

HURRICANE MATTHEW: THE VEOLIA FOUNDATION PROVIDES RELIEF IN HAITI

NOVEMBER 2016





HURRICANE MATTHEW: HAITI HIT ONCE AGAIN

Haiti was still recovering from the terrible earthquake of 2010, when a new natural disaster struck the country on the night of 3 to 4 October 2016: a category 4 storm, hurricane Matthew, killed several hundred people.

The Southwestern region of the country was the hardest hit: many cities were flattened, such as Jérémie, where 80% of the city was destroyed.

A provisional assessment by the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) reported that 2.1 million people were affected, 1.4 million people were in need of humanitarian aid, and more than 800,000 people faced food insecurity.

The Veolia Foundation mobilized from the start

In the days following the hurricane, the French NGO ACTED approached the Veolia Foundation to organize a humanitarian emergency mission.

At the humanitarian platform in Massy-Palaiseau (91), where the Foundation stores its emergency equipment, a team of volunteers mobilized to prepare and pack 2 tonnes of water purification equipment and ensure its transport to Haiti.

A plane chartered by the Ministry of Foreign Affairs left Paris on October 10, carrying:

- 6 Aquaforce 500 water purification units, with a capacity of 2 m³ per hour each
- 6 storage tanks, with a holding capacity of 3 m³ each
- Pumping equipment to transport and distribute water by truck

DAY-BY-DAY INTERVENTION

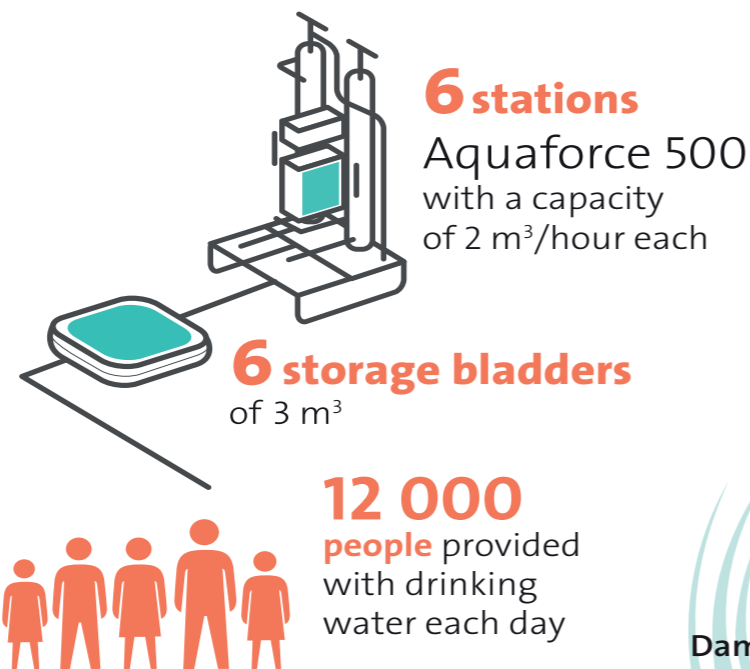
1 THE NIGHT OF OCTOBER 3-4, 2016

Hurricane Matthew strikes Haiti's South-West region.



7 OCTOBER 17-30

Further training of ACTED staff members.
Deployment and joint operation of Aquaforce 500 stations:
- 2 units in Port-à-Piment
- 1 near Chardonnières
- 3 in Dame-Marie



6 OCTOBER 16

Training begins for 7 staff members of NGO ACTED, present locally.

2 OCTOBER 10

A plane chartered by France's Ministry of Foreign affairs leaves with **2 tons of equipment** prepared by members of the Veolia Foundation.

