

SIMULTANEOUS DISCLOSURE

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

TRINIDAD AND TOBAGO

MULTI-PHASE WASTEWATER REHABILITATION PROGRAM - PHASE I

(TT-L1026)

LOAN PROPOSAL

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REQUIRED

1. Annual Operating Plan (AOP)
<http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37256204>
2. Procurement Plan
<http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37256201>
3. Monitoring & Evaluation Arrangements
<http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37256200>
4. Environmental and Social Management Report (ESMR)
<http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37256205>

OPTIONAL

1. Technical Analysis
<http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37256203>
2. Socio-Economic Analysis
<http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37256202>
3. Financial Analysis
<http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37256207>
4. Institutional Analysis
<http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37256199>
5. Safeguard and Screening Form for Screening and Classification of projects (SSF)
<http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37249534>

Abbreviations

| | |
|-------|---|
| AOP | Annual Operating Plans |
| CS | Country Strategy |
| EIA | Environmental Impact Assessment |
| EMA | Environmental Management Authority |
| ERR | Economic Rate of Return |
| ESMF | Environmental and Social Management Framework |
| ESMP | Environmental and Social Management Plan |
| ESMR | Environmental and Social Management Report |
| GORTT | Government of Trinidad & Tobago |
| ICAS | Institutional Capacity Assessment System |
| IDB | Inter-American Development Bank |
| IPD | Infrastructure Project Division |
| MPL | Multiphase Loan |
| NPV | Net Present Value |
| NRW | Non Revenue Water |
| OC | Ordinary Capital |
| OM | Operations manual |
| OPEX | Operational Expenses |
| O&M | Operations and Maintenance |
| PWG | Project Working Group |
| RFP | Request for Proposal |
| RIC | Regulated Industries Commission |
| TC | Technical Cooperation |
| T&T | Trinidad and Tobago |
| WASA | Water and Sewerage Authority |
| WWTP | Waste Water Treatment Plants |

PROJECT SUMMARY
TRINIDAD & TOBAGO
MULTI-PHASE WASTEWATER REHABILITATION PROGRAM – PHASE I
TT-L1026

| Financial Terms and Conditions | | | | | |
|--|----------------|-----------------|------------------|--|--|
| Borrower: Republic of Trinidad and Tobago | | | | Flexible Financing Facility* | |
| | | | | Amortization Period: | 25 Years |
| Executing Agency: Water & Sewerage Authority (WASA) | | | | Original WAL | 15,25 |
| | | | | Disbursement Period: | 5 years |
| Source | Phase I | Phase II | Phase III | Grace period | 5,5 Years |
| IDB (OC) | 246,500,000 | 100,000,000 | 200,000,000 | Supervision and Inspection Fee: | ** |
| Local | 0 | 0 | 0 | Interest Rate: | Libor-Based |
| | | | | Credit Fee: | ** |
| Total | 546,500,000 | | | Currency of Approval: | US Dollar chargeable to the Ordinary Capital |
| Project at a Glance | | | | | |
| <p>Project Objective/Description: The general objective of the multiphase program is to contribute to the GORTT's effort to improve the environmental conditions of Trinidad and Tobago (T&T) by decreasing the uncontrolled discharge of untreated wastewater into the environment. This will be carried out through a multiphase program which will comprise three phases. The specific objectives of the Phase I are: (i) the construction of two new and improved Wastewater Treatment Plants (WWTP) in San Fernando and Malabar catchments; and (ii) the institutional strengthening of the Water and Sewage Authority (WASA), through: (a) training activities on contract management for outsourced operations, operation and maintenance, and environmental management; (b) implementation of key actions to improve commercial management services; and (c) implementation of key actions to improve corporate governance. Phase II will continue necessary institutional strengthening and integrate the sewerage network for connection to the WWTP constructed in Phase I. Phase III will expand the wastewater collection system to cover the population in the catchment areas that are currently on septic tanks and other individual sanitation solutions.</p> | | | | | |
| <p>Special contractual clauses:</p> <p>Special contractual conditions precedent for the first disbursement: (i) presentation of evidence that the Borrower and WASA have signed an agreement for the transfer of the resources of the loan and the execution of the program activities (¶3.3); (ii) presentation of evidence that WASA has hired two Program Managers (PM) (¶3.3); (iii) presentation of evidence that an Environmental and Social Management Plan (ESMP) for construction and operation has been approved by the Board of WASA and has entered into effect, according to the terms previously agreed upon with the Bank (¶3.3); and (iv) the Borrower, directly or through the Executing Agency, has presented to the Bank evidence that it has put in place the Environmental and Social Management Framework (ESMF), in accordance with terms agreed with the Bank (¶3.3).</p> <p>Special execution condition: (i) prior to the award of the contract for the construction of works of each of the WWTP, the Borrower, through WASA, shall present, to the satisfaction of the Bank, evidence that, in accordance with laws and regulations of the Borrower, it has obtained the possession of the real property where the WWTP will be built (¶3.4); (ii) prior to issuance of the Request for Proposal (RFP) for the tender of the construction of each WWTP, the Borrower, through WASA, shall submit a completed hydrological baseline and flood risk assessment, as well as an updated assessment of potential environmental and social risks and impacts, including details of the mitigation measures to be</p> | | | | | |

implemented in design, construction and operation of the respective WWTP that may be required to address these risks and impacts, as well as a final updated aquatic survey (¶3.4); (iii) prior to the end of the third year of the program's execution, the Borrower, directly or through the Executing Agency, shall submit to the satisfaction of the Bank: (a) evidence that, once the competent authority has established new principles and methodologies by which WASA can determine the adjustments in the rates for the services it provides, such principles and methodologies are being implemented by WASA; and (b) subject to (a), a detailed plan for the attainment of WASA's self-sufficiency on a phased basis showing the impact of the adjusted rates on WASA's cost recovery (¶3.4); (iv) throughout the implementation of the program, WASA shall comply with the ESMP and the ESMF as well as with the terms and conditions of the Certificate of Environmental Clearance (CEC) issued by the national Environmental Management Authority (EMA) (¶3.4); (v) prior to the date of the program's fourth year of execution end, WASA shall submit to the Bank evidence that it has purchased and installed a new billing system (¶3.4); and (vi) the Borrower, through the Executing Agency, undertakes throughout the implementation of the program, to provide to the satisfaction of the Bank: (a) prompt notification of any environmental and social (E&S) non-compliance and any accidents or other new E&S risks and impacts related to the program; (b) plans to be implemented of remedial/corrective measures acceptable to the Bank; and (c) information with respect to the corrective actions, which have been taken, as well as copies of the regulatory authorizations, permits (as needed) and supervision reports (as applicable under local law) (¶3.4).

Exceptions to Bank policies: None

Project qualifies for: SEQ X PTI Sector Geographic Headcount

(*). Under the Flexible Financing Facility (FN-655-1) the Borrower has the option to request modifications to the amortization schedule as well as currency and interest rate conversions, in all cases subject to the final amortization date and original WAL. In considering such requests, the Bank will take into account market conditions and operational and risk management considerations.

(**) The credit fee and inspection and supervision fee will be established periodically by the Board of Executive Directors as part of its review of the Bank's lending charges, in accordance with the relevant policies.

