

Client: AusAID
Project: Da Nang Water Supply and Sanitation Project

CLIENT

AusAID, the Australian Agency for International Development, manages the Australian Government's official overseas aid program.

LOCATION

Da Nang is Vietnam's fourth largest city. It is located on the South China Sea approximately mid-way between Hanoi and Ho Chi Minh City (Saigon).

With a population of 72 million and a Gross National Product (GNP) per capita of US\$253 (both figures 1994), Vietnam is amongst the poorest and most densely populated countries in the world.

BACKGROUND

The Da Nang Water Supply and Sanitation Project forms part of a larger World Bank supported project to upgrade the water supply, sewerage, drainage and solid waste services in the cities of Hanoi, Haiphong, Da Nang and Ha Long. The Da Nang component of this larger project is funded by AusAID.

The purpose of the Da Nang project is to "improve the access to and utilisation of safe, sustainable, continuous water supply and contribute to improvement in environmental sanitation conditions in Da Nang".

The project is being jointly undertaken by two of Australia's largest multi-disciplinary consulting engineering and project management firms, Gutteridge Haskins & Davey Pty Ltd and Kinhill Pty Ltd. Earth Systems has provided specialist input to the engineering review, preliminary design and detailed design phases of the project.

OUR INVOLVEMENT IN THE PROJECT

Earth Systems, with the assistance of Vietnamese consultants, was largely responsible for the execution of the solid waste component of the project. Specific tasks include:

- ❑ Comprehensive review of existing facilities, practices and waste streams.
- ❑ Identification and evaluation of appropriate alternative waste storage, collection, transfer, and disposal technologies and strategies.
- ❑ Estimation of additional resources required to bring about short term improvement in solid waste storage, collection and transfer.
- ❑ Preparation of a hazardous waste management plan addressing biomedical and industrial wastes.
- ❑ Review of a proposal by the People's Committee of Da Nang to establish a centralised composting plant.
- ❑ Siting and preliminary design of sixteen waste transfer facilities.
- ❑ Siting and preliminary design of a new integrated waste management facility comprising a putrescible landfill, secure hazardous waste cell and waste recovery and sorting area.
- ❑ Development of a plan to improve the working conditions of waste pickers operating at the present landfill.
- ❑ Development of a detailed landfill operations and maintenance plan.
- ❑ Preparation of detailed capital and recurrent cost estimates for the various strategies identified.
- ❑ Detailed design of the waste transfer facilities and integrated waste management facility including the preparation of drawings and tender documents.
- ❑ Preparation of an equipment procurement specification and associated tender documentation.