4 OCTOBER 15

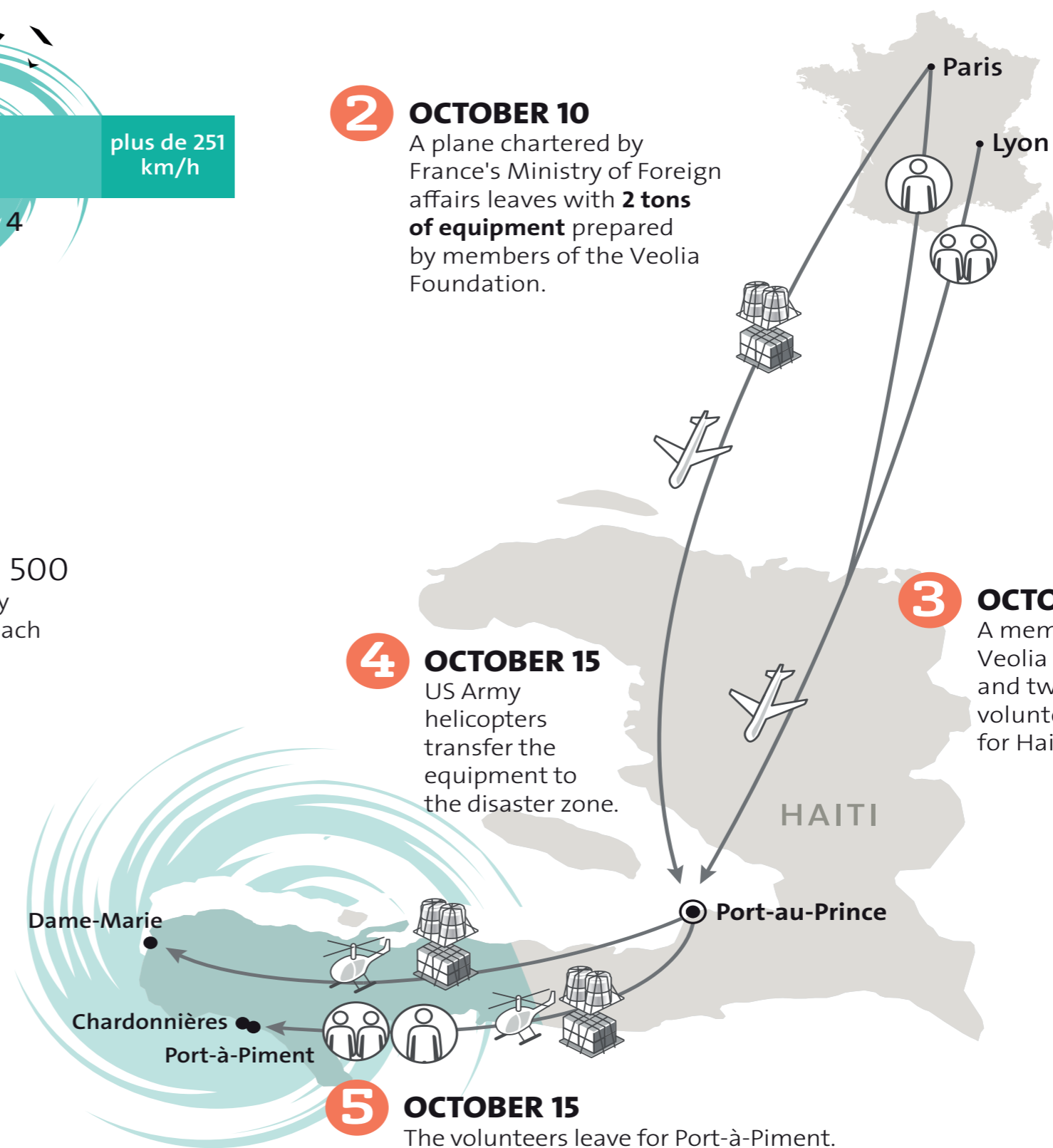
US Army helicopters transfer the equipment to the disaster zone.

5 OCTOBER 15

The volunteers leave for Port-à-Piment.

3 OCTOBER 11

A member of the Veolia Foundation and two Veoliaforce volunteers leave for Haiti.





