



DANUBE
LOGISTICS

Giurgiulesti International Free Port

Giurgiulesti International Free Port

OIL TERMINAL

STORAGE CAPACITY: 64 000 m³

Planning Interventions in case of Oil Spill



In order to ensure the industrial security at national and international level **GIFP** has developed a system of **INTERNAL OPERATING PROCEDURES:**

1. **GIFP port regulations** are elaborated according to the stipulations of the International Code regarding Safety Management, the ISPS Code (International Ship and Port Facility Security), the MARPOL Convention. It establishes several provisions intended to reduce the potential risks of occurrence of accidents.
2. **EMERGENCY RESPONSE PLAN** is developed on the basis of the International Safety Guide for Oil Tankers and Terminals(ISGOTT) provisions , coordinated by the Emergency Situations Service of the Republic of Moldova and establishes the actions, procedures and responsibilities in case of any emergency situation in the port.
3. **THE PORT FACILITY SECURITY PLAN** is prepared based on the stipulations of the International Code on Ship Security and Port Facilities (ISPS), approved by The Ministry of Transport of the Republic of Moldova and establishes the Procedures of Port Facilities Security.



4. **OIL TERMINAL EMERGENCY LOCATION AND LIQUIDATION OF PLAN** is coordinated by the Ministry of Economy of the Republic of Moldova and establishes the analysis of all possible emergency scenarios during the exploitation of oil terminal facilities, as well as the measures and procedures for their liquidation.
 5. **OIL SPILL RESPONSE PLAN** is coordinated by the Emergency Situations Service of the Republic and approved by the Captain of the Giurgiulesti International Free Port. It represents the basic regulation that establishes the responsibilities and actions to be undertaken by the Danube Logistics company, by the competent state authorities and private sector in case of oil spills.
- The objective** is to provide a detailed and systematized response of a timely, efficient and well coordinated safe intervention in case of a possible oil leakage and therefore to minimize the potential negative impact on the environment.



For the elaboration of the **Oil Spill Response Plan**, the Danube Logistics company has consulted several national and international institutions and relevant authorities, including:

- the Captainship of the Giurgiulesti Port
- The Ministry of Transport and Road Administration of the Republic of Moldova
- Cahul District Council
- Civil Protection and Emergency Situations Service of the Ministry of Internal Affairs of the Republic of Moldova
- The Department of Operational Civil Protection and Emergency Situations of the Cahul district
- The State Ecological Inspectorate
- The Ecological Agency Cahul
- The Republican corporation “Apele Moldovei”
- The Ministry of Economy of the Republic of Moldova

