PROJECT INFORMATION DOCUMENT (PID)
CONCEPT STAGE

Report No.: AB1740

Project Name	PH-GEF-Manila Third Sewerage Project
Region	EAST ASIA AND PACIFIC
Sector	Sanitation (50%);Sewerage (50%)
Project ID	P089082
GEF Focal Area	International waters
Borrower(s)	
Implementing Agency	
Environment Category	[X] A [ ] B [ ] C [ ] FI [ ] TBD (to be determined)
Date PID Prepared	July 11, 2005
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Estimated Date of Board Approval	February 28, 2006

1. Key development issues and rationale for Bank involvement

Water pollution in the Philippines is a growing problem due to rapid urbanization and industrialization. One major cause of water pollution is untreated domestic wastewater, which accounts for 48% of total BOD pollution nation-wide (2237 thousand metric tons per year). Metro Manila (MM), home to some 12 million people (14%), is an important economic zone, producing 35.7% of GDP in 2003. All Manila waterways are heavily polluted and the situation is grave as described below – MM's key urban watercourses, Marikina River and Pasig River, are biologically dead. About 65-75% of pollution is caused by residential sewage, with the rest originating from industries such as tanneries and textile mills, as well as from solid waste dumped in the rivers.

MM is located in the hydraulically complex Pasig River – Laguna Lake – Manila Bay watershed, which includes more than thirty tributaries within the urban area. Manila Bay is a pollution hotspot in the East Asia Seas region (Map 1). Laguna Lake, located in the south of Metro Manila, receives significant water pollution from MM region. Paradoxically, it is also a crucial raw water source for the MM region. The Pasig River provides an important two-way hydraulic connection between Manila Bay and Laguna Lake, and because of this interconnection, the Pasig River serves as a conduit to transfer pollutants and salinity between Manila Bay, the Laguna Lake, and other urban watercourses.

Manila Bay is one of 35 pollution hotpots identified in the Transboundary Diagnostic Analysis for the South China Sea (UNEP, East Asian Seas Regional Coordinating Unit, 2000). The accelerated degradation of the Bay has significant negative impacts on the country's socio-economic activities and is considered a major source of transboundary pollution. In response to these challenges, the Manila Bay Coastal Strategy (MBCS) was prepared in 2001, with the support of the GEF/UNDP/IMO Partnership for Environmental Management of the Seas of East Asia (PEMSEA), and adopted by national and local stakeholders.

While water is supplied to about 90% of MM population, only about 15% of the population is connected to a sewerage system; only one half of the latter are provided with sewage treatment. About 85% have septic tanks, which are often poorly constructed, inadequately maintained, and are effectively bypassed. Most residents rely on open drains to evacuate effluent from their septic tanks.

To mitigate the environmental impacts of water pollution, the Government of the Republic of Philippines (GOP) has enacted many water-related laws, but enforcement is weak due to inadequate resources, poor statistics, institutional fragmentation, and weak cooperation between the central and local government units (LGUs). In MM, the Metropolitan Waterworks and Sewerage System (MWSS) is mandated by law to provide water supply, sewerage and sanitation services, which it does through its two concessionaires, Manila Water Company Inc. (MWCI) in the east and Maynilad Water Services Inc. (MWSI) in the west. The concession agreements include performance targets for the provision of sewerage and sanitation services. The agreements allow renegotiation of performance targets and tariffs every five years during rate rebasing. The current targets in force, negotiated during the 2003 rate rebasing, were established using a philosophy of spreading sewerage service evenly around MM in order to minimize the tariff impact in any particular municipality. However, it has been found that these targets are not adequate to meet the needs of MM because they do not allow the concessionaires to prioritize investments in environmental hotspots.

The Government and concessionaires recognize that further optimization of the performance targets for sewerage and sanitation during the 2008 rate rebasing is necessary to ensure that MM's environmental goals are met. While it is envisaged that the main strategy established in 2003 of following a decentralized, phased approach to sewage collection and treatment in MM will continue to be pursued during and after 2008, the Government is planning to modify the prioritization of service provision such that the concessionaires' performance targets will require them to focus their future infrastructure development in identified environmental hotspots. However, there is currently very little information available to assist the Government in identifying these environmental priorities in MM. Bank assistance through this project will help the Government establish the environmental priorities that will form the basis of the 2008 rate rebasing, which will commence negotiation in 2007.

This project forms part of the Bank's assistance to the GOP through Manila Third Sewerage Project (MTSP). MTSP will finance a series of sewage treatment systems that will allow GOP to evaluate the viability of various options for sewage management. In particular, through MTSP, Bank assistance is providing crucial support for the demonstration of the technical and financial viability of cost-effective combined sewerage systems in the Philippine context.

Implemented parallel to MTSP, this GEF supported project, with the Department of Environment and Natural Resources (DENR) as its lead implementing agency, will provide complementary institutional and scientific support such that GOP can complete the following work prior to the next rate rebasing consultations which will commence in 2007: initiate institutional coordination for the Pasig River, Laguna Lake and Manila Bay watersheds; identify environmental risk areas in MM; prepare standard and allowable discharge regulations for all tributaries in MM; help

GOP prioritize the environmental clean-up of Manila Bay; and, demonstrate the viability of joint sewage-septage treatment in MM. This project is considered to be a *barrier-removal* project, as the outcomes of this project will target and initiate increased investment by the private sector, the Bank and other IFIs in environmental priority areas in MM. The DENR has been chosen as the implementing agency as it is the chief environmental regulator in the Philippines.

