------------------------------|-------------------------------------|
| <b>Quantity:</b>                | <b>1 Piece</b>                      |
| <b>Name:</b>                    | <b>ISKEN</b>                        |
| <b>Production Date:</b>         | <b>01.September.2002</b>            |
| <b>Shipyard:</b>                | <b>Remontowa in Gdansk , Poland</b> |
| <b>IMO No:</b>                  | <b>Not Applicable</b>               |
| <b>Structural design type:</b>  | <b>Barge ( Catamaran )</b>          |
| <b>Class regulation regime:</b> | <b>Ships</b>                        |
| <b>Flag:</b>                    | <b>Turkey</b>                       |
| <b>Port of Registration:</b>    | <b>Istanbul</b>                     |

|                                 |   |
|---------------------------------|---|
| <b>tugboats</b>                 |   |
| <b>Quantity:</b>                | <b>2Pcs</b>                                 |
| <b>Name:</b>                    | <b>ARKAD 1 &amp;ARKAD 2</b>                 |
| <b>Former Name:</b>             | <b>ARKAD I &amp; ARKAD II</b>               |
| <b>Production date:</b>         | <b>2002 , Aug. 01 &amp; 2002 , Aug. 09</b>  |
| <b>Shipyard:</b>                | <b>Türkter / Uzmar in Istanbul , Turkey</b> |
| <b>IMO no:</b>                  | <b>9277424 &amp; 9277436</b>                |
| <b>Structural design type:</b>  | <b>Single hull Ship</b>                     |
| <b>Class regulation regime:</b> | <b>Ships</b>                                |
| <b>Flag:</b>                    | <b>Turkey</b>                               |
| <b>Port of Registration:</b>    | <b>Istanbul</b>                             |




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| SERVICE BOAT          |                                      |
|-----------------------|--------------------------------------|
| Quantity:             | 1 Piece                              |
| Name:                 | ARKAD 3                              |
| Former Name:          | ARKAD III                            |
| Production Date:      | 2002 , Aug. 09                       |
| Shipyard:             | Türkter / Uzmar in Istanbul , Turkey |
| IMO no:               | Not Applicable                       |
| Flag:                 | Turkey                               |
| Port of Registration: | Istanbul                             |

| BARGES (BARGES)          |                                  |
|--------------------------|----------------------------------|
| Quantity:                | 2 Pieces (Twin Ships)            |
| Name:                    | ARKAD 4 &ARKAD 5                 |
| Former Name:             | ROLF, ARKAD IV& GUNTHER, ARKAD V |
| Production Date:         | 1999, Aug. 01 &1999,Sept. 01     |
| Shipyard:                | FSG in Flensburg , Germany       |
| IMO no:                  | 8956504 & 8956516                |
| Structural Design Type:  | Pontoon                          |
| Class regulation regime: | Ships                            |
| Flag:                    | Turkey                           |
| Registered Port:         | Istanbul                         |



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## ANNEX - 13 CEYHAN REGIONAL PORT AUTHORITY ADMINISTRATIVE BOUNDARIES, ANCHORING PLACES AND MARINE COORDINATES OF THE MANAGEMENT CAPTAIN LANDING/EMBORY POINTS

### A) PORT ADMINISTRATIVE AREA BORDER

The port administrative area of Ceyhan Regional Port Authority is the sea and coastal area within the line formed by the following coordinates.

- 36° 34' 03" N – 035° 33' 24" D
- 36° 25' 15" N – 035° 35' 57" E
- 36° 44' 54" N – 036° 03' 12" E
- 36° 55' 18" N – 036° 02' 14" D

### B) ANCHORAGE AREAS

a) Anchorage area no. 1 : The anchorage area of ships carrying dangerous goods, nuclear powered military ships, ships to be quarantined and ships that will carry out degassing is the sea area formed by the following coordinates .

- 36° 49' 06" N - 035° 57' 00" D
- 36° 47' 00" N - 035° 58' 48" D
- 36° 47' 00" N - 036° 01' 12" D
- 36° 51' 12" N - 036° 01' 12" D
- 36° 51' 48" N - 035° 59' 12" D

b) Anchorage area no. 2 : The anchorage area of ships not carrying dangerous goods and military ships is the sea area formed by the following coordinates .

