

Metolong Project Management Unit (PMU) for Metolong Dam and Water Infrastructure Program

Maseru, Lesotho

MCA-Lesotho was the host government agency responsible for managing implementation of works funded through a \$362 million compact between the Kingdom of Lesotho and Millennium Challenge Corporation (MCC), a compact that included \$86.8 million toward the cost of the \$430 million Metolong project – a key component of the overall water and sanitation sector strategy of Lesotho.



The governments of Lesotho and South Africa, World Bank, European Investment Bank, Arab Bank for Economic Development in Africa (BADEA), Kuwait Fund for Arab Economic Development, Saudi Fund for Development and OPEC Fund for International Development also provided project financing.

The water supply program, which benefited more than 500,000 people in the capital Maseru and neighboring towns of Morija, Roma and Teyateyaneng, involved 40 contracts for 20 projects, including:

- 73-meter high roller-compacted concrete dam, multi-stage raw water intake and 2 megawatt pump station;
- 93 million-liter-per-day conventional water treatment plant including 1 km of 1500mm diameter raw water rising main, 2.5 km of 1220mm diameter potable water rising main and 3.5-megawatt high-lift pump station;
- Downstream conveyance system more than 120 km long with pipes up to 1200mm diameter;
- Ancillary pump stations, storage tanks up to 40 million-liter capacity, 40 km of roads, 50 village water and sanitation projects, 18 operator houses, vehicle and pedestrian bridges, a wastewater treatment facility, and a 30 m³/day package treatment plant; and,
- Extensive environmental and social management activities according to IFC Performance Standards, including land acquisition, compensation for permanent and temporary servitudes, and voluntary resettlement.

The water treatment plant, dam and downstream conveyance system were implemented using FIDIC Conditions of Contract (FIDIC) – the water treatment plant through alternative design-build delivery and the dam and downstream conveyance system as traditional design-bid-build projects.

Key Project Features

- Total cost of Construction \$430 Million
- Total No. of staff-months of the assignment: 765
- No. of professional staff-months provided by associated consultants: 560

Client:

Millennium Challenge Account-Lesotho (MCA-Lesotho) and Metolong Authority

Project Dates:

Sept 2008 – June 2018*

*Project operated under MCA Lesotho from 2008 to Sept 2013 before transferring to (Metolong Authority) from Sept 2013 to June 2018

MCA-Lesotho awarded CDM Smith the contract to serve as the Metolong project management unit (PMU), responsible for programme and project management services, including oversight of contracts, monitoring of design engineers and constructors, tracking costs and identifying / mitigating



delays to meet the Compact End Date successfully; procurement of consultants and contractors; project scheduling, program controls, progress reports, project reviews; providing input for the risk register, coordinating with funding agencies to ensure that components are completed within time frames and available funds; preparation of TOR for final design of the DCS system, construction supervision, and six H&S and E&S consultancies, evaluation of tenders, presentations to tender sub-committees; review of detailed designs for the treatment plant and conveyance system prepared by consultants, review of tender documents and management-level oversight of infrastructure consultants and contractors; construction supervision, responding to claims with Engineer Determinations, requests for clarification, monitoring quality, reviewing pay certificates; environmental management in accordance with the laws and regulations of Lesotho, working directly with client staff, consultants, donors and indirectly with National Environmental Secretariat staff to complete Environmental and Social Impact Assessment (ESIA) and Environmental Monitoring Plan (EMP) documents and deal with issues related to cultural sites and relocation of burial sites, socio-economic and public health issues associated with land acquisition, relocation, Resettlement Action Plan (RAP), local employment, working conditions, HIV/AIDS programmes, human trafficking; financial management, including cost monitoring, evaluation and reporting; and community liaison / stakeholder co-ordination.



An initial stakeholder input phase was conducted with stakeholders that included a Risk Assessment Workshop and a Quality Management Workshop to secure support and ease concerns about the program. These early on strategy formulation approaches led to successful technical assistance (TA) in various

engineering disciplines within the program. A robust team of CDM Smith representatives reached out to communities on a regular basis to keeping them informed of project developments and addressing potential problems.

Working with and under guidelines from the Government of Lesotho (GoL), CDM Smith coordinated with nine funding agencies to ensure that components were completed within budgeted time frames, within funds available, and in accordance with the expectations of the GoL and the funding agencies. CDM Smith partnered with the GoL to identify factors that could cause delays, approval bottlenecks, etc., and to develop mitigation plans. An initial stakeholder input phase was conducted to secure support and ease concerns about the program with multiple stakeholders. Works funded by the MCC were delivered to meet to the five-year timeframe of the Compact.