

TC ABSTRACT

I. Basic project data

▪ Country/Region:	Guyana
▪ TC Name:	Support for the preparation of a water supply and sanitation infrastructure improvement program
▪ TC Number:	GY-T1090
▪ Team Leader/Members:	Marcello Basani (Team Leader, WSA/CGY); Rodrigo Riquelme (INE/WSA); Marle Reyes (WSA/CGY); Leticia Ramjag (CCB/CGY); Irene Cartin (INE/WSA); and Guillermo Eschoyez (LEG/SGO)
▪ Indicate if: Operational support, client support, knowledge generation & dissemination.	Operational Support
▪ If Operational Support, TC give number and name of Operation Supported by the TC:	GY-L1040 - Water Supply and Sanitation Infrastructure Improvement Program
▪ Reference to Request: (IDB docs #)	37836178
▪ Date of TC Abstract:	July 20, 2013
▪ Beneficiary:	Co-operative Republic of Guyana
▪ Executing Agency and contact name:	Guyana Water Incorporated (GWI)
▪ IDB Funding Requested:	US\$ 500,000
▪ Local counterpart funding, if any:	US\$20,000
▪ Disbursement period (which includes execution period):	8 months
▪ Required start date:	October, 2013
▪ Types of consultants:	Firm and individual consultants
▪ Prepared by Unit:	INE/WSA
▪ Unit of Disbursement Responsibility :	CCB/CGY
▪ Included in Country Strategy (y/n);	Y (dialogue area)
▪ TC included in CPD (y/n):	Y
▪ GCI-9 Sector Priority:	Water and Sanitation Infrastructure

II. Objective and Justification

- 2.1 Guyana Water Inc. (GWI) is the public utility owned by the Government of Guyana (GOG) in charge of providing water and sewerage services in the country. Established in 2002, GWI operates in accordance with the regulations outlined in the Water & Sewerage Act 2002, under a license issued by the Ministry of Housing and Water.
- 2.2 GWI water supply systems operate under constant challenges, the main problems including aging pipes and equipment, poor asset management, lack of adequate maintenance, illegal connections, high energy costs, uncertainty in aquifer yields, and inadequate financial performance. These problems have led to: (i) a gradual deterioration of the networks, with nation-wide NRW levels estimated between 50% and 70%; (ii) unreliable service, with pressure as low as 1-3 m,¹ and an average operating period of 16 hours/day; (iii) poor water quality and limited monitoring capacity. As for the sanitation sector, the existing sewer system serves only 48,000 citizens living in the capital Georgetown, about 6.5% of the country's population. One of the major challenges is that currently wastewater from this sewer system is discharged untreated through an outfall at the

¹In the coastal area, according to the License GWI is required to provide 24-hour continual service of pressurized water supply to a minimum of 5 meters at costumers' premises.

mouth of the Demerara River. In areas not served by the sewerage systems in Greater Georgetown, as well as in the hinterland, pit latrines and septic tanks are used for wastewater disposal. The pit latrines are generally in poor conditions (below WHO standards) and the septic tanks are not properly maintained (PAHO, 2009).

- 2.3 The objective of this Technical Cooperation (TC) is to contribute to the provision of sustainable water and sanitation services to the population of Guyana, supporting the preparation of the **Water Supply and Sanitation Infrastructure Improvement Program (GY-L1040)**. The objectives of the latter operation are to: (i) improve the water supply service; and (ii) improve access to sanitation in three selected areas. The proposed TC aims to: (i) produce the studies needed to substantiate the operation; (ii) increase GWI's technical capacity to assess water pollution and to monitor and evaluate program advances; and (iii) conduct a study to analyze the possible conversion of the Tucville sewer station into a wastewater treatment facility.
- 2.4 This TC is aligned with the Bank's Country Strategy (CS) for Guyana (2012-2016) that aims to sustaining economic growth while giving priority to investments that promote the sustainability of its natural resources endowments and favor the access of low income families to good quality services. Water and Sanitation is included in the CS as an area of dialogue, to discuss alternatives for improvements in efficiency, quality, sustainability and coverage of the potable water supply and sanitation services. The TC is also aligned with the Ninth General Increase in the Resources of the IDB (GCI-9) lending target for the 2012-2015 period "Lending to support climate change initiatives, sustainable energy and environmental sustainability." The related loan will also contribute to the lending target "Support development to small and vulnerable countries." Lastly, it is aligned with the second GCI-9 sector priority for 2012-2015 "Infrastructure for competitiveness and social welfare."

