



IN ACTION

Partnerships

Knowledge

Solutions

Polyethylene “Life Line” for Children’s Hospital in Hanoi

Vietnam has been growing fast over the last decade and has made considerable progress in meeting the UN Millennium Development Goals for water and sanitation. However, there are many challenges left which still need support from outside bodies.

One example was the National Hospital of Paediatrics (NHP) in Hanoi, Vietnam, where the water and sanitation conditions were far from ideal with poor water quality and very few drinking and hand washing facilities. Now, thanks to the work of the NGO Lien Aid, supported by Borouge, the situation is much improved, which will bring health and hope to many children as they embark on their journey to recovery.



Lien Aid, is an NGO working in Asia to bring safe water and sanitation to poor communities. In this, their second collaborative project with Borouge, they have significantly improved the water supply system to a children’s hospital in Hanoi, in North Vietnam.

As we all know clean water and good sanitation are essential for the health and wellbeing of us all and never more so than when we are in hospital recovering from an operation or illness. Unfortunately, for the patients at the National Hospital of Paediatrics (NHP) in Hanoi, Vietnam, the water and sanitation conditions were far from ideal, but thanks to the work of the NGO Lien Aid, supported by Borouge, the situation is now much improved.

Good solutions from Partnership

A project, called “**Life Lines**”, was developed by Lien Aid and Borouge to deliver clean drinking water from two new reverse osmosis (RO) treatment units to various water points around the hospital. This included hand washing facilities in the operating theatres and recovery rooms, contagious diseases unit, neonatal department, and the emergency resuscitation department, and 28 drinking water points throughout the hospital.

Borouge supplied all the PE80, PN10 pipes and fittings made of BorSafe™ME3440 for this project. As the water needed to be supplied throughout the two large hospital buildings, the pipes and fittings varied considerably in size, from 25mm to 90mm diameter. Borouge’s local agent, Han Huay Trading, ensured that high quality pipes were produced from the material by coordinating the supply from the reputable pipe customer, Tifoplast.

Water from reverse osmosis plants is known to be more “aggressive” than normal tap water on metal pipes and therefore, polyethylene pipes was by far the best choice. The flexible and UV resistant piping made of black PE80 compound offered easy plumbing installation, as the long lengths of coiled pipe could be fixed to the outer walls of the eight storey building without the need of protection against sunlight. Tight-fit fusion fittings ensured leak free joints for water distribution from the RO water tank on roof top to the lower floors.

Lien Aid managed the project and ensured that the water quality met the WHO requirements, by improving the existing water treatment system at the hospital and installing two 1,000 litre per hour aseptic water units.

The National Hospital of Paediatrics

The hospital, which treats around 400,000 children a year, uses about 900 cubic metres of water per day, half of which came from the municipal piped water supply and half from two wells located within the hospital grounds. The small-scale water treatment plant used to treat the well water was not sufficient to eradicate all bacterial contamination. In addition, the lack of trained staff to do regular maintenance work resulted in leaking pipes, clogged sand filters and exposed water containers, which resulted in further contamination of the water supply, making it unsuitable for use in the hospital.

Around the hospital, there were very few hand washing and drinking water facilities for both patients and staff. In the out-patient department, there were no drinking water points and patients had to buy bottled water to drink. This additional cost, on top of treatment costs, placed a heavy financial burden on patients and their families, many of whom came from poor rural communities.

The future

This is the first of two hospital projects where Borouge and Lien Aid will work in partnership to improve the water supply, and thereby, the quality of healthcare in Vietnam. These projects will bring health and hope to many children as they embark on their journey to recovery.



For more information on this project, contact: infopipe@borouge.com

For more information on Borouge PE100, visit: www.borouge.com



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