The proposed GEF-funded activities fall under GEF's International Waters focal area and, within this focal area, are consistent with the GEF's Contaminant-based Operational Program (OP 10), , as they will demonstrate and encourage replicable innovative approaches to wastewater collection and treatment and will lead to further investment that would reduce transboundary pollution. The project is also consistent with GEF Strategic Priorities (SP) 1 and 3 for the International Waters Focal Area in 2004-06. With respect to Priority 1, it will facilitate the efforts of a nation that signed the *Putrajaya Declaration*[1] to mobilize financial resources to implement policy/institutional reforms and stress-reducing investments to address a priority trans-boundary water issue (land-based pollution of a shared water body) that is highlighted in the declaration. With respect to Priority 3, the project will demonstrate the feasibility of innovative technical solutions, which accelerate investments in wastewater structures that reduce pollution of the rivers and the contamination of an international water body. The combination of these particular sewage collection and treatment technologies represent least-cost solutions that generate a mix of local and global benefits.

The project received pipeline entry from GEF in May 2005. It has been endorsed by the GOP focal point for the GEF. The project forms part of the WB/GEF Pollution Reduction Investment Fund for the Large Marine Ecosystems of East Asia, which has the objective to remove technical, institutional, and financial barriers in order to leverage investments in the reduction of land-based marine pollution in the Seas of East Asia.

2. Proposed objective(s)

2a. Proposed project development objective(s)

The development objectives of the *Manila Third Sewerage Project* are to: (a) increase the coverage and effectiveness of sewerage service delivery in participating areas of Metro Manila through an integrated approach involving septage management, sewage management, and heightened consumer awareness of water pollution problems and their solutions; and (b) establish the financial and technical viability of new approaches for sewage management in MM.

2b. Proposed project global environment objective(s)

The global environment objective of the proposed GEF-MTSP project is to reduce transboundary pollution in the Large Marine Ecosystems of East Asia caused by pollution in Manila Bay.

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[1] On 12 December 2003 twelve coastal nations including Philippines took an important first step towards a formal regional arrangement by adopting the *Sustainable Development Strategy for the Seas of East Asia* (SDS-SEA). Ministers and Senior Officials from the 12 governments signed the *Putrajaya Declaration*, signifying their agreement and determination to implement the SDS-SEA.

3. Preliminary description

Component 1: Integrated management system for Laguna Lake-Manila-Bay-Pasig River watershed area.
Presently, a number of agencies have regulatory authority and operational responsibility within the Manila Bay watershed area, including: MWSS; the Department of Works and Highways (DPWH); the Pasig River Rehabilitation Commission (PRRC); the Laguna Lake Development Authority (LLDA); the Metropolitan Manila Development Authority (MMDA); the DENR; and, LGUs. Currently, each authority has its own strategy, action plan, administration, management responsibilities, and priorities for sustainable development and environmental management.

The proposed component is aimed at formalizing an institutional and operational linkage within the watershed area among all the players mentioned above. With DENR taking the lead as the primary environmental regulator, the project will establish a partnership mechanism that will coordinate management of the Laguna Lake-Manila-Bay-Pasig River watershed area. Specifically, convergence will be forged in the following strategic areas: (i) policy, regulatory and investments programming; (ii) development and implementation of water quality strategies including the establishment of allowable discharge loads to contributing rivers consistent with the DENR and ASEAN freshwater and marine water quality standards; (iii) attainment of water quality improvement and environmental sustainability; (iv) institutionalization of mechanisms for increased private sector and stakeholder co-management; and (v) capacity-building and knowledge sharing.

Component 2: Water quality standards and investment program for watershed area.
This component is aimed at defining maximum effluent discharges and water quality for the rivers and tributaries within MM. The component will assess medium and long-term allowable pollution loads that would bring the Laguna Lake-Manila-Bay-Pasig River watershed area into compliance with the national Clean Water Act standards. Appropriate functional uses and water quality standards, taking into consideration ecological and socio-economic factors, will be established. The agreed standards would provide the basis for the development of a coordinated and integrated pollution control investment program in the watershed.

Component 3: Public and private sector investments in priority sewerage and sanitation projects.
This component will address pollution problems in the Pasig River, Manila Bay and the Laguna Lake by enhancing the septage management component under MTSP. This component includes: i) upgrading of a sewage treatment plant to a combined septage/sewage treatment plant; ii) review and identification of independent providers of septage removal and transportation, and determination of sources of financing for upgrading the trucks to a minimum acceptable standard; iii) provision of technical assistance to private small-scale septage operators and training to improve current practices in hauling septage; iv) provision of assistance to the MWSS-Regulatory Office in expanding the current scope of the Public Assessment on Water Services (PAWS) to cover sewerage and sanitation services; and v) organization of knowledge dissemination workshops for watershed agencies.

4. Safeguard policies that might apply

To be provided by Jitendra Shah and Maya Villaluz.

5. Tentative financing

Source:		($m.)
BORROWER/RECIPIENT		84.46
GLOBAL ENVIRONMENT FACILITY		5.00
	Total	89.46

6. Contact point

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