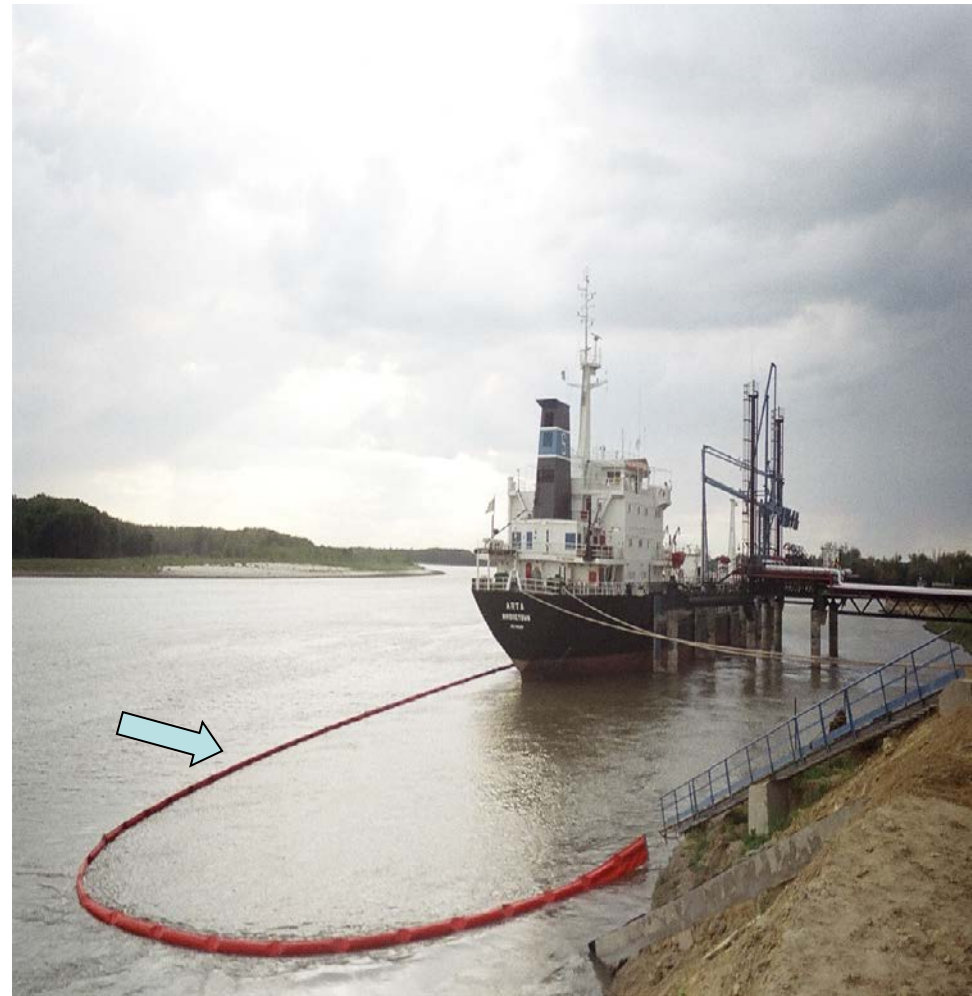


SECURITY POLICIES, OPERATIONAL PROCEDURES

- The Danube Logistics SRL made considerable investments to purchase equipment for oil leakage prevention and for intervention in case of oil spill (ICSP). The majority of the equipment was purchased from the company Elastec, USA - one of the largest companies in the world that provides ICSP equipment.
- Port operators have been multilaterally trained by international experts from International Maritime Organization (IMO) in the field of prevention and intervention in case of oil leakage, use of the equipment in case of oil spills.

PREVENTION AND INTERVENTION EQUIPMENT in case of oil leakage

- **“OPTIMAX II” – Retention dam for oil products- 240 m in 30 m sections**
 - ✓ is an obstacle that looks like a flexible cuff for the retention of oil products and floating substances for the protection zone and quick action;
 - ✓ The diameter of the floating surface is 18 cm and of the cuff 30 cm ;
 - ✓ It is made of polyurethane (military standard), trailed by a high voltage stainless steel cable of 6 mm braided in metal and a galvanized ballast chain, coated by a 8 mm hot plunge;
 - ✓ Is provided with standard connectors with universal floating devices and accessories.



PREVENTION AND INTERVENTION EQUIPMENT in case of oil leakage

***SKIMMER 118/E -150Y
collection system is
composed of:***

- 2 collector reels with hydraulic motor located on anodized aluminum housing for shipbuilding.

The collector shall be placed on water to collect the spilled oil. At their turn, they are discharged through pipes into a storage tank located on shore.



PREVENTION AND INTERVENTION EQUIPMENT in case of oil leakage

SKIMMER 118/E -150Y system
is powered by a diesel engine.

The system consists of :

- suction centrifugal pump ;
- set of flexible hoses with a diameter of 50 mm with a fixing armature ;
- 15m of hydraulic hoses;
- power block





PREVENTION AND INTERVENTION EQUIPMENT in case of oil leakage

Absorbent material

- Multipurpose absorbent cloths that can be used on water and in the area of oil terminal in case of small oil leaks.
- Granular absorbent material

An entirely separate dam

which will be installed inside the main dam in case of oil spills for the absorption of the overflowed petroleum products .





Building solutions

- The construction of berth ensures the collection of storm waters or accidental spillage of petroleum products from the platform, by endowing it with an inclined bottom plate, in which the pollutants are accumulated and are leaking through a pipe set in a united collection tank, with a total volume of 25m³.
- A special armed concrete platform was built on the territory adjacent to the berth. It is covered with a special film of horizontal polyethylene of 2mm thick (HDPE), for the discharge on the shore of the equipments for preventing and collection of oil spills during their unloading on ships.



OPERATIONAL PROCEDURES

Services and Equipments of the Third Parties

Support Services of towage, mooring of ships, pontoon installation, leaving ships from the GIFP is made by an international company of towage and rescue services "Multraship Romania" through the tugboat Multratug21.



OPERATIONAL PROCEDURES Training

The port operators have been multilaterally trained on the operation of the protection dam and other equipment in case of oil leakage.

The training is provided, by the producing company, that is an independent Danish company, expert in training regarding the use of intervention equipment in case of oil spills.





OPERATIONAL PROCEDURES

Services and equipments of the Third Parties

GIFP has signed a contract with Seacor Environmental Services from USA in order to provide services of intervention in case of “3-rd Level” oil spills. In case of a major oil leak Seacor will immediately intervene with specialized equipment, on behalf of the Danube Logistics from their base located in the Black Sea.

Seacor is one of the three main companies of this kind recognized in the world and serves well-known oil companies.

GIFP is also being negotiating with neighboring port administrations on issues related to **possible mutual assistance in emergencies**.



INTERVENTION PLAN IN CASE OF OIL LEAKAGE

ICSP Plan provides a system of intervention in case of oil spills, it's format being internationally agreed classifies the magnitude of the leakage in accordance with “**The pollution degree**”, determined by analyzing the oil layer thickness.

