



Oil spill update February 2007

Many partners worked with the Ministry of Environment to manage the oil spill crisis. Some partners offered their expert knowledge about oil, some provided resources (financial, material and manpower), some carried out pilot cleaning of sites to test the equipment that is available in Lebanon, some did sea maneuvers and installed barrier booms to trap the free floating oil that was threatening to pollute more site and some worked alongside the Directorate General to complete Phase I of the cleanup process.

As per the priorities set by the Ministry, Phase I was the removal of free floating oil and the bulk of the oil that can be remobilized from all heavily affected sites along the coast.

The priorities were decided based on criteria set by the Ministry of Environment in order to make best use of the resources made available for Lebanon to alleviate the adverse effects of the oil spill and they were as follows:

- To capture and remove free floating mobile oil from the sea and where it had pooled in confined areas
- To prioritize where there is direct human contact with the oil
- To prioritize where the oil spill hampers economic activities such as fisheries, tourism etc
- To prioritize where there is a direct threat to environmentally and / or culturally important sites
- Following the South to North sea water and wind currents

Not much could have been achieved without the support of the international community, the local private sector, the local and central administrations, the local NGO's and knowledgeable academics.

Below is a region by region update of Phase I works from Jiyeh to Tripoli (South to North)

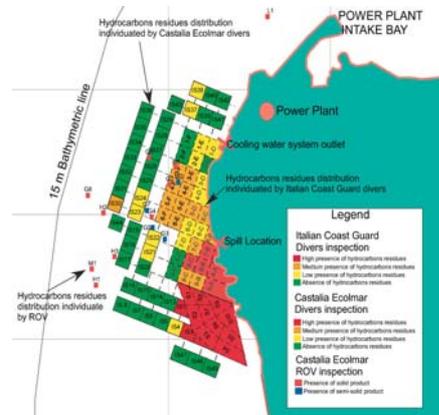
The removal of all free floating oil was completed by October 2006 and the removal of bulk amounts found on all polluted sites was completed by January 2007.

Phase II involves cleanup of polluted sites to a higher level of cleanliness and this depends on the nature and sensitivity of the site and the re-prioritization of importance according to the criteria set by the Ministry of Environment which include whether these sites need a phase II and whether they are economically and environmentally sensitive and whether the funding is available for this more expensive phase of the work.

The Ministry of Environment is continuously monitoring all the coast (South to North) and is at this stage working on the phase II priority sites and the waste management plan of the waste generated by the oil spill cleanup operations.

Jadra, Jiyeh and its surroundings

The Italian environmental mission “Bahar” that lasted from September to November 2006 was instrumental in carrying out many activities that included mapping, clean-up and monitoring operations in the sea and on the seabed facing the power station in Jiyeh and the archipelago of Palm Islands Protected Area. They also carried out professional sampling and monitoring activities along the Lebanese coast and last but not least an aerial surveillance all along the coast.



Site of mapping and diving opposite Jiyeh
Source of picture: Italian Team

The NGO Bahr Lubnan worked alongside the Italian Delegation in extracting submerged fuel in addition to carrying out cleanup activities on the sandy and rocky beaches surrounding Jiyeh power plant using the surf washing technique.

The Canadian International Development Agency (CIDA) through the United Nations Development Programme (UNDP) funded the Environmental Protection Engineering S. A. (EPE) of Greece to carry out Phase I work on heavily polluted rocky platforms and stretches in Jadra and until Ras Al Saadiyat in Jiyeh. Work continues and is monitored by the Ministry of Environment, UNDP and CEDRE.

Beirut

Sites where Phase I has been completed in Beirut are:

Sporting area, Movenpick marina, Hamman Askary, Dalieh Fishermen’s Wharf, stretch of coast around Raouche and around Dalieh including a number of caves. Not to mention Ramlet Al Bayda.

The second phase of work will include cleaning port walls and rocks and will take place after the necessary resources are made available.

At this point in time, fuel in the intertidal zone of Ramlet Al Bayda was discovered and is being removed and put in waterproof bags pending transport to allocated storage facilities. This fuel was physically moved by waves and stuck to the sand in the intertidal zone.

Byblos to South of Anfeh Phoenician Wall

Phase I, the removal of all free floating oil, in Byblos Port was done by the Lebanese Army using the Norwegian equipment as early as September 2006.



USAID funded the American company SEACOR to carry out phase II clean up activities in Byblos port and Phase I activities along the coast from Jbeil (Byblos) until Anfeh.



High pressure pumps were used to clean the port walls, fishermen's boats and some rocky beaches.

Cleanup of the polluted walls of the cultural historical site of Byblos was done in collaboration with UNESCO and the Ministry of Culture.

North of Anfeh Phoenician Wall until Tripoli including Palm Island Nature Reserve



The Swiss Agency for Development and Cooperation (SDC) in collaboration with the International Union for the Conservation of Nature (IUCN) and Le Floch Depollution and the local community namely El Mina municipality, Palm Island Nature Reserve Committee and the local fishermen carried out cleanup operations along the beach from Anfeh to Tripoli and on Palm Island Nature Reserve.

A number of fishermen were transported daily to the island to collect oil and contaminated debris and transfer them to specialized containers set up on the port of Tripoli.

Cost of Cleanup

The cost of treatment of the oil spill was estimated to be in the range of US\$ 137 to 205 million. The assistance that Lebanon has received to date is less than 5% of the needed financial resources. Nonetheless, progress has been made in the treatment of the pollution along the coastline with the minimal resources that have been made available.

Duration of Cleanup

It is planned by the Ministry of Environment that Phase II, the cleanup of rocky platforms and walls of wharfs and rip raps to a higher level of cleanliness in some sites along the coast, if resources are made available to Lebanon, be initiated as soon as the sea and weather permit.



Waste recovered from August until January 2007

- around 1026 m³ of liquid fuel has been recovered,
- and around 6254 m³ of pollutes waste (includes heavily polluted sand, garbage, debris and equipment) has been recovered.

This waste, which is considered as hazardous waste due to the toxicity of the fuel, has been collected in waterproof barrels and bags and in some cases in large containers and will be transported to three secure storage sites in Lebanon until the management and final treatment plan is completed. This plan involves the reduction of the waste generated, detailing what can be treated in Lebanon and transporting what cannot be treated nationally to a partner country capable of treating this waste through the Basel Convention.



The struggle continues ...

We have to keep our planet healthy. We have no where else to go...