I. DESCRIPTION AND RESULTS MONITORING

A. Background, Problem Addressed, Justification

- 1.1 **Background.** Trinidad and Tobago (T&T) has achieved almost universal coverage of potable water. According to the 2010 UNICEF/WHO Joint Monitoring Program, 94% of the population uses an improved drinking water source (98% in urban areas and 93% in rural areas). This report also indicated that 92% of the population uses improved sanitation facilities referring to flush toilets. Despite these improvements, the wastewater and water services face institutional, operational, maintenance and financial challenges that will require a long-term period (7–10 years) to address. This is beyond the usual period of time that is required for the execution of a single investment loan; hence this program is designed as a multi-phase loan operation.
- 1.2 The Water and Sewage Authority (WASA) was created under the 1965 Water and Sewerage Act, and is the statutory body responsible for carrying out the government policies related to water and wastewater and for the provision of water and wastewater services in T&T. With respect to water supply, notwithstanding the high coverage level, the system operates under constant challenges, mostly related to aging pipes (in many areas installed more than 50 years ago and never replaced), and lack of adequate maintenance, due to lack of resources to finance the needed investments and to WASA's organizational and institutional inefficiencies. These problems have led to a gradual deterioration of the network, high level of Non-Revenue Water (NRW) (as high as 50%), and poor continuity of supply (only 20% of the population in Trinidad and 58% in Tobago have access to continuous water supply). WASA is fully cognizant of these problems and has plans in the Strategic Plan Framework 2011–2015 to address them.
- 1.3 On the wastewater side, T&T introduced centralized sewer and wastewater treatment systems in the 1960s. Since then, the sewage collection and treatment infrastructure has grown to an estimated 560 km of sewers and 243 wastewater facilities. According to WASA, this infrastructure connects only 30% of the population to a wastewater collection system (20% serviced by WASA and 10% by private entities). The remainder of the population has on-site sanitation solutions serviced by septic tanks and pit latrines. Because of the inadequate expansion of the central sewerage systems, the Government of Trinidad and Tobago (GORTT) required private developments to build and operate their own sewers and packaged wastewater treatment plant (WWTP). The intent was to allow WASA to expand its central sewerage systems, connect the new housing schemes and decommission the packaged WWTP. However, no incentives or controls were put in place, and while the central wastewater management system was never constructed, primarily because of lack of resources and weakness of the participating institutions, most developers after selling the properties would not operate the WWTP, leaving them abandoned (hence the term 'orphaned plants'). These plants serve industries and a variety of institutions (schools, hospitals, etc.) as dedicated solutions; about 70 are associated with private developments and serve medium to large housing schemes.
- 1.4 An essential cause of the failure was that developers were not able to charge residents for the Operations and Maintenance (O&M) of the sewerage and WWTP. Nor were controls

put in place to force developers or property owners to operate these facilities¹. Recent assessments demonstrate that nearly all of the packaged private WWTP are malfunctioning, and untreated effluent is discharged into water courses posing public health and environmental risks². The Environmental Impact Assessment done for the San Fernando catchment detected extremely high levels of faecal coliforms in receiving waters (above 150,000 Cfu/100mls in Cipero River), well above internationally accepted levels (usually varying between 400 and 4,000 Cfu/100mls) and with the average values measured upstream much lower than the average values measured downstream. A similar situation occurs for the Malabar catchment and, exacerbating the problem here, the WWTP is situated upstream of the source of potable water supply that supplies 34% of the potable water produced in Trinidad; hence proper wastewater treatment is critical. Several studies in the last 15 years have documented how the quality of rivers and streams in urban T&T have been steadily deteriorating, showing high level of organic material (BOD) and pathogens (faecal coliforms), mainly caused by the discharge of untreated sewerage flows.³

- 1.5 In addition to the foregoing, the water and sewerage sector in T&T, and more specifically WASA itself, faces several operational, financial and institutional challenges and difficulties covering its operational costs through tariffs. Specifically with regards to its wastewater treatment services, T&T and WASA are experiencing among others: (i) limited expansion of the central sewers; (ii) tariffs below the cost of providing sewerage services; (iii) limited technical level of human resources; (iv) aged systems; and (v) inefficient maintenance of the existing infrastructure. These operational and financial issues are linked to two major water and sewerage sector governance challenges: (i) the low tariff level that has not been adjusted during several years; and (ii) WASA's limited autonomy, which has also contributed to inefficiently high staffing levels. These challenges are currently being addressed as explained below, the economic regulator has issued a new methodology that will allow WASA to update its tariffs; and WASA's Board has approved a strategic plan to transform WASA into an autonomous commercially run company with a strong corporate governance. The proposed operation will contribute to this effort.
- 1.6 **WASA institutional challenges.** Though operating with sufficient technical know-how and sufficient control systems (see Institutional Viability below), WASA suffers from many constraints, including lack of autonomy and insufficient financial resources. This is mainly due to WASA's very nature of being a government agency and its duty to carry out ministerial directives in all management areas. A consultancy on corporate governance revealed the need for several areas of improvement, especially in managerial autonomy, accountability, and financial discipline. A recent analysis revealed also that WASA's commercial management service needs urgent attention, as it is based on an outdated billing system installed in 1996 and on a customer database not supported by geographical information systems. Another substantial cause of inefficiency is

¹ Legislation to regulate and ensure proper operation and maintenance of sewage treatment plants by developers was not put in place; such treatment works by private developers were not expected to be a permanent solution as WASA was expected to regain control.

² Assessments have been conducted by TTWS in 1997; Safage in 2004-2005, Genivar in 2007.

³ See Delcan, 1994 (integration of Sewerage Systems in Trinidad); EMA, 1998 – 2004 (State of Environment Reports); Water Resources Agency (Integrating The Management of Watersheds and Coastal Areas in T&T); Dillion Consulting, 2006; Ministry of Planning and Development, 2007 (First Compendium Environmental Statistics).

represented by the organizational structure and personnel level, consequence of the increase in state companies' employment of the past decade as well as the lack of effective performance-based systems. While the plan to decrease the number of employee per 1,000 connections from 12.5 in 2011 to 5.8 in 2016 is being supported by loan "WASA- Modernization and Wastewater Infrastructure Rehabilitation Program" (2600/OC-TT) approved in 2011. WASA has recently embarked in a broader reform process to address the core issues of its governance structure related to its very organizational design and functions.

