



## Activity report Haiti April 2010

**Project title:**

*“Post-Earthquake rehabilitation of existing water sources and increasing access to safe drinking water in Camps and Communities in Petit-Goâve and Grand-Goâve, Haiti.”*

### 1. Project progress

arche noVa Teams have been in Haiti since shortly after the earthquake. In the first weeks our activities included the provision of potable water through reverse osmosis treatment plants in a community in Carrefour, at the Malteser International Field Hospital in Léogane and in Petit-Goâve. Currently they are providing potable water at Petit-Goâve, a town located approximately 60 kilometres west from Port-au-Prince, and in several other communities and institutions. They have formed a Hygiene Promotion Team to, spread awareness of hygiene related issues and to act as a monitoring mechanism to give feedback from the community. Furthermore, they have set up a small water quality testing laboratory to monitor the quality of the water pre and post SkyHydrant treatment at the distribution points as well as in spot-checks at household level. arche noVa received 30 SkyHydrants from generous donations from Siemens Stiftung, Siemens Water Technologies, Crown Project Services and associated industry colleagues and friends on 22<sup>nd</sup> February 2010. In general, arche noVa are planning to use the SkyHydrants for projects designed to increase and guarantee access to safe drinking water for the people in Petit-Goâve, Grand-Goâve and surrounding communities on a long-term basis.

Noted below is a snapshot of some of the SkyHydrant installations:

### 2. Project Implementation

- a) In Carrefour, one of the areas most affected by the earthquake, SkyHydrants were installed in camps supported by a group of Missionaries from the United States. Because Carrefour is some distance from arche's main base of operation, the community has agreed to operate and maintain the units, providing safe drinking water to the surrounding community from wells that were found to be contaminated with bacteria.



Technician testing the SkyHydrant at Carrefour

- b) Also in Carrefour, in a hospital run by the American organisation ACTS World Relief, a SkyHydrant provides patients, staff and visitors with safe drinking water. Furthermore, the water is used in a kitchen that provides 3,000 meals per day.



Matt Anderson (HoM arche noVa) with from ACTS World Relief Logistician

- c) In Petit Guinée, a small community on the outskirts of Petit-Goâve where at least 80% of the buildings have been destroyed, arche noVa was providing safe drinking water to a Child Friendly Space operated by the Czech organisation People In Need (PIN) and a daily medical clinic installed by the International Medical Corp (IMC). PIN and IMC have since abandoned the site due to land rights issues (the owner has passed away and his heir was no longer willing to provide the space for these facilities), but the SkyHydrant is on an adjacent property and is still in place because it currently represents the only safe drinking water source for the surrounding community. Because there were no remaining structures to place a tank on, arche noVa constructed a water tower for the SkyHydrant.



SkyHydrant with water tower

- d) There is a second site in Petit Guinée where arche had originally set up two RO-Treatment Plants, but have now replaced them with two SkyHydrants as these are easy to operate and have negligible running costs. Because of the high turbidity in the raw water source, arche installed a small sand filter for pre-treatment to reduce the number of times the SkyHydrants have to be backwashed.



Two SkyHydrants installed at the main site in Petit Guinée

- e) Next week arche noVa are going to install a SkyHydrant in a camp supported by ADRA Czech. Water samples have shown high levels of microbiological contamination of the existing source, a spring catchment. Because this site is unlike all the sites in that there has not been any type of water distribution system before the earthquake, this site will be the first permanent installation. Because it is now end of the official emergency phase it is necessary to ensure that the interventions (SkyHydrant installations) have an added level of sustainability and ensure that arche are confident that they can work with the existing structures to ensure that the units are properly maintained and operated.

### 3. Problems during the project progress

Because of the lack of existing public water supply systems in large parts of the country the people in Haiti are used to purchasing their drinking water, if they are able to. Usually this water is produced by reverse osmoses machines the product of which, of course, has no taste and no colouration. Depending on the raw water source, the water that has been treated by our SkyHydrants usually has some residual taste. Arche noVa found that the people do not automatically trust the quality of the SkyHydrant water and are not used to drinking water that has a taste, even if it is proven that the SkyHydrant water is safe, through regular testing. Arche noVa found it necessary to educate the communities, which is why they have initiated the Hygiene Promotion Teams. They have had good feedback and word is spreading that the water is good but of course it takes time to change some people's behaviour.

### 4. Project plans

Currently arche noVa is in contact with several other national and international NGOs that have requested arche noVa to install SkyHydrant water treatment plants. With the local NGO Association des Paysans de Vallue (APV) they have already signed a MoU to start working in some of the more rural areas where arche noVa have access to enough water head to install the units without the additional need for a pump and water tower. APV has been working in the mountainous areas for more than 23 years. On first assessment they have identified 5 – 6 appropriate sites to install SkyHydrants and consequently they are now scoping the projects.

The German NGO Cap Anamur has also asked arche noVa to help them with the installation of several water treatment plants in two schools they are in the process of rebuilding. There have been many other requests, especially for water treatment/distribution schemes in schools, but they are still at the assessment stage. The current plan is for arche noVa to maintain a presence in Haiti for the next two to five years using the SkyHydrants as the core water purification treatment system for all their projects.

Noted below is an extract from a technical report received from arche noVa, written by the arche noVa, Head of Mission in Haiti:

*“In our opinion the mode of delivery and the maintenance requirements of the SkyHydrants are absolutely brilliant. Compared to the other types of treatment plants that arche noVa is operating, they are extremely easy to maintain and are well suited to be turned over to local community structures, such as Water Committees or local NGOs for operation.*

*These units are quite versatile and very easy to maintain. They have certainly generated a lot of interest from other actors in the WaSH sector.”*

*April 2010*

This report highlights that the reconstruction phase will take many years however; arche noVa is committed to maintain a presence for the duration which will ensure that this generous donation will have a lasting legacy for the people of Haiti.