



**EMERGENCY RESPONSE TO ALLEVIATE THE LACK OF ACCES TO  
BASIC SERVICES OF THE MOST VULNERABLE POPULATION OF  
GAZA CITY AND NEIGHBOURING AREAS, GAZA STRIP**

Last update on the 01<sup>st</sup> April 2009

**INDEX**

1. Operation overview of the action
2. Water distribution implementation
3. Supply water fuel (50,000L) to the CMWU (Costal Municipalities Water Utility)
4. Emergency cleanup of sewage and reinforcement and repair of the sewage lagoons of Beit Lahia and Gaza City.
5. Supply of spare parts to the CMWU
6. Distribution of UNICEF Family Hygiene and Water kits
7. Others.

Annex 1: Selected pictures

## 1 Operational Overview of the Action

**General objective:** To ensure access to safe water to avert associated public health risks in Gaza City

**Specific objective:** To improve the physical access to the basic water needs of families affected by the current crisis in Gaza City.

## 2 Water distribution

ACF began supplying water to the population on the 12<sup>th</sup> of January 2009 and has been completed this activity on Tuesday 24<sup>th</sup> March 2009.

The total amount of water distributed up to the 24<sup>th</sup> March are **16,883.7 cubic meters** to private houses & **784.2 cubic meters** to UNWRA shelter locations in Gaza City, Beach and Jabalia Camps (2,373 water trucks deliveries in total).

The total number of beneficiaries in private houses so far is **146,223 people** (over 19,188 families) as shown in the following table:



Location	Total Cubes m <sup>3</sup>	Number of beneficiaries
1- Az Zaitoun (Gaza)	2527.75	19954
2- Southern Remal (Gaza)	45	395
3- Ash Shuja'iyyeh (Gaza)	298.2	4339
4- An Naser Ash Sheikh Radwan (Gaza)	34.5	280
5- Jabalia El Balad (Jabalia)	7171.15	57918
6- Jabalia Camp	31	482
7- As Sabra Gaza	60.75	1486
8 – Ad Darraj Gaza	17.5	108
9 – At Tuffah Gaza	71.6	1014
10 – Tal El Hawa Gaza	83.5	883
11 Ash Shati' Camp	5	86
12 - Al Salateen	6.85	197
13- Al Attarta	4151.95	37468
14-As Siafa	2391.1	20476
15-Khan Yunis	11.5	61
16-Al Qarara	9	1076
<b>TOTAL</b>	<b>16,916.35 m<sup>3</sup></b>	<b>146,223 people</b>

ACF has completed the water quality monitoring program on 23<sup>rd</sup> March 09, to monitor the water trucking. Meanwhile 100 water samples were taken during the last 6 week as follows:

- 23 samples were taken from the sources
- 62 samples were taken from the water trucks used to supply the water
- 15 samples were taken from the household roof tanks

The water samples were tested in the Beirzeit University Water Lab.

The following table show the general water sample results in the different stages:

Stage of the process	No samples	Results		
		Free of Total Coliforms	Total Coliforms detected	# of Total Coliforms detected
<b>Until 23<sup>rd</sup> March 2009</b>				
1 - From the sources	23	23	0	0
2 - From the water trucks used to supply the water	62	51	11	13,10,12,68,30,18,14,TMC,TMC,10, TMC
3 - From the roof tanks	15	7	8	TMC,TMC,15,6,24,8,40,20
<b>Total samples</b>	<b>100</b>	<b>81</b>	<b>19</b>	

According to the water analysis results some coliforms are detected at water truck level, and roof tanks houses, ACF stopped the concerned water tankers while requesting and ensuring the contractors disinfect the tanks and ensure safe maintenance.

At the same time, whenever coliforms are detected at HH level (i.e. roof tanks), immediate HH focused advices are provided by ACF's staff.

### 3 Supply diesel fuel (50,000L) to the CMWU (Coastal Municipalities Water Utility)

ACF finished this activity the last 21<sup>st</sup> of January 2009.

### 4 Emergency cleanup of sewage spills and reinforcement and repair of the sewage lagoons of Beit Lahia and Gaza City.

ACF started this activity on the 17<sup>th</sup> of January 2008.

