



Canadian International  
Development Agency

Agence canadienne de  
développement international



**EMERGENCY**



**OIL SPILL**

**CLEAN UP**



**RESPONSE**



---

## **OIL SPILL CONTEXT: WHAT HAPPENED?**

During the middle of the July 2006 conflict that shook Lebanon last summer, an air strike hit the fuel storage tanks of the Jiyeh power plant, Beirut's main electricity generating plant located some 30 km south of the capital. Approximately 15,000 tonnes of heavy fuel oil escaped into the sea spreading northwards along 100-120 km of the Lebanese coastline. Surveys and assessments of the affected areas showed that many touristic beaches, marinas. Fishermen's wharfs and sea ports became heavily contaminated.

Such oil spills have serious implications on human health, marine life, fisheries and tourism; ultimately, deteriorating livelihoods and negatively affecting the national economy.

The seriousness and scale of this environmental disaster prompted donors to immediately provide assistance to the Government of Lebanon. One of the first major donors was the Canadian International development Agency (CIDA).



## SITES UNDER CONSIDERATIONS

The Lebanese Ministry of Environment (MoE), through its Oil Spill Operations and Coordination Center (OSOCC) along with a team of international experts, determined priority sites for clean up based on a thorough assessment of their economic value, environmental importance and on potential for possible recontamination of other adjacent sites.

**Based these priority considerations, the funds from the Canadian International Development Agency (CIDA) were allocated for the clean-up of the following three sites:**

**Site No. 1:** *This area is located in the small town of Jadra and extends up to the limits of Jiyeh Power Plant. The site includes a hotel and small touristic resorts and beaches nearby. The contamination here consisted of oiled debris, oil-coated walls and rocks, and polluted sediment.*

**Site No. 2:** *This site consisted of 'Bondi' beach, a touristic resort in the vicinity of the town of Jiyeh, composed of a sandy beach, concrete walls and flat decks, and a rocky platform, all of which were heavily contaminated by oil.*

**Site No. 3:** *This site was made up of 'Bellevue' touristic resort; the beaches to the south of this resort, all the way to the outskirts of 'Bondi' beach (site no. 2); and the beaches further north up to end of Ras al Saadiyat. Here the contamination consisted of oiled sand mixture, tar balls, oil coated rocks, oil coated rocky platform, oiled debris and polluted sediments.*





---

## **PROGRESS TO DATE**

To ensure that the world's best oil spill response professionals work on the clean-up of these sites, UNDP issued an international tender process between October and November 2006. Upon thorough evaluation of the technical proposals and financial offers received, the bid was awarded to a Greek company, Environmental Protection Engineering S.A. (EPE).

Work on the sites began on 07 December 2006. EPE recruited some 50 local workers (on a daily basis) who were trained to assist eight Greek professional decontamination experts in the clean-up operation. The entire work was completed and the sites were officially handed over to UNDP and the Ministry of Environment by the beginning of February 2007. The before and after photographs found here show the extent and effectiveness of this intense clean-up operation.

## MONITORING AND EVALUATION

The clean-up operation was continuously monitored and supervised by representatives from the Ministry of Environment, UNDP and the “Centre de Documentation de Recherche et d’Experimentations sur les Pollutions Accidentelles des Eaux (CEDRE)”, a French agency specialised in oil spill response which was sub-contracted as an independent qualified supervisor. Two official site visits were conducted between January and February 2007 before the final hand-over of the sites took place. In parallel, several consultation and technical visits were undertaken during the operation.





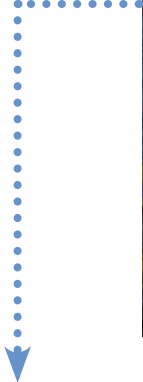
## ISSUES AND NEXT STEPS

Naturally, all this oil spill clean-up operation generated a lot of oily waste that was collected in heavy duty plastic bags and temporarily stored near the beaches. The waste was then loaded into specially prepared containers and transported by road, following strict international standards for transportation of such waste, to the Zahrani Oil Refinery where they are stored until a long-term solution to all the oily waste is found by the Government of Lebanon.



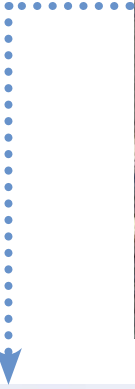
# Annex: Before and after cleaning pictures

Saint Rock Beach - Jiyeh





Coco Caya - Jiyeh



Bondi Beach - Jiyeh





Ras El Saadiyat



Ras El Saadiyat





Bellevue Beach - Jiyeh





Canadian International Development Agency    Agence canadienne de développement international

The Canadian International Development Agency (CIDA) is Canada's lead agency for development assistance. It has a mandate to support sustainable development in developing countries in order to reduce poverty and to contribute to a more secure, equitable, and prosperous world.



UNDP is the UN's global development network, advocating for change and connecting countries to knowledge, experience and resources to help people build a better life. We are on the ground in 166 countries, working with them on their own solutions to global and national development challenges. As they develop local capacity, they draw on the people of UNDP and our wide range of partners.

**For more information:**

United Nations Development Programme  
United Nations House  
Riad El-Solh Square, Beirut, Lebanon  
Telephone: (961) 1 981 301  
Facsimile: (961) 1 981 521  
E-mail: [registry@undp.org.lb](mailto:registry@undp.org.lb)  
Website: [www.undp.org.lb](http://www.undp.org.lb)