- 36° 49' 30" N - 035° 54' 42" D
- 36° 49' 30" N - 035° 55' 17" E
- 36° 48' 30" N - 035° 54' 24" D
- 36° 48' 30" N - 035° 53' 50" D

c) Anchorage area no. 3 : The anchorage area of ships not carrying dangerous goods and military ships is the sea area formed by the following coordinates .


- 36° 52' 18" N - 035° 59' 18" D
- 36° 51' 42" N - 036° 01' 36" D
- 36° 52' 48" N - 036° 02' 18" E
- 36° 53' 30" N - 036° 00' 06" E

ç) Anchorage area no. 4 : The anchorage area of ships not carrying dangerous goods and military ships is the sea area formed by the following coordinates .

- 36° 46' 00" N - 035° 52' 00" D
- 36° 46' 00" N - 035° 53' 12" D
- 36° 47' 36" N - 035° 54' 30" D
- 36° 47' 36" N - 035° 53' 24" D


### C) PILOT PICK-UP AND DROP-OFF PLACES

- 36° 52' 30" N – 035° 58' 48" D
- 36° 51' 21" N – 035° 57' 18" E
- 36° 50' 18" N – 035° 56' 24" D
- 36° 47' 00" N – 035° 56' 00" D

|   |                                       |                     |                      |                |
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## **ANNEX -14 EMERGENCY RESPONSE EQUIPMENT AGAINST MARINE POLLUTION IN THE PORT FACILITY**

With a private company by way of purchasing services regarding marine pollution ; It has been agreed on the subjects of being ready to fight against marine pollution, Inspection, Pollution response and cleaning (Level 1, Level 2 and Level 3), Coastal cleaning, Rehabilitation of coastal and sea areas, Compensation for pollution damages, Waste transfer, Waste disposal .

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## **ANNEX- 15 PERSONAL PROTECTIVE EQUIPMENT (PPE) USAGE EQUIPMENT**

### **MATERIALS TO BE GIVEN TO ALL EMPLOYEES**


- Work gloves
- Raincoat
- Helmet
- Work shoes
- Occupational safety glasses
- leather jacket or coat

### **MATERIALS TO BE GIVEN TO TECHNICAL EMPLOYEES**

1. Business suit
2. Coat
3. Ski mask or beanie

### **MATERIALS TO BE GIVEN TO PROTECTION (PRIVATE SECURITY) PERSONNEL**

1. Shirt
2. Trousers
3. Tie
4. Cap
5. Hard hat
6. Parka
7. Sock
8. Cartridge belt
9. Waistcoat
10. Jumper
11. Gloves


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**Equipment related to dangerous cargoes is as follows.**

- MSDS of dangerous goods will be provided and examined.
- A coordination meeting will be held at least 1 day before the dangerous goods are accepted to the port facility, taking into account the information in the IMSBC Code book and MSDS forms. This meeting will be attended by the operation manager, DGSC and other relevant persons (Occupational safety specialist, Occupational physician, Environmental engineer). (The decision to hold this meeting for the routinely handled dangerous goods accepted to the port can be made by the operation or DGSC).
- At the coordination meeting; Additional equipment and personal protective equipment required for dangerous cargo/ s to be accepted at the port will be determined within the scope of MSDS and IMSBC CODE documents.
- If a decision is made to accept the dangerous goods as a result of the meeting, the responsible persons shall take into account the information in the MSDSs and implement and enforce the additional measures required within the scope of the IMSBC Code.
- Equipment and materials in terms of emergency response will be determined in the IMSBC Code and MSDSs . If there is a need for missing equipment , equipment and materials, the purchasing unit will be notified and their supply will be provided urgently.
- Handling or in case of an accident will be determined and supplied in accordance with the load type and will be kept ready for use.
- Handled in our coastal facility Personal protective equipment and equipment suitable for the petcoke load and against the risks it may pose were distributed to the employees. Helmet, safety glasses, work clothes (phosphorescent), gloves, steel toe cap and steel sole work shoes that do not hold static load were distributed to our employees.


**Handled at our facility Additional protective and equipment that should be kept for coal in emergency situations are as follows.**

- Protective clothing (fire resistant boots, gloves, overalls, hood)
- Gasmask
- Fresh air breathing apparatus
- Gas measuring device.