#### Reinforcement lagoons of Gaza City

**Works have been completed and the damage has been repaired.**

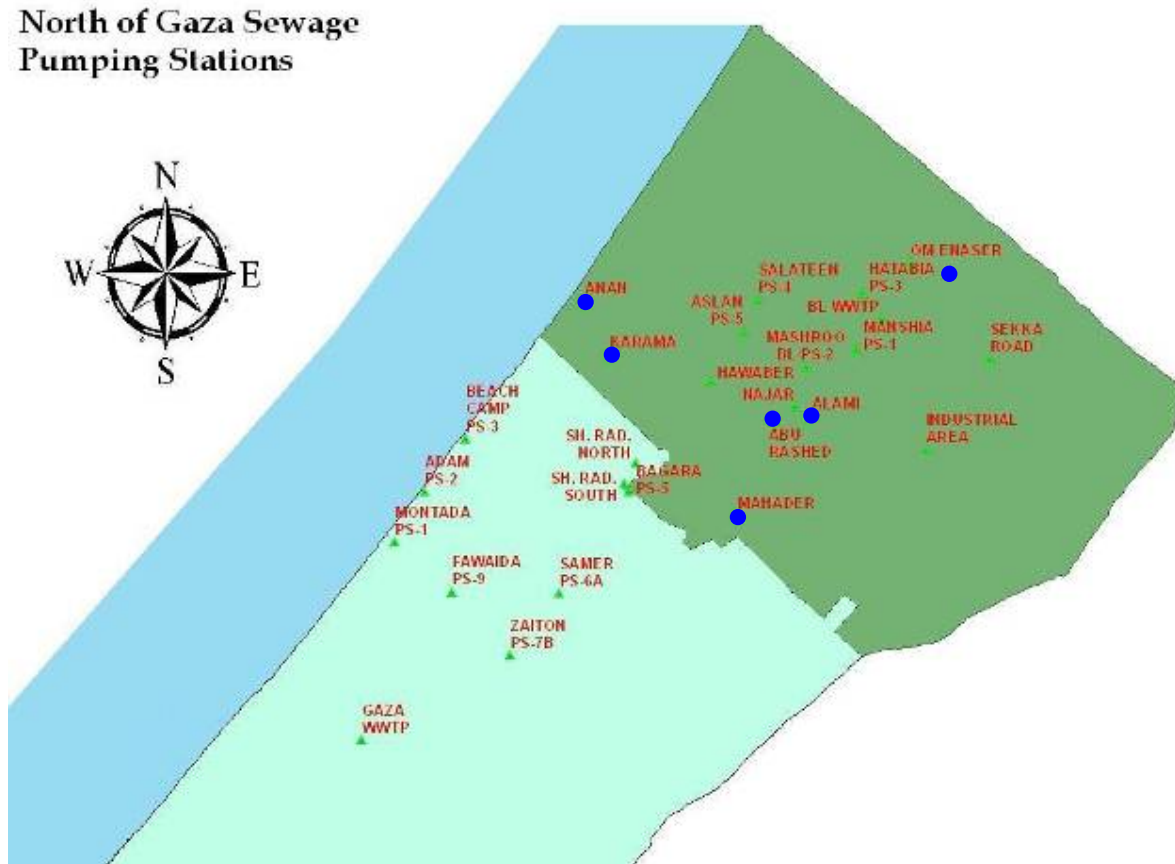
#### Emergency cleanup of sewage spills and repair sewage facilities

Recently two teams of 20 workers completed the cleaning up work in northern of Gaza on 16<sup>th</sup> March 2009 in northern Gaza. At the same time two new teams of 22 workers started to work in northern of Gaza on 17<sup>th</sup> March 2009 in northern Gaza mainly cleaning Beit Lahia Wastewater Treatment Plant and removing debris and sewage spillage from the streets, as repairing pumping stations. This intervention is shown in details in the following table:

Team	Working dates	Executed Duties	Locations	Achieves
1- Pumping stations Mechanical team	From 18 <sup>th</sup> until 26th March, 09	<ul style="list-style-type: none"> <li>• Check generator &amp; exchange oil filters.</li> <li>• Paint fences.</li> <li>• Excavating of electrical cables and replace all sensors and cables to test.</li> </ul>	<ul style="list-style-type: none"> <li>• AbuRashed PS</li> </ul>	Improvement in the pumping stations performance.
		<ul style="list-style-type: none"> <li>• Repairing pump of Flygt type 3000 cc.</li> <li>• Repairing, maintenance and reinstalling the pump in addition to fix an electrical connections.</li> <li>• Clean and oil impeller from stones and reinstalling.</li> </ul>	<ul style="list-style-type: none"> <li>• Phisfos PS</li> </ul>	

