



# Together ... We Achieve More



Petroleum Safety & Environmental Services Company

[PETROSAFE]





شرآــة الخدمــات البتروليــة للسلامـة والبيـئــة [بتروسيــف]



### CONTAMINATION MANAGEMENT

### **Marine / River OIL SPILL Combating Services**

The importance of water resources is very well recognized whether it is marine, river or any other water stream.

Therefore, the Egyptian General Petroleum Corporation "EGPC" saw PETROSAFE as the best capable entity to manage its oil spill combating centers located all over Egypt in Alexandria, Suez, Hurghada and Ras Ghareb. PETROSAFE has developed these centers to cover South Sinai "El-Tur" and the river Nile North in Tebbin and South in Aswan. (Luxor and Asyut centers are under construction).

PETROSAFE has always provided support to protect national coasts through these centers in addition to an Emergency Operations Room available 24/7 providing both onshore and offshore pollution response, and Road tanker spill incidents.

PETROSAFE is committed to provide the highest quality level of services according to international standards ISO 9001 and ISO 14001 and OHSAS 18001, national and international laws and conventions [OPRC 1990 (International Convention on Oil Pollution Preparedness Response and Cooperation), MAROPL 73/78 (International Convention for the Prevention of Pollution from Ships)].

PETROSAFE can provide the following list of services through its fully equipped centers and skilled highly qualified personnel:

### Marine, River and Coastal Oil Spill Combating

All centers are fully equipped with up to date equipment like skimmers, booms, sorbents, dispersants machines, marine vessels, transfer pumps, oil storage tanks and beach clean-up equipment. These equipment are handled by highly qualified experienced personnel that are trained frequently to be in a stand-by status.



### **Securing Ship to Ship and Drilling Operations**

PETROSAFE upon client request provides protection crews to secure all Ship to Ship and drilling activities and fight any spills if there are any.



### Oil Spill Combating Equipment Rental

After training their personnel, PETROSAFE can also rent equipment suitable to client activities for a certain periods.



### CONTAMINATION MANAGEMENT

### **Equipment Maintenance and Technical Support**

It is very important to select an appropriate combating equipment according to the nature of your activities to ensure that the equipment are always fit the duties. PETROSAFE has good experience in assessing the risks that may arise from the activities of your facilities and choosing the appropriate equipment to deal with these risks. Moreover, PETROSAFE has qualified maintenance crews with high experience in oil spill combating equipment.

#### **3R-Risk Reduction Review Program**

A checklist formulated by PETROSAFE to determine risk and define ways of mitigation to help protect human and capital resources in addition to saving time and money.