- 1.7 In order to address the above-mentioned difficulties, WASA and the GORTT submitted to the Bank their Wastewater Development Strategies 2012-2022, which provides the grounds for the instant program prioritizing Malabar and San Fernando wastewater catchment areas for immediate attention. These strategies were consolidated in a Bank's finance study in which regional areas with critical situations with relation to the malfunctioning of the facilities were defined, screened, and priority areas were confirmed.⁴ Malabar WWTP is upstream from a major water supply intake and treatment plant, San Fernando WWTP is currently operating over its design capacity and in need of urgent upgrading; both areas have experienced high population growth. The present population to be served in Malabar is approximately 70,000 (projected to 108,630 in 2035) and in San Fernando is approximately 105,000 (projected to 111,600 in 2035). The proposed intervention has been demonstrated in the implementation of the Beetham WWTP implemented in 2005.⁵
- 1.8 **Program rationale and alternatives considered.** This program is being designed as a MultiPhase Loan (MPL), which will comprise three phases in order to provide long term support (institutional, technical and financial) to the wastewater sector in T&T. The design of the proposed operation as a MPL is based upon the following reasons: (i) the need of implementing institutional and policy reforms so as to support WASA on its strategic path towards modernizing its institutional and corporate governance arrangements and operating under a more sustainable financial arrangement; (ii) adjust to a change from operating many small and medium size wastewater treatment plants to operating a smaller number of significantly larger plants; (iii) the need for several construction works, which by the nature of its complexity would take more than one project cycle to complete; and (iv) the crucial fact that the economic benefits of the infrastructure works (for which 95% final designs have been prepared) will only and solely be achieved after the conclusion of the last phase of the program. The phases of the program are sequential and the commencement of the second and third phases is dependent on the completion of the respective preceding phase. Each step of the multi-phase support is substantiated by the government's vision to improve WASA's efficiency, its commitment to elevate attention to wastewater issues, the RIC endeavor to improve WASA performance and the transformative reforms being undertaken by WASA's management team. The GORTT/WASA is aware of the need for a longer term commitment for the implementation of the program beyond a five-year project cycle and

⁴ Nolasco and Associates Inc. 2011 (Final Report TT-L1018 Trinidad & Tobago Wastewater Infrastructure Rehabilitation Program Orphan WWTPs).

⁵ The Beetham WWTP, upgraded in 2005, serves the Greater Port of Spain using an activated sludge process fully comparable to the one proposed in this operation for Malabar and San Fernando.

informed that they are committed to their Plans and Strategies to address the wastewater problems of Trinidad and Tobago.⁶ The GORTT has also given greater prominence to the water sector of Trinidad and Tobago and recently created the Ministry of Environment and Water Resources with direct focus on water resources management and improvement of efficiency in WASA as a service provider in the country.

- 1.9 The engineering works comprised in the first phase will take approximately three years, while the completion of the entire first phase, including startup operation and maintenance of the plant will span the disbursement period up to five years. The engineering works for the second and third phases are estimated at three years each. Considering the partial overlapping execution periods among phases, it is estimated that a period of eight years will be necessary for the execution of all the engineering works. The program will build on WASA's ongoing efforts to reform and improve its operational efficiency, deepen the institutional strengthening activities comprised in loan 2600/OC-TT, and address key wastewater infrastructure needs.
- 1.10 During Phase I, the program will finance the infrastructure works, specifically the construction of two wastewater treatment plants one for San Fernando catchment area and the other for the Malabar catchment area; and on the institutional strengthening front, the program will assist WASA to update its legal governance framework and improve corporate governance, commercial services and management of operations consistent with the practices of a modern utility, as well as to improve the technical capacity of its personnel for proper management and operation of the new plants. The construction of wastewater treatment plants and the strengthening of WASA proposed for the first phase will be followed and complemented by the construction of a sewerage network during a second phase, and finally by the provision of connections to the network during the third phase. Specifically, Phase II (US\$100 million) will finance the continuation of necessary institutional strengthening activities including the follow-up on the implementation of the action plan for corporate governance, and the construction of the sewerage network for connection to the WWTP constructed in Phase I. Phase II also will involve the takeover, refurbishment, upgrade, and/or decommissioning of eight malfunctioning wastewater treatment facilities in the catchment area of San Fernando and four in Malabar and their eventual integration into the newly constructed plants. During Phase III (US\$200 million), the program will finance the expansion of the wastewater collection system to cover the population in the catchment areas that are currently on septic tanks and other individual sanitation solutions. This will include financing the connections of individual households in the catchment areas to the sewer systems in the catchment areas.
- 1.11 Specific triggers have been developed (see ¶3.8) to show that: (i) the construction of the two wastewater treatment plants has progressed as planned; and (ii) the institutional strengthening has progressed on pace in accordance with the Results Matrix for Phase I.
- 1.12 **Institutional Arrangement.** The Ministry of Environment and Water Resources is responsible for policy making for the sector as well as for granting licenses to water and

⁶ [IDBdocs37249264](#): Justification for Multi-Phase Program TT-L1026 Wastewater Rehabilitation Program. WASA communication to the Bank informing of their request for a single loan commitment for US\$600M for implementation of the program.

wastewater providers. As a state-owned entity, WASA is subject to regulation by a number of agencies including the RIC, which is the economic regulator; the EMA, which is the environmental regulator; the Water Resources Agency (appended to WASA), which regulates the use of the water resources of the country; and the Occupational Safety and Health Administration (OSH) Act 2004 for health and safety of workers. Hence, there is a separation of roles in the sector including the utility service provider, the economic, environmental, and resource management regulators and the policy maker. Other GORTT agencies that have roles in the water sector include the Tobago House of Assembly, the Forestry Division of the Ministry of Agriculture, Land and Marine Resources and the Ministry of Health.

- 1.13 **Inter-American Development Bank's assistance.** In the past, the Bank's support in the sector in T&T was limited to studies. A Technical Cooperation (TC) was approved in 1999 to develop a plan for wastewater sector development. In 2008, under the Water and Sanitation Initiative (GN-2446-2), the Bank financed another plan to review the strategic vision of the water sector. In December 2009, a TC "Preparation of Wastewater Rehabilitation Program" (ATN/OC-11932-TT) was approved. Implementation began in 2011 with the objective of: (i) preparing an action plan to rehabilitate the malfunctioning or abandoned wastewater facilities, including the final designs for selected interventions; and (ii) providing recommendations for the improvement of the institutional arrangement for the wastewater sector. The outputs of the TC served as base for the preparation of the US\$50 million "Wastewater Infrastructure Improvement Program" (2600/OC-TT), which was approved in 2011 with the objective of supporting the takeover, refurbishment, upgrade, integration or decommissioning of malfunctioning wastewater treatment facilities; the rationalization of WASA's personnel; and the improvement of WASA's wastewater management operational and maintenance performance. At the moment this loan is addressing the rationalization of WASA's personnel, for which US\$20.1 million have been disbursed, while designs for refurbishment, upgrade, integration and decommissioning of malfunctioning wastewater treatment facilities are being finalized. The works are scheduled to begin in the first quarter of 2013. This new operation will complement loan 2600/OC-TT, build upon the efforts already started, and continue the implementation of the GORTT strategy to address the water utility constraints in the country.
- 1.14 **Link to Country Strategy:** The proposed operation is aligned with the Country Strategy (CS) with The Republic of Trinidad and Tobago (2011-2015) (GN-2638), where wastewater is cited as a priority sector. The program will contribute directly to attaining the CS indicators related to the increase in the volume of wastewater treated, and to the increase in the number of households covered by centralized wastewater treatment systems. The operation is directly aligned to assist T&T prepare for a post-hydrocarbon economy by the reduction in subsidy transfers from GORTT to WASA and reliance on revenues from tariffs. The program is consistent with the Bank's Water and Sanitation Initiative as it contributes to the goals set under its "100 Cities", "Water Defenders", and "Efficient and Transparent Utilities". Through the implementation of activities oriented towards a better management of WWTP infrastructure and of water as a natural resource, the proposed program will contribute directly to the Report on 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 program also contributes 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.”