"Being useful to the most vulnerable populations"

Damien Machuel, Project Manager and permanent member of the Veolia Foundation

Damien Machuel, project manager at the Veolia Foundation, ensures the smooth running of humanitarian emergency and development missions in countries where access to water and sanitation is scarce. "My job has a significant impact and allows me to be useful to the most vulnerable populations," he says. In 2013, he flew to Uvira, in the Democratic Republic of Congo, where he prepared a program to rehabilitate and secure water systems, with the aim of preventing cholera outbreaks. More recently, he left for Ecuador, days only after the devastating earthquake that struck on April 16, 2016. He was part of the team responsible for deploying mobile water treatment units in the municipality of Calceta. The intervention underway in Haiti is his second emergency mission.

"Putting my experience and skills in the service of others"

Louis-Joseph Jourdana, Plant technician and member of the Veoliaforce intervention team

A Veolia employee for the last 16 years, Louis-Joseph Jourdana is a plant technician. Every day, he ensures the proper operation of drinking water and wastewater treatment plants and carries out maintenance work. In June 2016 he underwent special training to join the Veoliaforce response team, made up of 500 volunteers, and to participate in the humanitarian emergency missions organized by the Veolia Foundation all over the world. «I wanted to put my experience and skills in the service of others» he says. On October 11, he flew to Haiti for his first mission with Veoliaforce. His objective: restoring access to drinking water for the populations most affected by hurricane Matthew.

"Sharing and helping one another at the heart of the approach"

Steve Mougin, Development technician and member of the Veoliaforce intervention team

Steve Mougin has been a development technician with Veolia since 2009. Based in Chambéry, Savoy, he is responsible for commissioning and monitoring water and wastewater treatment facilities in France. In parallel, he is involved in developing new water treatment processes. In 2016, Steve was one of 25 new volunteers trained in emergency response techniques and the use of Aquaforce 500 and 5000 units. He joined the Haiti response team on October 16 for his first mission with Veoliaforce. «The Foundation offers Group employees the extraordinary opportunity to put their experience and skills to work for people in need. Sharing and helping one another are values I share, and which are at the heart of the Foundation's approach.»

VEOLIA EXPERTS IN SUPPORT OF ACTED TEAMS

On October 11, a member of the Veolia Foundation and a volunteer from the Veoliaforce intervention team flew to Port-au-Prince.

They were initially responsible for receiving the equipment and organizing its transfer to the priority sites identified by the UN Humanitarian Coordination and Haiti's Drinking water and wastewater national office (DINEPA) as having the greatest need for drinking water.

At the same time, they recruited 7 ACTED staff members to be trained in the use of the Aquaforce 500 stations and ensure their day-to-day operation.

A second Veoliaforce volunteer joined the team a few days later, and at the same time, Veolia employees in Guadeloupe mobilized and offered their support to the Foundation.

6 Aquaforce 500 units deployed in Haiti

On October 15, all the emergency equipment left Port-au-Prince to be dispatched to their deployment sites. The Aquaforce 500 units were carried aboard US Army helicopters, as road conditions were too uncertain to consider trucking.

Three Aquaforce 500 units were transported to the country's South coast: two in Port-à-Piment, and one near Chardonnières, further West. Three other units landed in Dame-Marie, in Western Haiti.

The Veoliaforce team, accompanied by members of the NGO ACTED, left for Port-à-Piment by car to begin the theoretical and practical training, set up the equipment and quickly start the production and distribution of drinking water.

Once all the units were up and running, the Veoliaforce team remained in support of ACTED staff for several weeks, to ensure they encountered no difficulties using the equipment.

The Veolia Foundation already present in Haiti



3 Aquaforce 5000 units

20 tonnes of emergency equipment

67 drinking water distribution points

The Veolia Foundation has been present in Haiti for some time through its emergency and development missions.