### **Oil Spill Contingency Plans**

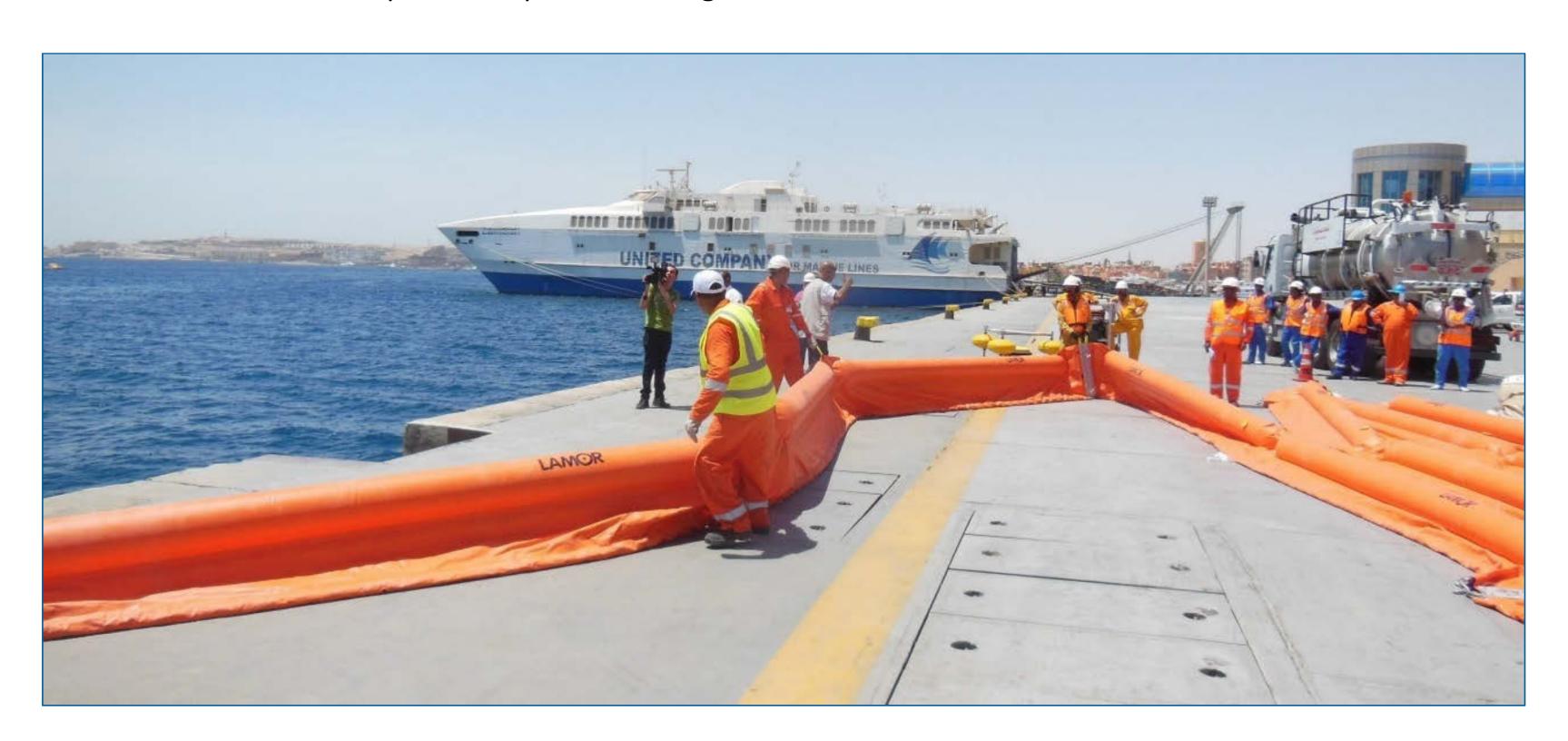
The oil spill contingency plans are designed to guide pre-identified personnel through processes required to respond to an oil spill and to coordinate all aspects of the response to an oil spill.

PETROSAFE offers a variety of contingency plan packages:

- Offshore production and drilling oil spill contingency plans (including pipelines)
- Ports and port facilities oil spill contingency plans
- Local authorities oil spill contingency plans
- National authorities.

### **Training**

PETROSAFE provides a group of various training programs. We deliver these programs through our accredited trainers or our accredited partnership with training houses.





### CONTAMINATION MANAGEMENT

### **Technical Consultancy**

One of the major fields of cooperation with companies, organizations and port authorities as we offer our technical consultancy based on our expertise in the form of establishing spill combating matrixes and define needs in light of each activity and according to laws and international standards and conventions.

#### **Emergency Drills**

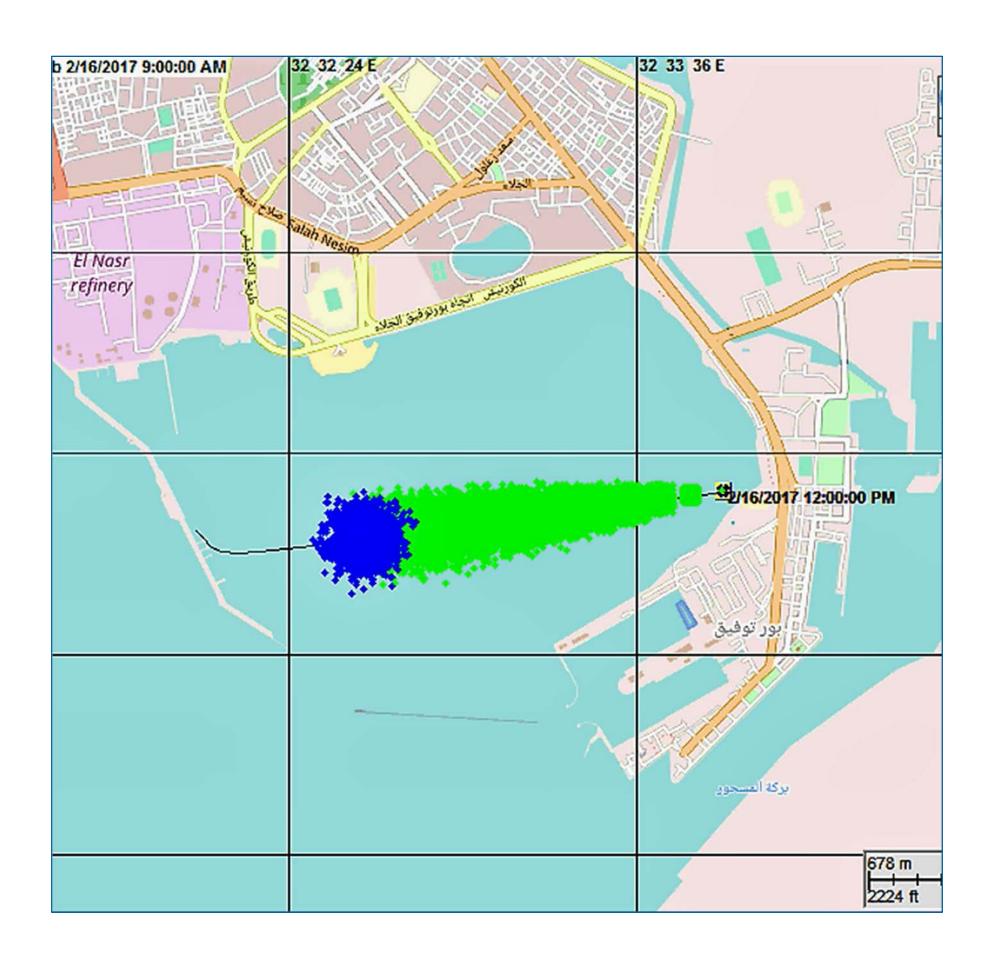
response resources.

