

The program 'Wastewater and Solid Waste Management in Provincial Centers' contributes to improved environmental conditions in, at present, six provincial cities through the development of comprehensive wastewater and drainage management, comprising the enhancement of existing wastewater and storm water collection systems and the construction of pumping stations and new wastewater treatment facilities.

The lead agency for the technical cooperation (TC) component is the Ministry of Construction (MoC). The Vietnamese partner cities/provinces include: Bac Ninh, Hai Duong, Vinh/Nghe An, Can Tho, Tra Vinh and Soc Trang. The German partner institutions include KfW (German Development Bank) for Financial Cooperation (FC) and GTZ (German Technical Cooperation) as well as DED (German Development Service) for Technical Cooperation (TC).

COMPONENT: TC Component 2 – Capacity Development Wastewater Management (WWM)
PERSPECTIVE: Asset Management
ACTIVITY: O&M Training Module 1.1: 'Cleaning and inspecting sewers, manholes and street inlets'
LOCATION: Can Tho and Hai Duong
DATE: November & December 2008

was conducted for the northern provinces (including Bac Ninh, Hai Duong, Vinh) between December 08 and 12, 2008 in Hai Duong. A total of 60 participants, consisting of sewer O&M staff from the WWCs' network units, staff from vehicle units as well as middle ranking managers from planning and technical departments, were trained during the courses.

The objectives of the training courses are:

- participants understand the basics to effectively plan and implement sewer cleaning and inspection works that are in accordance to agreed standard operation procedures (SOP), utilizing currently available O&M equipment;
- participants learn how to document implemented O&M works in accordance to agreed SOPs.



Practicing sewer cleaning by winch system in Hai Duong



Practicing sewer cleaning by suction vehicle in Can Tho.

Conducting trainings on operation and maintenance (O&M) of assets for technical and operational staff of the participating wastewater companies (WWC) is an major focus of the component's capacity building activities. Regarding sewerage/drainage collection facilities, the TC advisors have agreed with the participating WWCs to conduct nine training modules, consisting of modules:

- 1.1: Cleaning and inspecting sewers, manholes and street inlets.
- 1.2: Cleaning and maintaining back flow flaps and tide gates.
- 1.3: Cleaning, inspecting and repairing box culverts.
- 1.4: Repairing sewers, manholes and street inlets.
- 2: Operating, controlling, maintaining and repairing storm water pumping stations.
- 3: Cleaning, inspecting, dredging and repairing open channels and regulation lakes.
- 4: Emptying septic tanks and installing new house connections and services.
- 5: Operating, controlling, maintaining and repairing wastewater pumping stations.
- 6: Managing safety and emergencies.

Between November 25 and 28, 2008, a first O&M training (Module 1.1) on cleaning and inspecting sewers, manholes and street inlets using currently available equipment and tools (winches and suction vehicles) was implemented by the WWM advisors in Can Tho City. Relevant staff from all three southern provinces (including Tra Vinh and Soc Trang) were invited to Can Tho to participate. The same course

To meet these objectives, a combination of coaching, class room training and on-the job exercising were implemented, including: participative development of administrative and technical standard operation procedures (SOPs), agreement on work order and report forms and the demonstration and use of existing cleaning and inspection equipment. The first two training courses were successfully implemented and entirely met the participants expectations. The WWM advisory team likes to thank all participants for their enthusiastic contributions. Particular thanks to Can Tho and Hai Duong WWCs for their support in making all required equipment and tools available.