- 1.15 **Sectoral Policies of the Bank:** The proposed operation promotes improvement of wastewater management and treatment; financial sustainability and administrative and operational efficiency of the main operator in T&T. It also improves the quality of services and promotes a comprehensive analysis of water and sanitation systems in order to avoid and/or minimize environmental problems, and promotes actions that contribute to the development of the sector, such as institutional strengthening of sectoral authorities.
- 1.16 This program and the national objectives for the water and sanitation sector are consistent and compatible with the objectives and basic conditions of the Public Utilities Policy (OP-708), and was structured using the gradual approach specified in the “Guidelines for application of the Public Utilities Policy to the water and sanitation sector”. The program complies with the separation of functions among the entities responsible for policy-making, regulation, and service delivery (see ¶1.12). With respect to financial sustainability, WASA’s O&M costs are covered through a combination of GORTT transfers (done promptly and periodically) and tariff rates. Moreover, there is a plan that includes a gradual tariff adjustment in the following years (see ¶2.11), to reduce the GORTT burden. Regarding this same policy, the program will continue to increase economic efficiency which was initiated in the previous loan “Wastewater Infrastructure Improvement Program” (2600/OC-TT) which will be improving the efficiency through the reduction of the main operational cost component of WASA (personnel cost). The operation is also in compliance with the Environmental Sanitation Policy (OP-745) requiring: (i) including sewerage projects in national development plans; (ii) addressing larger population centers; (iii) giving attention to sanitation problems requiring urgent care; and (iv) motivating the beneficiary community to make rational use of the service.

B. Objective, Components and Cost

- 1.17 The general objective of the operation is to contribute to the GORTT’s effort to improve the environmental conditions of T&T by decreasing the uncontrolled discharge of untreated wastewater into the environment. This will be carried out through a multi-phase program which will comprise three phases. The specific objectives of the Phase I are: (i) the construction of two new and improved WWTP in San Fernando and Malabar catchments; and (ii) institutional strengthening for WASA, through: (a) training activities on contract management for outsourced operations, operation and maintenance, and environmental management; (b) implementation of key actions to improve commercial management services; and (c) implementation of key actions to improve corporate governance. The program is comprised of three phases as described above.
- 1.18 This Phase I operation (up to US\$246.5 million) will finance the following two components.
- 1.19 **Component 1. Construction of San Fernando and Malabar Wastewater Treatment Plants (US\$234.4 million).** This component will finance the construction of two wastewater treatment plants and collection systems for the San Fernando catchment and

the Malabar catchment areas, which will require infrastructure works for the construction of these WWTPs together with trunk sewers collection systems from existing connections. Detailed designs for construction including bill of quantities, drawings and specifications of the works are fully developed. There is an access road and bridge needed for the works in San Fernando which are currently being developed.

- 1.20 **Component 2. Institutional Strengthening for WASA (US\$4.2 million).** This component will finance activities related to the initiation of policy and institutional reforms at WASA, as well as to institutional restructuring and capacity building. The specific activities comprised in this component include: (i) implementation of key actions to improve corporate governance (such as the development of comprehensive corporate governance policies, the improvement of the current transparency and disclosure practices, training on risk management and controls systems, the establishment of a permanent Financial Statements Team to strengthen auditing and internal control practices); ii) implementation of key actions to improve commercial management services (including the purchase, installation, integration and implementation of a new billing system); and (iii) training activities on contract management of outsourced operations, operation and maintenance, and environmental management.

C. Key Results Indicators

- 1.21 The indicators are described in more details in the Results Framework of the project in Annex II. The main outcomes, extracted from the complete Results Framework, are presented in table I-1.

Table I-1 – Main Outcomes

| Key Results | Baseline | Target |
|--|-----------------|---------------|
| Households with new connection to a sewerage network in pilot area (household) | 0 | 400 |
| Households connected to an improved sewerage network in Malabar and San Fernando (household) | 0 | 16,626 |
| Malabar: percentage of population in the catchment covered by the WWTP (percentage) | 0 | 100% |
| San Fernando: percentage of population in the catchment covered by the WWTP (percentage) | 0 | 100% |
| Malabar: percentage of wastewater treated by the WTTP meeting the Water Pollution Rules (percentage) and having a zero or positive net impact on downstream water quality (in relation to upstream water quality) | 0 | 90% |
| San Fernando: percentage of wastewater treated by the WTTP meeting the Water Pollution Rules (percentage) and having a zero or positive net impact on downstream water quality (in relation to upstream water quality) | 0 | 90% |
| Women trained in water quality monitoring (percentage) | 0 | 50% |
| Hours of preventative maintenance in the Malabar and San Fernando systems (hours/month) | 200 | 720 |
| New systems operated and maintained according to design specifications (system) | 0 | 2 |
| New systems designed, implemented, operating and maintained according to social and environmental specifications (system) | 0 | 2 |
| WASA with new set of corporate governance policies (approved by the Board) | 0 | 1 |
| Corporate governance policies and compliance report disclosure of WASA's web page | 0 | 1 |
| WASA's audited financial statements available to the public | 0 | 4 |
| Percentage of WASA costumers served with new billing system (percentage) | 0 | 100 |

II. FINANCING STRUCTURE AND MAIN RISKS

A. Cost and Financing

- 2.1 The total cost of the three phases of the Multi-Phase Program Loan (MPL) is estimated to be up to US\$600 million. The total cost of Phase I is up to US\$246.5 million and it will be

financed with the proposed loan operation up to US\$246.5 million from the Bank’s Ordinary Capital resources (OC). The following table provides a breakdown by investment category and source of financing:

Table II-1 – Project Costs (US\$)

| Category | IDB | Local | Total |
|--|--------------------|-------|--------------------|
| 1- Project Administration | | | |
| 1.1 Project Management and Supervision | 1,000,000 | | 1,000,000 |
| 1.2 Works supervision | 5,445,000 | | 5,445,000 |
| 2- Direct Costs | | | |
| 2.1 Construction of San Fernando and Malabar Wastewater Treatment Plants | 210,942,000 | | 210,942,000 |
| 2.2 Works cost escalation allocation | 23,438,000 | | 23,438,000 |
| 2.3 Institutional Strengthening for WASA | 4,255,000 | | 4,255,000 |
| 3- Concurrent Costs | | | |
| 3.1 Auditing | 200,000 | | 200,000 |
| 3.2 Monitoring and Evaluation | 100,000 | | 100,000 |
| 4. Unallocated | | | |
| 4.1 Contingencies | 1,120,000 | | 1,120,000 |
| Total | 246,500,000 | | 246,500,000 |
| Percentage (%) | 100 | 0 | 100 |

