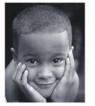


SkyJuice<sup>™</sup>Foundation Inc. No: 9883786 ABN: 57 240 520 309



Level 15, 3 Spring Street Sydney NSW 2000 Australia

Tel: +61 2 9252 4420 Fax: +61 2 9252 4430

Email: jann.hughes@skyjuice.com.au Website: www.skyjuice.com.au

Sustainable Water Solutions for Humanitarian and Disaster Relief

## SAFE WATER PROJECTS in JOGYAKARTA - INDONESIA

**Background:** An earthquake measuring 6.2 on the Richter scale hit Yogyakarta, Indonesia on May 26<sup>th</sup> 2006. Whilst not considered significant in a global context, the destruction was widespread and the population affected was significant. The most affected districts were Bantul, Kulonprogo and Klaten Districts. In excess of 6000 people were killed and over 50,000 were injured. All major services and infrastructure were damaged or destroyed, leaving the population without basic services, including safe potable water.

**The Need**: Just prior to the earthquake, Yogyakarta also experienced a volcanic eruption from nearby Mt Merapi. Streams of lava and volcanic ash infiltrated the Yogyakarta main water supply, the Adem River, contaminating the water for some 5 million people. Many families living near the river were the first to be exposed to a wide range of water borne diseases such as diarrhoea and other respiratory problems.

**The Beluk Project** - Eighteen months after the earthquake and volcanic eruption, reconstruction of new health clinics is a priority for the community in Beluk. The SkyJuice Foundation in conjunction with Australian Aid International (AAI) will install a SkyHydrant water filtration unit for the health clinic, to be constructed in the Klaten Province of Beluk for a population of 2484 (797 families). Mr David Hughes and Mr Larry James from the SkyJuice Foundation travelled to Yogyakarta in September 2007 with equipment and ancillaries to instruct the AAI staff and local operatives in the installation, operation and maintenance of the SkyHydrant water filtration unit. Construction has commenced on the new health clinic and will be completed in late October 2007. This will incorporate a SkyHydrant system.

The Wonosari Project - 80 kilometres from Yogyakarta is the impoverished village of Gunung Kidul in the District of Wonosari. The village has approximately 180 families (630 people). The village water supply is also the water source for a further 4 villages nearby. The existing water infrastructure is a combination of individual and shared ground wells. This is insufficient for the community and many families have to rely on untreated river water. The local health clinics report that diarrhoea and respiratory tract infections are common due to unsafe water and lack of adequate sanitation. The SkyJuice Foundation in conjunction with the Australian Indonesia Business Council and the NSW Parliament Asia Pacific Friendship Group installed a SkyHydrant water filtration unit for the Wonosari village in September 2007. The Sultan of Yogyakarta nominated Wonosari as the most appropriate site. The village chief and committee eagerly undertook maintenance and operations training and quickly saw the many advantages of having immediate access to clean potable water.



Yogyakarta after the May 2006 earthquake



Local operators being trained in the operation and maintenance of the SkyHydrant in Gunung Kidul



Safe water for the village of Gunung Kidul



The Bantul Project - CHF International (Indonesia) is an international non-profit development organization that serves as a catalyst for long-lasting positive change in low-and moderate-income communities around the world, helping families improve their economic circumstances, environment and infrastructure through Community, Habitat, and Finance. In Indonesia, CHF works with communities in Banda Aceh and Jogjakarta to provide immediate relief after devastating natural disasters, as well as their long term reconstruction and development assistance. CHF International in Indonesia is currently constructing a Health Clinic in the earthquake devastated area of Bantul. It is imperative that Health Clinics have access to continual sustainable safe water for the patients presenting to the clinic with ill health. CHF International is working in partnership with SkyJuice Foundation to provide a solar powered SkyHydrant water filtration system for the clinic. The SkyHydrant<sup>™</sup> water filtration system has not been installed as the clinic is not yet complete, however SkyJuice Foundation volunteers met with Mr Muhammad Hafiz (Water and Sanitation Engineer) from CHF International to instruct the committee on operations and maintenance of the SkyHydrant system ready for installation

## ACKNOWLEDGEMENTS:

Australia Indonesia Business Council (AIBC) NSW Parliament Asia Pacific Friendship Group Memcor Australia Pty Ltd CHF International (Indonesia) Australian Aid International Mr Welly Salim, Mr David Hughes, Mr Larry James



Handing over to Village Chief of Gunung Kidul Village near Wonosari



SkyJuice Foundation volunteers hand over SkyHydrant water filtration unit to CHF Indonesia Water and Sanitation committee

## SAFE WATER PROJECT in JAKARTA - INDONESIA

**Background:** Heavy rains in February 2007 caused massive flooding in the Indonesian capital of Jakarta. Nearly 270,000 people were made homeless, 60% of the city was inundated and the torrential rains caused rivers to burst, pouring muddy waters up to 4 metres deep into homes and buildings. One of the most severely affected areas was Kramatjati in East Jakarta. Many of the residents in this poor area live in slump areas along the riverbank and flood prone areas.

**The Need:** Since February 2007 potable water supply has been a major issue for the impoverished community of Kramatjati, as the existing water infrastructure was devastated in the floods. The Kramatjati village is one of the poorest in Jakarta. Currently, residents use untreated well water for all non potable requirements however; they have no choice but to purchase bottled water for their potable water requirements.

The significance of safe water to the overall health and prosperity of impoverished is well documented. The NSW Parliamentary voluntary group; The Asia Pacific Friendship Group and the Australia Indonesia Business Council worked in conjunction with the SkyJuice Foundation to provide access to safe water for the community of 1500 residents in Kramatjati in September 2007. The location of the installation is Arus Dalam, RT 010/02 Kel Cawang, Kec: Kramat Jati, Jakarta.

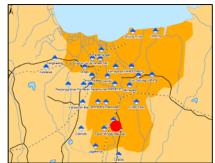
**The Outcome:** A physical disinfection barrier and high rate filter is essential in any sustainable water treatment solution. The SkyJuice Foundation offered to send Mr David Hughes, as Project Director, and Mr Larry James as Technical Adviser to Jakarta in September 2007 to assess the conditions and to organise the installation of a SkyHydrant water filter for the community in Kramatjati.

Negotiations were held with the village leader and the Susila Dharma committee to source the most appropriate location for the SkyHydrant<sup>™</sup> water filtration unit. The village leader organised a sub-committee to oversee the maintenance and operations of the SkyHydrant to ensure that all those in need had access to continual safe water. The financial burden of purchasing bottled water is no longer an issue for the community of Kramatjati and as the SkyHydrant water filtration unit uses no consumables to filter the water, the ongoing operation and maintenance costs will be insignificant.

**Future Projects:** Low maintenance, simple operation and high efficiency SkyHydrant<sup>™</sup> water filtration units are ideal for the impoverished areas of Jakarta. The Kramatjati project was commissioned as a pilot site for Jakarta and SkyJuice looks forward to working with Government and non government organisations to further provide safe water filtration units for Indonesia.

## ACKNOWLEDGEMENTS:

Australia Indonesia Business Council NSW Parliament Asia Pacific Friendship Group Memcor Australia Pty Ltd Qantas Ltd Project Managers: Mr David Hughes, Mr Larry James



Inundated area of Jakarta highlighting the Kramatjati District



Residents flee their homes with minimal possessions



Residents of Kramatjati now have access to continuous free safe water



Susila Dharma and village chief from Kramatjati receive the SkyHydrant water filtration unit for the community