Team	Working dates	Executed Duties	Locations	Achieves
2- Cleaning and mechanical sewage network team	From 27 <sup>th</sup> until 31st March	<ul style="list-style-type: none"> <li>• Release steel pipes 3" and excavate drainage channel of rainwater as a slope.</li> <li>• Clean Inlets, Catch basin gutter for storm water from, garbage's, sand, stones &amp; gravels.</li> <li>• Fix P.S 3 cc of Flygt type after rolling.</li> <li>• Release P.S to clean &amp; excavate of electrical cables with fix automatic floats for Flygt PS and backfill.</li> <li>• Release P.S &amp; exchange old peaces with fix new bolts for impeller and reinstall.</li> <li>• Repairing &amp; fix Flygt pump 3cc.</li> <li>• Cleaning inlets, Manholes, and sewage pipes.</li> <li>• Repair broken manholes &amp; fix new manholes.</li> <li>• Install new sewage pipes.</li> </ul>	<ul style="list-style-type: none"> <li>• AbuRashed PS</li> <li>• Jabalia ElBalad</li> <li>• Phisfos PS</li> <li>• AbuRashed PS</li> <li>• Jabalia ElBalad</li> <li>• AbuKhalid PS</li> <li>• Annan &amp; Aburashed</li> <li>• Jabalia camp</li> </ul>	<ul style="list-style-type: none"> <li>• Improvement in the storm water and sewage draining.</li> <li>• Reduction in the frequency of sewage network flooding and clogging</li> </ul>
3- Treatment plant team	From 27 <sup>th</sup> until 31st March	<ul style="list-style-type: none"> <li>• Cleaning and removing debris and sludge from Beit Lahia wastewater treatment plant</li> <li>• Repair fences of treatment plant.</li> </ul>	<ul style="list-style-type: none"> <li>• Umm Alnasser Village at Beit Lahia.</li> </ul>	Improvement of wastewater treatment

The targeted pumping stations are highlighted by blue solid circles on the following map:



## 5 Supply of spare parts to the CMWU

ACF has been signed off the purchase contracts of the below spare parts materials to the CMWU store, and some of these materials have been delivered to the CMWU store in Gaza as shown in the attached photos. These materials will be used in the daily operation and maintenance of sewage and water networks in addition to the replacement of spare parts in the wastewater pumping stations as shown in detail in the following table:

S/N	Item description	Use	Store place
1 *	Jetting Hose of diameter 1" with fiber reinforcement for pressure capacity of 200 bar	To pump water and cleaning the wastewater networks in order to remove the clogging of sewage pipelines. It can be used also to deliver water to houses	CMWU warehouse (Gaza City)
2 *	Transparent hose of 4 "diameter for sewage evacuation suction pumps with spiral steel reinforcement	To evacuate wastewater and sewage from the cesspits and sewage manholes	
3 **	Flygt pump CP3300-181-HT/ 54 kW impeller Pump curve No.: 425	Spare part to repair and maintain the pumping stations in the Gaza Strip	
4 **	Flygt pump CP3300-181-HT/ 54 kW impeller Pump CurveNo.: 460	Spare part to repair and maintain the pumping stations in the Gaza Strip	
5 **	Arc welding electrodes 2.5mm E 6013	For welding and repairing steel pipe lines	
6 **	Arc welding electrodes 3.25mm E 6010		
7 **	Submerged liquid level regulator electric control commutator working by a mercury bulb (MATIC brand) 10A – 250 V – T55 with 15 meter cable for sewage pumping station.	Used as switch sensors in the wastewater pumping stations in the Gaza Strip to control the operational hours of pumping to prevent flooding	
8 **	Discs for the Grinder Disc Size 230 x 3 x 22.2 mm Application: concrete	For cutting the concrete sewage manholes	
9 **	Discs for the Grinder Disc Size 230 x 3 x 22.2 mm Application: Steel	For cutting the steel pipes	
10 **	Supply Pipe Wrench Tool of type Ridgid or equivalent heavy duty, of size diameter E 24" with Powerful I-Beam handle with comfortable grip. Tool steel jaws. The adjusting nut rides free in an open housing, permitting full grip on nut when making adjustment	It is a tool used to repair and fix the water distribution networks.	
11 **	Ditto but for diameter size of E 18" capacity for 2-1/2" (No. RD 31075).		
12 **	Ditto but for diameter size of E 14" capacity for 2" (No. RD 31070).		
13 **	Ditto but for diameter size of E 12" capacity for 1-3/4"(No. RD 31065).		

\* Delivered

\*\* Pending deliver

## 6 Distribution of UNICEF Family Hygiene and Water kits

ACF finished this activity in the last 3<sup>rd</sup> of February 2009.

## **7 Others**

ACF has participated jointly with the WASH Cluster in the selection committee of water tankering consultant to carry out a survey to assess the current status/need for emergency water tankering in the Gaza Strip.

ACF has appointed recently a hygiene promotion expert in the Gaza strip to conduct the hygiene and public awareness activities.

## ANNEX 1: SELECTED PICTURES



Water trucking distribution in Ezbit Abed Rabo area – North of Gaza (20/03/09)



Cleaning and repairing of air release valve in Abu Rashed sewage pumping station in Jabalia (31/03/09)



Repairing pumps in Abu Rashed pumping stations in Jabalia (31/03/09)



Materials which have been delivered to the CMWU store in Gaza – (Jetting hoses and Transparent sewage pipes of 4 inches diameter (23/03/09)