B. Environmental and Social Safeguard Risks

- 2.2 The potential negative environmental and social impacts will be those typically associated with construction activities such as: contamination of water, contamination of soils, worker’s health and safety issues, waste disposal, traffic congestion, noise and dust, and those associated with the operation of a WWTP. There are no anticipated significant social impacts or risks; however, minor risks include assurance that WASA's stakeholder consultation and engagement plan and compensation strategy comply with IDB's environmental and social safeguard policies and directives; and assurance of continued public support for both projects pursuant to a willingness-to-pay study. These are considered to be local, short term, and not significant and manageable through the implementation of mitigation measures, and as such the program has been classified as Category “B” under Bank’s Environment and Safeguards Compliance Policy (OP-703). Specific IDB policies and directive applicable to the program include: B.4 (Other Risks); B.7 (Supervision and Compliance); B.9 (Natural Habitats and Cultural Sites); and, B.11 (Pollution Prevention and Abatement) of the Environment and Safeguards Compliance Policy (OP-703) and the Disaster Risk Management Policy (OP-704).
- 2.3 In accordance with OP-703, Environmental Impact Assessments (EIA) were undertaken for both projects, and in accordance with OP-102, these have been disclosed. However, both EIAs lacked certain information pertaining to the hydrological baseline (flow assessment, water quality parameters), and risks related to tidal flooding, which could be further exaggerated under future climate change scenarios (particularly in the case of San Fernando), and potential impacts of the discharge and flow on local aquatic life and hydrological regimes, including the Caroni Swamp (a RAMSAR site and Important Bird Area) and on the downstream users, i.e. disruption to arable lands. While it is not expected that any of these will constitute significant environmental and social impacts or risks, WASA and IDB have agreed that the analysis will be completed before the issuance of construction RFPs and appropriate mitigation measures be implemented. See electronic link [ESMR](#) for further details.

2.4 To address the environmental and social mitigation requirements the loan contract will include conditions prior to first disbursement as well as conditions of execution that the Executing Agency will be required to meet. See ¶3.3 and 3.4. These conditions are related to the previous verification and quantification of the flooding impact over arable land and new works as well as the aquatic life over the body of waters. This will imply that final designs will need to be verified prior to award to contract for works in order to reduce or eliminate the risks mentioned above.

C. Fiduciary Risks

2.5 The project team, in consultation with WASA and other stakeholders, conducted a Risk Management workshop to identify the major risks that are likely to affect the proposed project in the various categories of development, sustainability, governance, and fiduciary among others. The overall project risk level is medium. A Risk Mitigation Matrix outlining the actions to be taken to control and mitigate the identified risks was prepared. The risks pertaining financial management and procurement is considered low and the WASA adherence to the normal planning and reporting requirements of the Bank will be assured by Bank supervision. A joint review of the matrix will be undertaken on an annual basis, and any necessary additional mitigating actions will be adopted.

D. Other Key Issues and Risks

2.6 **Institutional Viability.** The Bank and WASA conducted the Institutional Capacity Assessment System (ICAS) analysis on WASA in 2012, whereby all areas of its operations, including procurement and financial management, were evaluated and analyzed. The ICAS evaluation indicated that WASA has adequate structure in place to manage its operations, having sufficient capacity in terms of technical know-how and financial management. In particular, WASA maintains sufficient internal and external control, facilitating the checks and balances that are necessary for the successful operation and implementation of this multiphase program. The Bank carried out further analyses on corporate governance and on commercial management services. An action plan was developed to address issues related, among others, to transparency, disclosure, audit and control, with the objective to transform WASA into an efficient corporate entity. A second action plan was developed to address issues related to the obsolete billing system currently in use. Budget has been included in this operation to implement both plans. Challenges that need to be addressed to improve performance also include the redundancy of staff that present unnecessary burdens for WASA's operational efficiency. The redundancies in the personnel structure and the consequent high staffing costs are being addressed through the implementation of an institutional reorganization, which is being supported by the Bank through loan 2600/OC-TT. The re-evaluation of key roles and the identification and elimination of redundancies would allow for better planning and cost control. While WASA is familiar with Bank's policies and procedures, a series of strengthening activities have been discussed and agreed upon with WASA and will be initiated during the preparation of the program with the support of the Bank's representation in T&T and of external consultants. These activities include technical training, procurement forums and round tables, regular visits to assess and discuss the institutional and financial management framework, as well as one-to-one training sessions (when need arises).

2.7 **Technical Viability.** The proposed technical solutions for the interventions and the selection criteria identified for future works fully meet the need for the improvement of WASA

wastewater service. The [Technical Analysis](#) link includes a description of the proposed works, as well as related costs and schedule. The Bank's assessment indicates that the works are feasible and are the outcome of an analysis that contemplated different technical alternatives and configurations. The costs of these alternatives were estimated and compared to make an economic-feasibility appraisal considering local unit prices, technologies and services. The sizing criteria and parameters are fully compatible with local and international design standards, and materials and technology that will be used are known in T&T and have been used in other projects by WASA. WASA is reasonably familiar with the operation of the assets that will be acquired under the program, but needs to improve its O&M programs and practices. These will be supported under the institutional strengthening component. Regarding cost overruns, there was a detailed study made by the engineering consultant that made the final designs. This study covered the three phases of the program. Furthermore, a 10% contingency cover was already included in the works budget for Phase I. The costs for Phases II and III will be reviewed upon the time of preparation of the future phases of the program.

- 2.8 **Financial Viability.** The financial analysis for WASA was carried out through a financial model developed by INE/WASA based on the historical financial statements, projections and assumptions of the company for the next several years (see Financial Analysis). Historical information and eleven-year projection is presented in real terms starting at year end 2011.
- 2.9 WASA produces around 370 million cubic meters of water per year, serving a population of 1.3 million with a customer base of approximately 380,000 accounts (about 92% of the population). On the contrary, its waste-water network, which includes 460 kilometers of sewers, covers only 20% of the population, with a current sewage customer base of approximately 72,000 accounts.
- 2.10 Currently, WASA faces several financial challenges, among others: (i) coverage of its operational costs through tariffs (WASA's operating revenue covers nowadays around 37% of its Operational Expenses (OPEX), but all these deficits are promptly and periodically being covered by the GORTT in the form of subsidies); (ii) increasing metering levels (less than 4% of the customer's water consumption is metered); and (iii) improving other operational inefficiencies, such a high number of employees per 1,000 connections (circa 12.5x); as explained in ¶1.6, the Bank is assisting with this through Loan 2600/OC-TT.
- 2.11 The GORTT has expressed the political willingness and long term commitment to make the necessary changes to improve the efficiency of WASA. As a result of this, WASA has submitted to the RIC all the financial and commercial information to adjust the tariffs for the sector in order to update, in a progressive increase approach, water tariff levels (tariff levels have been constant for the last several years) in the upcoming years. The aim is to allow WASA to recover its operational costs through tariff revenues in the medium term (4 years after the beginning of the tariff adjustment). The tariff adjustment will be accompanied also by a strategic plan from WASA, which includes several operational efficiencies for the upcoming years such as reduction in the level of NRW, increase the continuity of the services, reduction of the ratio of employees per 1,000 connections (already being addressed by 2600/OC-TT), and increase the level of metering, among other actions. All these actions related to increase of operational revenues and efficiency in operational costs will derive in achieving WASA financial sustainability in the medium term.