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## ANNEX-16 DANGEROUS GOODS INCIDENTS NOTIFICATION FORM

|   |  |
|---|--|
| <b>Issue number- Date</b>   |  |
| <b>Company / Institution</b>  |  |
| <b>Sender Office</b>  | <b>CONTACT INFORMATION</b>   |
| <b>Receivable Office</b>  |  |
| <p align="center"><b>PORT FACILITY</b><br/><b>“ DANGEROUS GOODS EVENT NOTIFICATION”</b></p> |  |
| <b>1.</b>   | DATE AND TIME OF EMERGENCY:  |
| <b>2.</b>   | PLACE WHERE THE BOILER OCCURRED (SHOE FACILITY AND/OR SHIP), POSITION AND AREA OF IMPACT:  |
| <b>3.</b>   | EMERGENCY TYPE (eg: FIRE, FUEL SPILL, PERSONNEL INJURY) AND CASE OF THE BOILER ) :   |
| <b>4.</b>   | IF THE WINNING IS KNOWN HOW IT OCCURRED AND THE REASON:  |
| <b>5.</b>   | NUMBER OF INJURED, DEAD AND MISSING AND IDENTIFICATION INFORMATION:  |
| <b>6.</b>   | SIZE OF DAMAGE/POLLUTION CAUSED:   |
| <b>7.</b>   | INFORMATION IF THE SHIP ATTENDED IN CRASH (NAME, FLAG, IMO NO, EQUIPMENT, OPERATOR, CARGO AND AMOUNT, CAPTAIN'S NAME AND SIMILAR INFORMATION):   |
| <b>8.</b>   | METEOROLOGICAL CONDITIONS:   |
| <b>9.</b>   | DANGEROUS SUBSTANCE INFORMATION INCLUDED IN THE ACCIDENT;<br>FLOUR NUMBER:<br>PSN:<br>CLASS:<br>DUAL RISK, IF ANY:<br>WHETHER MARINE POLLUTION:<br>SIGN AND LABEL DETAILS OF DANGEROUS GOODS |

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|  |  |
|--|--|
| <b>10.</b>   | MANUFACTURER INFORMATION OF THE DANGEROUS SUBSTANCE:<br>PACKAGING CARRIED BY THE DANGEROUS SUBSTANCE; FEATURES<br>AND NUMBER OF THE CARGO UNIT AND CONTAINER:<br>SEND INFORMATION :,<br>CARRIER INFORMATION:<br>RECEIVER INFORMATIONS: |
| <b>11.</b>   | CONTROL MEASUREMENT DAMAGES AND EMERGENCY RESPONSE BY<br>THE COASTAL FACILITY TO CONTROL THE EMERGENCY:  |
| <b>12.</b>   | AMOUNT OF DAMAGE TO FACILITY/ EQUIPMENT, IF ANY:   |
| <b>13.</b>   | LOSS OF PRODUCT AND/OR AMOUNT OF RECYCLED PRODUCT, IF ANY:   |
| <b>14.</b>   | EFFECT OF BOILER ON ROUTINE OPERATIONS OF THE FACILITY:  |
| <b>15.</b>   | EQUIPMENT AND/OR PRODUCT QUALITY CONTROLS:   |
| <b>16.</b>   | ACTIVITIES TO BE DONE / TO AVOID THE EMERGENCY SITUATION NOT<br>AGAIN:   |
| <b>17.</b>   | AUTHORITIES AFFECTED BY THE EMERGENCY SITUATION AND TO<br>THEIR EMERGENCY STATES:  |
| <b>18.</b>   | OR EXPECTED REACTION IN THE PRESS:   |
| <b>FORM PREPARED BY:</b><br><br><b>Name Surname :</b><br><b>Mission:</b><br><b>Signature :</b> |  |

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# **ANNEX-17 NOTIFICATION FORM FOR CONTROL RESULTS OF DANGEROUS GOODS CARGO TRANSPORT UNITS (CTUS)**

CTU handling is not carried out on the coastal facility.



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## 12. DEFINITIONS AND ABBREVIATIONS

**Handling :** Dangerous cargo; loading and unloading, stacking, sorting, relocation, loading and unloading of the cargo transport unit, degassing, ventilation, replacement or repair of the cargo transport units and their packaging, and similar transportation transactions,

**DGHG:** Dangerous Goods Handling Guide

**Temporary storage:** For a temporary period of time at the coastal facility of dangerous goods subject to transport storage,

**Ship's Person:** Owner , operator, charterer, captain or agents and natural or legal persons authorized to represent the ship owner.