III. Description of activities

- 3.1 **Component 1. Studies and tender documents for water supply infrastructure improvement.** This component will finance the preparatory studies for: (i) the construction of three new water treatment plants (WTP) in selected areas; (ii) the implementation of complementary works such as transmission mains installation, distribution upgrades and metering in the areas served by the new WTP; and (iii) the implementation of priority works in the network supply system in Georgetown. Documents to be prepared include the economic and environmental assessments, the designs and the tender documents. The three selected areas are: (i) Cornelia Ida to De Kinderin, where a new WTP would bridge a geographical "treatment-gap" in the West Coast of Demerara; (ii) Diamond-Herstelling, where a new WTP would bridge a geographical "treatment-gap" in the East Bank of Demerara; and (iii) Cumberland-Williamsburg, where a new WTP would bridge a geographical "treatment-gap" in the East Berbice, and would address the issue of abnormally high iron content (up to 7.2 mg/L).
- 3.2 **Component 2. Studies and tender documents for sanitation infrastructure improvement.** This component will finance the studies needed for the upgrade of pit latrines into efficient septic tanks units. The component will focus exclusively on low-income areas served by the WTP to be constructed. Documents to be prepared include the economic and environmental assessments, the identification of household selection/prioritization criteria, and the preparation of construction designs and of the tender documents.

- 3.3 **Component 3. Improvement of technical capacity in Laboratory.** This component will finance the enhancement of laboratory testing capabilities of GWI. The activities will include: (i) training of GWI staff in water analysis, focusing on heavy metals; and (ii) procurement of laboratory equipment for heavy metal analysis.
- 3.4 **Component 4. Assessment of the Tucville sewerage receiving facility for conversion into a wastewater treatment facility.** This component will finance the (i) assessment of the Tucville sewer station for conversion into WWTP; and (ii) the preparation of conceptual designs for the conversion of this facility into a wastewater treatment plant.

IV. Indicative Budget

Activity/Component	IDB/Fund Funding US\$	Counterpart Funding US\$	Total Funding US\$
Component 1. Studies and conceptual designs for water supply infrastructure improvement.	310,000	-	310,000
Component 2. Studies and conceptual designs for sanitation infrastructure improvement.	80,000	-	80,000
Component 3. Improvement of technical capacity in Laboratory.	50,000	-	50,000
Component 4. Assessment of the Tucville sewerage receiving facility for conversion into a wastewater treatment facility.	30,000	-	30,000
Project Execution Unit (transportation, office costs, etc.)	-	20,000	20,000
Audits	30,000	-	30,000
Total	500,000	20,000	520,000

V. Executing agency and execution structure

- 5.1 The Executing Agency (EA) will be GWI through the Capital Investment and Planning Department (CIPD), which will be responsible for the overall administration of the proposed operation, including planning, budgeting, and implementation. The financial management will be the responsibility of GWI's Finance Department. GWI is knowledgeable of the Bank's procurement and financial policies and procedures as it executed LO-1047/SF-GY, the AquaFund financed ATN/OC-11805-GY and the FSO financed ATN/SF-11904-GY. In addition, GWI is currently executing 2428/BL-GY and 2535/BL-GY.

VI. Project Risks and issues

- 6.1 GWI is currently executing two loans from the IDB (2428/BL-GY and 2535/BL-GY), which minimizes the risks associated to lack of understanding of the Bank's policies and procedures. The only risk is related to the need to execute the TC in a timely manner to ensure that the preparatory studies for the GY-L1040 are available. The risk is mitigated by the fact that the TC will require only two procurement processes. Also, GWI will appoint a project coordinator to ensure proper and timely execution and coordination.

VII. Environmental and Social Classification

- 7.1 This TC has been classified as Category "C". No environmental assessment or studies or consultations are required for Category "C" operations.