Furthermore, WASA is planning to embark in an ambitious capital expenditure program for the next eleven years in order to improve and expand water and wastewater services in T&T.

- 2.12 In the loan contract for the current program, the Borrower will commit to adopt the necessary measures, to the Bank's satisfaction, so as to assure that WASA will cover its operational and maintenance costs. Moreover, there will be an execution condition regarding the tariff adjustment (¶3.4). Based on the Financial Analysis, the methodology to monitor WASA's financial performance will be established, in accordance with the analysis of the following aspects: (i) recovery of operational costs with operational incomes; (ii) increase efficiency in operational costs; and (iii) implementation of the new tariff adjustment. Additionally, the Bank, in coordination with WASA and the GORTT, will also monitor closely the process of approval of the new tariff structure by the economic regulator which is one of the triggers of the second phase.
- 2.13 **Socio-economic Viability.** A cost-benefit analysis of the program (i.e. for the three phases) was performed on the Malabar and San Fernando sub-projects. This analysis shows that the program is economically feasible, showing an Economic Rate of Return (ERR) of 15.0% for Malabar and 13.0% for San Fernando and an economic Net Present Value (NPV) of US\$28.2 million for Malabar and US\$9.8 million for San Fernando. The analysis was complemented by an appropriate sensitivity assessment ([see link](#)). The project will also imply a positive, high and permanent environmental benefit. Both new wastewater treatment facilities will imply an immediate benefit on the natural courses of the catchment which currently receives wastewater not treated at an adequate level.
- 2.14 **Multi-Phase Implementation Risk.** Inherent in a multi-phase loan, because of its longer term duration, is that it may span more than one political administration and the risk that a new administration may not support the continuation of the program. The GORTT/WASA has committed itself to the full implementation of the three phases by having invested in full-fledge engineering designs that require three phases for implementation, requested a loan for the full amount for the three phases, and also reorganized ministerial portfolio for improvements in water resources management. However, the Bank's policy on multi-phase precludes an arrangement for one loan for each phase of the program. Compliance with the various conditions of the loan, particularly the implementation of the new tariff and operational practices improvement (corporate governance, cost efficiency, asset management) among others, will therefore assure the Bank and the borrower the full implementation of the program.

III. IMPLEMENTATION AND MANAGEMENT PLAN

A. Summary Implementation Arrangements

- 3.1 The Borrower is the Republic of Trinidad and Tobago and the Executing Agency for the program will be WASA. The WASA Infrastructure Project Division (IPD), which operates under the guidelines of WASA Project Management Office (PMO), will be responsible for the overall administration of the Program, including planning, budgeting, implementation and monitoring. Given the complexity of the operation, appropriate staff will be designated by WASA for the execution of the program, and assigned full time to an internal Project Working Group (PWG), established for the execution of loan 2600/OC-TT. This PWG will coordinate and monitor the execution of the program, and will include two PM (one each for

Malabar and San Fernando), two engineers, a financial officer, an accounting officer, a procurement officer and an environmental specialist. Accounting and financial monitoring and reporting will be undertaken by the Project Accounting Department within WASA's Financial Services Division. The PWG will also include representatives from Legal Services, Environment, Wastewater Operations, Quality Control, Purchasing & Stores, Finance, and Corporate Communications of WASA. The two PM will be hired using loan resources. A group comprised of officials from the Ministry of Finance and the Economy, the Ministry of Planning and Sustainable Development, the Ministry of the Environment and Water Resources and WASA will provide oversight of the program execution and monitor the progress of the works, provide direction and support to the program and assist in clearing any bottlenecks. For that purpose, and for the purpose of compliance with the condition precedent to prior disbursement, WASA and the Ministry of the Environment and Water Resources will enter into an agreement.

- 3.2 Specific responsibilities of WASA will include: (i) preparation, implementation and coordination of the Annual Operating Plans (AOP); (ii) financial administration, program accounting and preparation of budgets and disbursement requests; (iii) preparation of the program's annual procurement plan, and the procurement of works, goods and services; (iv) coordination of the preparation of technical reports and financial statements; (v) monitoring of the progress of program activities, environmental and social safeguards compliance, and analysis of variances of actual results against plans; (vi) selection and hiring of the external audit and ensuring that the relevant recommendations are implemented; (vii) hiring of consultants for the carrying out of external evaluations and ensuring that the recommendations are implemented; and (viii) serving as a liaison for the program implementation with the Bank. For the execution of the program, WASA will follow the procedures and processes established in the Operations Manual of loan 2600/OC-TT.
- 3.3 **Special contractual conditions for the first disbursement will be: (i) presentation of evidence that the Borrower and WASA have signed an agreement for the transfer of the resources of the loan and the execution of the program activities; (ii) presentation of evidence that WASA has hired with two PM; (iii) presentation of evidence that an ESMP for construction and operation has been approved by the Board of WASA and has entered into effect, according to the terms previously agreed upon with the Bank; and (iv) the Borrower, directly or through the Executing Agency, has presented to the Bank evidence that it has put in place the ESMF, in accordance with terms agreed with the Bank.**
- 3.4 As special execution conditions: (i) prior to the award of the contract for the construction of works of each of the WWTP, the Borrower, through WASA, shall present, to the satisfaction of the Bank, evidence that, in accordance with laws and regulations of the Borrower, it has obtained the possession of the real property where the WWTP will be built; (ii) prior to issuance of the RFP for the tender of the construction of each WWTP, the Borrower, through WASA, shall submit a completed hydrological baseline and flood risk assessment, as well as an updated assessment of potential environmental and social risks and impacts, including details of the mitigation measures to be implemented in design, construction and operation of the respective WWTP that may be required to address these risks and impacts, as well as a final updated aquatic survey; (iii) prior to the end of the third year of the program's execution, the Borrower, directly or through the Executing Agency, shall submit to the satisfaction of the Bank: (a) evidence that, once the competent authority has established new principles and methodologies by which WASA can determine the adjustments in the rates for

the services it provides, such principles and methodologies are being implemented by WASA; and (b) subject to (a), a detailed plan for the attainment of WASA's self-sufficiency on a phased basis showing the impact of the adjusted rates on WASA's cost recovery; (iv) prior to the date of the program's fourth year of execution end, WASA shall submit to the Bank evidence that it has purchased and installed a new billing system; (v) the Borrower, through WASA, undertakes to comply throughout the implementation of the program, WASA shall comply with the ESMP and the ESMF as well as with the terms and conditions of the Certificate of Environmental Clearance (CEC) issued by the EMA; and (vi) the Borrower, through the Executing Agency, undertakes throughout the implementation of the program, to provide to the satisfaction of the Bank: (a) prompt notification of any environmental and social (E&S) non-compliance and any accidents or other new E&S risks and impacts related to the program; (b) plans to be implemented of remedial/corrective measures acceptable to the Bank; and (c) information with respect to the corrective actions, which have been taken, as well as copies of the regulatory authorizations, permits (as needed) and supervision reports (as applicable under local law).