**Cargo Person:** The sender , receiver, representative or organizer of the transport works of the dangerous cargo .

**Accident:** During the transportation of dangerous goods by sea or during their handling and/or storage in coastal facilities ; Incident or events that have harmful consequences such as death, injury, property damage and environmental pollution , originating from or involving dangerous substances your chain,


**Coastal Edge Line:** Sandy, pebbly, rocky, stony, reed, swampy and swampy areas formed by the water movements in the land direction after the coastline in sea, natural and artificial lakes and streams . the natural boundary of similar areas ,

**Coastal Facility:** Port, quay, pier, berthing place, fuel oil, liquefied gas, where ships or marine vehicles can safely take their cargo or take shelter, where dangerous cargo is handled, including the temporary storage areas located on the sea side of the shore edge line defined in the Coastal Law No. 3621. or chemical pipeline and float system or dolfen/platform,

**Existing Coastal Facility:** The coastal facility that has been granted a coastal facility operation permit/coastal facility temporary operation permit within the scope of the Regulation on the Procedures and Principles Regarding the Operation Permit for Coastal Facilities published in the Official Gazette No. 26438 and dated 18/2/2007 ,

**Incident:** Occurring in a coastal facility in connection with operations and activities and endangering the safety of the facility, people in the facility or other persons, or the environment or not fixed in case of endanger able to insert the one which... and accident outside remainder event or events sequence,

**Hot Work:** done by people certified by the relevant authority; the use of open fires and flames, power tools or hot rivets, grinding, soldering, burning, cutting, welding , or any work involving heat or sparks,

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**Dangerous Goods Compliance Certificate** : Hazardous material handling and the coastal facilities engaged in temporary storage activities, which they have to take within the scope of the regulation and document,

**Dangerous Cargo:** 1) Petroleum and petroleum products included in the International Convention for the Prevention of Pollution of the Seas by Ships (MARPOL) 73/78 Annex I, Attachment 1,

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

3) Among the cargoes given in IMSBC Code Attachment 1, the bulk cargoes with "B" and "A and B" expressions in the group box in the characteristic table,

4) Liquid substances with the phrase "S" or "S/P" in the "d" column titled "hazards" of the table given in Chapter 17 of the IBC Code,

5) Gaseous substances given in IGC Code Chapter 19,

**Port Authority:** Each port authority established by legislation in our country,

**IMSBC Code:** International Maritime Solid Bulk Cargoes Code,

**IMDG Code:** International Maritime Dangerous Goods Code,

**VHF** : Radio communication made over very high frequency,


**CTU:** Freight Transport Unit

**IMO:** International Maritime Organization

**UN:** United Nations

**MSDS:** Material Safety Data Sheet

**ADR:** European Agreement on the International Carriage of Dangerous Goods by Road

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## PRESENTATION

This guide is published by the Ministry of Transport and Infrastructure; It has been prepared within the framework of the “Regulation on the Transport of Dangerous Goods by Sea and Loading Safety dated 14 November 2021 and numbered 31659” and it has been prepared within the frame work of “Dangerous Cargo Handling Guide Implementation instruction dated 20 April 2022 and numbered 281879”

This Guide applies to the entry and presence of dangerous goods in port areas, both on board and on shore. These are intended to be made applicable to all ships visiting a port, regardless of their flag.

Ships' stores and equipment , or to troop transports and warships. It is to help the persons and institutions that prepare the legal requirements to ensure that these requirements are made as effective as possible by specifying all possible situations of dangerous goods in the cargo areas, but without creating validity for exceptional situations.

This guide and its content can never be in violation of the requirements of national and international legislation and do not remove the responsibilities of the parties within the framework of national and international legislation. When there is a conflict between this guide and the relevant national and international legislation, the relevant national and international legislation provisions are valid.

This is Dangerous Goods Handling It is obligatory to follow up the matters specified in the guide by the ship's captains and cargo persons in accordance with the changing national and international provisions. This guide has been prepared only as a guide and it is the legal responsibility of the relevant parties to take the necessary preventive measures/measures even if they are not specified in this DGHG.