In the aftermath of the powerful earthquake that devastated Port-au-Prince on 12 January 2010, the Veolia Foundation joined the French Red Cross to supply over 30 tonnes of drinking water production and distribution equipment. A team of 9 Veoliaforce experts worked on the spot to assess the water and sanitation needs in the priority areas and supervise the deployment of several Aquaforce 5000 units in the capital.

During the first few months of the emergency phase, volunteers ensured the proper functioning of the 67 drinking water distribution points set up throughout the city.

Aquaforce 500, a unit adapted to emergency deployments

Aquaforce 500 is a mobile water treatment unit designed for humanitarian emergencies. Lighter and easier to handle than the Aquaforce 5000, it can be easily transported by pick-up and by air. The Aquaforce 500 is equipped with ultrafiltration technology. It is able to produce 15 litres of drinking water per person per day, to a population of around 2,000 people. It has been deployed by the Veoliaforce teams since 2012, in order to quickly restore access to water for disaster-stricken populations and thereby control the development of epidemics.

AQUAFORCE

500

250 kg of equipment

Volume of 2.5 m³

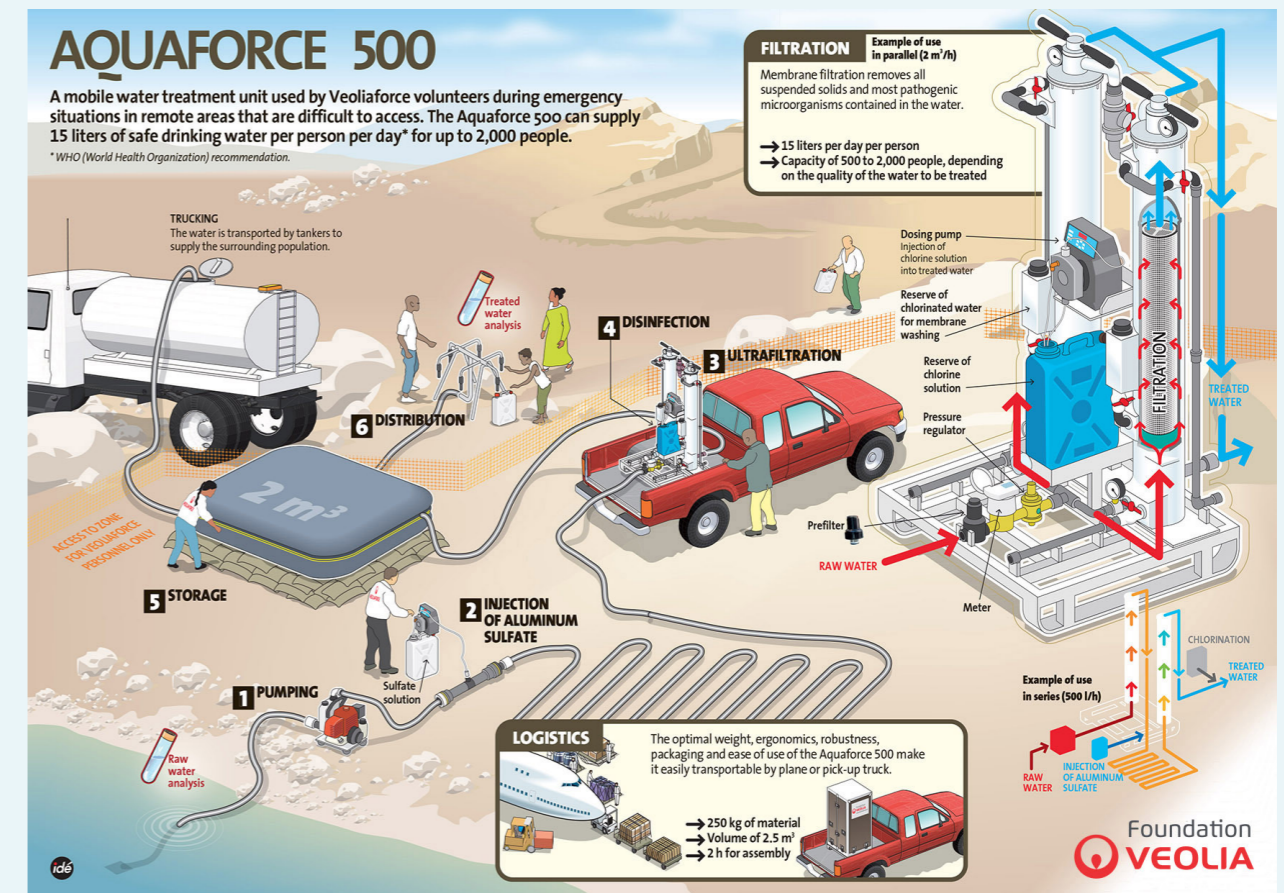
2 hours to set up

5000

6 tonnes of equipment

Volume of 20 m³

1.5 day to set up



PROVIDING RELIEF DURING HUMANITARIAN EMERGENCIES

In France and abroad the Veolia Foundation supports non-profit projects of general interest that contribute to the sustainable development of territories. Its priority areas of intervention are humanitarian emergencies and development assistance, support towards employment and social link, the protection of the environment and biodiversity.

The Foundation calls on skill-based sponsorship, thus providing not only equipment, but also Veolia's expertise. Which is why each of its projects is sponsored by a Group employee. Since its creation in 2004, the Foundation has supported more than 1,350 projects, and carried out nearly 150 skill-based missions.

The Veoliaforce network brings together 500 Group employees, all experts in the fields of water, waste, and energy. Volunteers travel to the four corners of the world to put their experience and skills in the service of others through humanitarian emergency missions and projects to develop essential services.