- 3.5 **Annual Operating Plans.** The program will be executed following the AOP that will include for each programmed annual activity: its goals, terms of reference, budget, source of funding, and responsibility for its execution. Changes to the AOP may be introduced as needed during program implementation, and will require the Bank's non-objection. The AOP will be prepared according to guidelines established in the OM (§3.2), which will set forth all the details regarding program execution including coordination of activities amongst the different offices. The AOP for the first year will be contained in the initial report, and the AOP for each of the subsequent years will be submitted to the Bank, for its non-objection, before November 30 of each year, and will cover the activities that will be carried out in for the following year.

B. Summary of Arrangements for Monitoring Results

- 3.6 As indicated in the Proposal for Operation Development (POD), WASA through its Infrastructure Project Division (IPD) will be in charge of monitoring program performance and progress throughout execution. Program monitoring will be based on the Results Framework, the Progress Monitoring Report (PMR), the Procurement Plan, and the AOP. WASA will submit two semi-annual progress reports throughout program execution, within 60 days following the end of each semester, as described below
- 3.7 **Evaluation.** (i) The Executing Agency shall hire, with resources from the Financing, an independent external consultant to conduct a mid-term and a final evaluation of the program: (a) the mid-term evaluation will be carried out when 60% of the Loan resources have been committed; and (ii) the final evaluation of the program will be carried out after 90% of the Loan resources have been committed. As this is a MPL and the full benefits will be realized after completion of the final phase, the ex post economic evaluation will be conducted after the end of the final phase operation⁷. The aforementioned evaluations will include reports on environmental and social issues as well as safeguards compliance.
- 3.8 **Triggers for Phase II.** The above-referenced evaluations will evaluate the progress in the achievement of the indicators set out in the results matrix of the program, and will include reporting on environment and social issues and on safeguards compliance. Achievement of

⁷ Arrangement for the financing of the ex post evaluation will be agreed upon during the preparation of the Phase III operation.

the mid-term evaluation targets and compliance with the conditions of execution of this Phase I operation will trigger the preparation of the Phase II operation. These are: (i) commitment of 60% of the financing and disbursement of 40%; (ii) 40% of physical progress of the civil works; and (iii) compliance with section ¶3.4 (iii).

Table III-1 - Disbursement schedule (US\$ millions)

| Year | 1 | 2 | 3 | 4 | 5 | Total | % |
|--------------|-------------|-------------|-------------|-------------|-------------|--------------|-------------|
| IDB | 36.9 | 70.9 | 83.2 | 41.6 | 13.9 | 246.5 | 100 |
| WASA | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 36.9 | 70.9 | 83.2 | 41.6 | 13.9 | 246.5 | 100% |

- 3.9 **Progress Reports.** The progress reports will contain at least the following elements: (i) descriptions of the executed activities per component; (ii) accounts of the contractors', consultants' and the supervision firm's performances; (iii) description of the procurement processes carried out during the reported period; (iv) updated schedule of physical progress and disbursements; (v) level of compliance with the performance indicators; (vi) progress with respect to the implementation and execution of environmental audits, including timeline, results and implemented measures to comply with the ESMP (biannually), ESMF and compliance certifications and reports (such as the environmental and social compliance report; (vii) identification of new risks/events that may potentially affect the future implementation of the program, and update of the matrixes produced within the project risk management process; (viii) implementation plan to be completed in the following two six month periods; (ix) a summarized program financial statement, and (x) the estimated cash flow for the next two six month periods.
- 3.10 **O&M.** Manuals for each of the two WWTPs to be built with program resources will be prepared by the contractor and training provided to WASA staff prior to the completion of the construction of each of the said treatment plants. From the date of approval of the O&M manuals, within 60 days from the beginning of each semester, WASA will submit to the Bank an O&M report, which shall include: (i) details of the organization responsible for maintenance; and (ii) information pertaining to the resources to be allocated for maintenance during the current year and for the subsequent year. The O&M reports will have to be submitted throughout program execution and up to five years following program completion.
- 3.11 **Construction Supervision.** Qualified individuals or firms will be hired by WASA using Loan's resources to carry out the supervision of the civil works, and to transfer knowledge on proper construction practices. Budget has been duly allocated to ensure proper monitoring of the construction progress, including the timely application of environmental and social mitigation measures.

C. Significant Design Activities Post Approval

- 3.12 The Bank is currently preparing the TC "Preparation for the Rehabilitation of Sewerage Infrastructure" (TT-T1030) to complete the project package for the full execution of TT-L1026. The activities will include civil engineering designs, design of operation contract, supplementary environmental studies and treatment process review. WASA has entered into a contract with AECOM Consultants, who prepared the detailed engineering designs for Malabar and San Fernando, to include the access road and bridge for the San Fernando site which was not included in the original project. These designs are going to be ready by the end of 2012 when construction RFPs documents are released. The funds will be eligible for retroactive finance.

| Development Effectiveness Matrix | | | |
|--|---|---|---------------|
| Summary | | | |
| I. Strategic Alignment | | | |
| 1. IDB Strategic Development Objectives | Aligned | | |
| Lending Program | (i) Lending to small and vulnerable countries, and (ii) Lending to support climate change initiatives, renewable energy and environmental sustainability. | | |
| Regional Development Goals | Incidence of waterborne diseases (per 100,000 inhabitants). | | |
| Bank Output Contribution (as defined in Results Framework of IDB-9) | Households with new or upgraded sanitary connections. | | |
| 2. Country Strategy Development Objectives | Aligned | | |
| Country Strategy Results Matrix | GN-2638 | Rehabilitated and expanded wastewater system. | |
| Country Program Results Matrix | GN-2661-4 | The intervention is included in the 2012 Country Program Document. | |
| Relevance of this project to country development challenges (If not aligned to country strategy or country program) | | | |
| II. Development Outcomes - Evaluability | Highly Evaluable | Weight | Maximum Score |
| | 9.1 | | 10 |
| 3. Evidence-based Assessment & Solution | 9.9 | 25% | 10 |
| 4. Ex ante Economic Analysis | 10.0 | 25% | 10 |
| 5. Monitoring and Evaluation | 6.6 | 25% | 10 |
| 6. Risks & Mitigation Monitoring Matrix | 10.0 | 25% | 10 |
| Overall risks rate = magnitude of risks*likelihood | Medium | | |
| Environmental & social risk classification | B | | |
| III. IDB's Role - Additionality | | | |
| The project relies on the use of country systems (VPC/PDP criteria) | Yes | Financial Management: Budget, treasury, accounting and reporting, and internal audit. Procurement: Information systems, and shopping methods, and national public bidding. | |
| The project uses another country system different from the ones above for implementing the program | | | |
| The IDB's involvement promotes improvements of the intended beneficiaries and/or public sector entity in the following dimensions: | | | |
| Gender Equality | | | |
| Labor | | | |
| Environment | | | |
| Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project | Yes | TC- T1030 Preparation for Wastewater Rehabilitation Program for TT related to this operation. | |
| The ex-post impact evaluation of the project will produce evidence to close knowledge gaps in the sector that were identified in the project document and/or in the evaluation plan. | | | |

The proposed project is the first phase of three multiphase program designed "to contribute to the GORTT's effort to improve the environmental conditions of Trinidad and Tobago by decreasing the uncontrolled discharge of untreated wastewater into the environment". This first operation will finance the construction of two Wastewater Treatment Plants (WWTP) located in the San Fernando and Malabar catchment areas and includes institutional strengthening activities.