As reference points for expression of thickness serve the following:

- Silver gloss 0.0001 mm
- Multicolored gloss 0.003 mm
- Brown / black gloss 0.1 mm
- Dark brown / black gloss > 1mm

Formula used to determine the approximate quantity:

$$\mathbf{L \text{ (meters)} \times W \text{ (meters)} \times \frac{\text{Thickness(mm)}}{1000} = m^3}$$



INTERVENTION PLAN IN CASE OF OIL LEAKAGE

The scale for assessing the accidents used by GIFP is as follows:

- **Rank 1** $< 1\text{m}^3$

Small operational leakage, when some immediate measures can be taken with local resources without any outside interventions

- **Rank 2** (between 1m^3 and 10m^3)

Medium leak which would require using external and the authorities services

- **Rank 3** $>10\text{m}^3$

Large size leak, which should be removed by authorities and services of external agents.



INTERVENTION PLAN IN CASE OF OIL LEAKAGE

- The head of the shift should report immediately any oil leakage to the Director of the GIPF.
- The Director, together with technical officers, shall make a visual assessment of the oil leakage in accordance with “Assessment form in case of oil leakage” and determine the category of leakage.
- Depending on the degree of oil leakage, the following measures will be taken by the General Director of GIPF.



INTERVENTION PLAN IN CASE OF OIL LEAKAGE

- If the accident is considered of the “**1st rank**”, the Director of the GIFP takes the following measures:
 1. Informs the 1st Level Notification Points (GIFP)
 2. Establishes the intervention team
 3. Initiates measures to prevent oil spills in cooperation with the intervention team in case of oil spill
 4. Organizes sampling from the contaminated areas
 5. Takes measures to clean contaminated areas
 6. Organizes safe storage and evacuation of the oil products and of the contaminated water/soil.



INTERVENTION PLAN IN CASE OF OIL LEAKAGE

- If the accident is considered of the “**2nd Rank**” the Director of the GIFP takes the following measures:
 1. Informs the 2nd Level Notification Points that are
 - ✓ Danube Logistics
 - ✓ The Ministry of Transport and Road Management (the Captain of the Giurgiulești International Free Port)
 - ✓ Civil Protection and Emergency Situations Service of the Ministry of Internal Affairs of the Republic of Moldova
 - ✓ The State Ecological Inspectorate(AE Cahul)
 - ✓ The Ministry of Economy and Commerce of the Republic of Moldova (IPSSTOIP)
 - ✓ Information and Security Service of the Republic of Moldova



INTERVENTION PLAN IN CASE OF OIL LEAKAGE

2. Prepares the Assessment of the Accidental Leakage
3. Takes measures to prevent oil spills in collaboration with the intervention team for oil spills
4. Organizes sampling from the contaminated areas
5. Organizes cleaning actions of the contaminated areas in collaboration with the Ministry of Environment
6. Organizes safe storage and evacuation of petroleum and contaminated soil in collaboration with the Ministry of Environment



INTERVENTION PLAN IN CASE OF OIL LEAKAGE

- If the accident is considered of the “**3rd rank**” the Director of the GIFP takes the following measures:
 1. Informs the **3rd Level** Notification Points
 - ✓ Danube Logistics
 - ✓ The Ministry of Transport and Road Management (the Captain of the Giurgiulești International Free Port)
 - ✓ Civil Protection and Emergency Situations Service of the Ministry of Internal Affairs of the Republic of Moldova
 - ✓ The State Ecological Inspectorate(AE Cahul)
 - ✓ The Ministry of Economy and Commerce of the Republic of Moldova (IPSSTOIP)
 - ✓ Information and Security Service of the Republic of Moldova
 - ✓ Lower Danube River Administration
 - ✓ The Zonal Captaincy Galați
 - ✓ The Captaincy of the Reni Port



INTERVENTION PLAN IN CASE OF OIL LEAKAGE

2. Prepares the Assessment of the Accidental Leakage
3. Takes measures to prevent oil leakage in collaboration with the intervention team for oil spills, the authorities and the national and international agencies
4. Organizes sampling from the contaminated areas
5. Organizes cleaning actions of the contaminated areas in collaboration with the national and international authorities
6. Organizes safe storage and evacuation of petroleum and contaminated soil



INTERVENTION PLAN IN CASE OF OIL LEAKAGE

- **Key elements of assessment of the accident are:**
 - ✓ Assessing the size of spill, estimating the approximate volume of leak.
 - ✓ Movement of leakage, and an approximate estimation of the direction of leaked oil movement;
 - ✓ Tracking the leakage will be performed regularly during this period to provide the latest information in order to facilitate the control of the incident;
 - ✓ The environmental monitoring, the regular monitoring after the incident until it comes to understanding that the remediation is completed, providing information on the progress of the recovery situation.



INTERVENTION PLAN IN CASE OF OIL LEAKAGE

- **The Captain of the Port**, as a supervisor of every nautical operations, has the following responsibilities:
 - ✓ To establish the type and the volume of the pollution caused by the ship or operator and to determine the cause of pollution;
 - ✓ To receive alarm signals, to centralize and transmit them through the vessels coordination system
 - ✓ To liaise with the administrations of all levels by sending current information related to the situation in the port
 - ✓ To participate in assessing the costs and effects, the causes that led to the accident or pollution of the Danube or Prut Rivers in the areas of competence.



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Thank you!

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