Veoliaforce provides emergency relief in areas struck by disaster, and contributes to sustainably improve the living conditions of the most deprived people – for instance, in the Democratic Republic of Congo and Ecuador.

The Democratic Republic of Congo: fighting against cholera at its source

According to the WHO, cholera causes tens of thousands of deaths every year worldwide. In the Democratic Republic of Congo (DRC), this infectious disease, inherently linked to the lack of access to drinking water, is a major public health issue.

Since 2007, the Veolia Foundation has been working with numerous development actors and tropical disease experts within the Global Alliance Against Cholera (GAAC). The aim of this international alliance is to

develop an integrated strategy to fight against cholera, combining the development of water, sanitation, and hygiene infrastructure and a joint approach including state, private sector, and civil society actors.

The Foundation is present in the cities of Kalemie in Katanga and in Uvira, in the province of South Kivu, where the main cholera outbreaks in the DRC are located. The Foundation works with its partners to improve access to drinking water for the population by rehabilitating, securing, and developing infrastructure.



50 volunteers from Interagua, Veolia's subsidiary in Ecuador

41 days of work

5 Veoliaforce experts mobilised

Ecuador: restoring access to drinking water following a major earthquake

The earthquake, with a magnitude of 7.8 on the Richter scale, occurred on Saturday, 16 April 2016 in Northern Ecuador. Veoliaforce and the local Interagua teams, a subsidiary of Veolia in Ecuador, were urgently mobilized to provide drinking water to the affected populations.

Responding to the request for international assistance launched by the Ecuadorian authorities, the French Ministry of Foreign Affairs sent an aircraft carrying 30 civil security military personnel on April 23. The Veolia Foundation supplied three Aquaforce mobile water treatment units and sent five volunteer engineers. Alongside the military personnel, the Veolia Foundation volunteers ensured drinking water was produced and distributed to the people.

In Calceta, in the province of Manabi - most affected by the earthquake - two Aquaforce 500 mobile units produced 40,000 litres of drinking water per day. An Aquaforce 5000 unit produced an additional 50,000 litres of water per day to supply villages within a radius of 30 kilometers around the disaster area by tanker truck.