To protect and maintain our human and capital resources, we have to keep them ready at all times through continuous training in the form of emergency drills carried out along the Mediterranean, the Red Sea and the river Nile in cooperation with governmental authorities, companies and all concerned parties.

### Oil Spill Response Trajectory System "RPS ASA Oil Map"

A great value added to our variety of services, which is the latest version of Oil Spill Response Trajectory System "RPS ASA Oil Map".

The new system enables us to enhance oil spill response group of services in order to ensure the accuracy of the oil spill tracking calculations (2D/3D), perform a fate of oil and weathering calculation for the spilled oil (2D/3D) and assist decision making for the optimum and efficient use of oil spill



- The system is supported by accurate information on the currents of the sea and the wind movement in the oil spill occurrence by connecting the Internet server of the satellite system specialized in weather conditions.
- Tools are provided to introduce various chemical-mechanical responses to the oil spill, helping the planning team to develop an appropriate control strategy during leakage or contingency planning.



### CONTAMINATION MANAGEMENT

### **Waste Management**

#### **NORM Management**

NORM is an abbreviation for naturally occurring radioactive materials. These materials are found in the ground and come to the surface of the earth by some non-nuclear industries such as the phosphate fertilizer industry and the oil and gas industry, as well as its concentration in the combustion of coal used in the electricity industry.

PETROSAFE provides an integrated service to manage the pollutants of natural radioactive materials and deal with them in terms of identifying them and removing them from their places of presence in the field of oil and gas in the drilling equipment and production facilities and oil fields and to fill and supervise the transfer to storage places allocated to it In a safe and sound manner and in accordance with the legislation and laws concerned by a team trained and experienced and licensed to all members to deal with radioactive sources by the Nuclear and Radiation Control Authority and aware of the seriousness of these materials and how to deal with it.



#### **Dry Location**



The dry location technology is a new approach for waste management. Dry location technique is used to eliminate the waste pit and reduces the drilling fluid (Water Base Mud or Oil Base Mud) on cuttings to below 10% instead of 40%. Moreover, the drilling fluid and cutting are separated into two main streams. Liquid (liquid waste water) and semi dry (drilling cutting or drilling mud cuttings). Waste pits are replaced with tank, 10 tons box for the solid waste and 500 bbl for the liquid waste.

PETROSAFE presents this service of clients, which has many environmental and economic benefits such as, reducing the area of the location, reducing the quantity of the used chemicals and recovering the drilling fluids from the solids control equipment. Furthermore, to improve drilling performance, decrease mud cost, decrease cost of cleaning and collection and disposal of waste.

### **Integrated Waste Management**

PETROSAFE is carrying out integrated waste management operations for different industrial sectors. Waste management operations starts with develop a plan including search in collection, transportation, recycling, and treatment before final disposal of wastes.

PETROSAFE has long experience in the field of waste treatment like thermal and biological treatments for oil base mud cuttings, and treatment of industrial wastewater from Oil and gas treatment processes and drilling water. PETROSAFE is also carrying out tank cleaning operations using different techniques.



OIL will disappear, whereas our sources will remain.