The diagnosis is complete and describes the challenges related to outdated infrastructure, and sector and institutional deficiencies which contribute to the main problem: untreated wastewater flow that does not comply with pollution rules and results in poor water quality. The vertical logic is clear, and points that both physical investments and institutional strengthening activities lead to increased coverage and better water quality. The Results Matrix indicators are SMART. The project includes a proposed draft PMR.

This logic is also consistent with the implicit logic in the economic analysis, which includes a complete Cost Benefit analysis at efficiency prices using contingent valuation techniques, based on Willingness-To-Pay surveys. The operation has an Evaluation and Monitoring Plan according to Bank Guidelines. It is proposed that the program as a whole will be evaluated – not this specific project – with an ex-post economic analysis.

Risk is medium and mitigation measures have been identified.

| Results Framework | | | | | | | | |
|--|---|-------------|-------------|-------------|-------------|-------------|---------------|--|
| Multi-Phase Wastewater Rehabilitation Program – Phase I (TT- L1026) | | | | | | | | |
| Objective | The general objective of the operation is to contribute to the GORTT's effort to improve the environmental conditions of T&T by decreasing the uncontrolled discharge of untreated wastewater into the environment. The specific objectives of the Phase I are: (i) the construction of two new and improved wastewater treatment plants (WWTP) in San Fernando and Malabar catchments; construction of trunk sewers, decommissioning of existing wastewater facilities and (ii) institutional Strengthening for WASA, through: (a) training activities on contract management for outsourced operations, operation and maintenance, and environmental management, (b) implementation of key actions to improve commercial management services; and (c) implementation of key actions to improve corporate governance. The program is comprised of three phases as described above. | | | | | | | |
| Program Output and Outcome Indicators | | | | | | | | |
| Component 1. Improvement of Trinidad and Tobago's wastewater system | | | | | | | | |
| | Baseline | 2013 | 2014 | 2015 | 2016 | 2017 | Target | Comments/ Means of verification |
| Outputs | | | | | | | | |
| Equipment for operation and maintenance acquired (equipment) | 0 | - | - | - | 4 | - | 4 | Verification: completion certificate signed by construction supervisor and WASA; Semi-annual reports to IDB. The equipment to be purchased include: 2 small VAC tracks and 2 CCTV system |
| Malabar Waste Water Treatment Plants built (includes commissioned) (plants) | 0 | - | - | - | 1 | - | 1 | Verification: completion certificate signed by construction supervisor and WASA; Semi-annual reports to IDB. |
| Old Malabar Waste Water Treatment Plants decommissioned (plants) | 0 | - | - | - | 1 | - | 1 | Definition: decommission refers to physical dismantling of the old facility and all other actions required to make the site available for further use ((Demolition activities; Debris removal; Site clearing; Ground leveling; Landscaping). Verification: completion certificate signed by construction supervisor and WASA; Semi-annual reports to IDB. |
| San Fernando Waste Water Treatment Plants built (includes commissioned) (plants) | 0 | - | - | - | 1 | - | 1 | Verification: completion certificate signed by construction supervisor and WASA; Semi-annual reports to IDB. |

| | | | | | | | | |
|--|---|-------|---|---|------|--------|--------|---|
| Old San Fernando Waste Water Treatment Plants decommissioned (plants) | 0 | - | - | - | 1 | - | 1 | Definition: decommission refers to physical dismantling of the old facility and all other actions required to make the site available for further use (Demolition activities; Debris removal; Site clearing; Ground leveling; Landscaping). Verification: completion certificate signed by construction supervisor and WASA; Semi-annual reports to IDB. |
| Sewage pumping stations built (station) | 0 | 2 | 2 | - | - | - | 4 | Verification: completion certificate signed by construction supervisor and WASA; Semi-annual reports to IDB. |
| Sewerage network built (Km) | 0 | 2 | 7 | 9 | 8 | - | 26 | Verification: completion certificate signed by construction supervisor and WASA; Semi-annual reports to IDB. |
| Intra-domiciliary sanitary connections built in pilot area (connection) | 0 | - | - | - | 200 | 200 | 400 | Verification: completion certificate signed by construction supervisor and WASA; Semi-annual reports to IDB. |
| Access road to San Fernando Waste Water treatment Plant constructed (Km) | 0 | 0.305 | - | - | - | - | 0.305 | Verification: completion certificate signed by construction supervisor and WASA; Semi-annual reports to IDB. |
| Access bridge to San Fernando Waste Water treatment plant (N°) | 0 | 1 | | | | | | Verification: completion certificate signed by construction supervisor and WASA; Semi-annual reports to IDB. |
| Outcomes | | | | | | | | |
| Households with new connection to a sewerage network in pilot area (household) | 0 | - | - | - | 200 | 200 | 400 | Verification: completion certificate signed by construction supervisor and WASA; Semi-annual reports to IDB. |
| Households connected to an improved sewerage network in Malabar and San Fernando (household) | 0 | - | - | - | - | 16,626 | 16,626 | This refers to the households currently connected to the packages plans that will be converted in lift stations. Verification: completion certificate signed by construction supervisor and WASA; Semi-annual reports to IDB. |
| Malabar: Percentage of population in the catchment covered by the WWTP (percentage) | 0 | - | - | - | 100% | 100% | 100% | Verification: WASA water quality monitoring reports (catchment area); Semi-annual reports to IDB. |

| | | | | | | | | |
|--|-----------------|---------------|---------------|---------------|---------------|---------------|---------------|---|
| San Fernando: Percentage of population in the catchment treated by the WWTP (percentage) | 0 | - | - | - | 100% | 100% | 100% | Verification: WASA water quality monitoring reports (catchment area); Semi-annual reports to IDB. |
| Malabar: Percentage of wastewater treated by the WWTP meeting the Water Pollution Rules (percentage) and having a zero or positive net impact on downstream water quality (in relation to upstream water quality) | 0 | - | - | - | 90% | 90% | 90% | Verification: WASA water quality monitoring reports (monitoring point at outfall site). The ESMP will specify the sampling points and the definition of a baseline. |
| San Fernando: Percentage of wastewater treated by the WWTP meeting the Water Pollution Rules (percentage) and having a zero or positive net impact on downstream water quality (in relation to upstream water quality) | 0 | - | - | - | 90% | 90% | 90% | Verification: WASA water quality monitoring reports (monitoring point at outfall site). The ESMP will specify the sampling points and the definition of a baseline. |
| Women trained in water quality monitoring (percentage) | 0 | | 50% | 50% | 50% | 50% | 50% | Verification: WASA monthly monitoring reports; Semi-annual reports to IDB. |
| Component 2. Institutional strengthening of WASA | | | | | | | | |
| | Baseline | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Target | Comments/Means of verification |
| Outputs | | | | | | | | |
| Training activities on preventative maintenance (including training on use of new equipment) implemented | 0 | - | - | 1 | 1 | - | 2 | Verification: Consultant reports; Semi-annual reports to IDB. |
| Training activities in water quality monitoring, including water quality assessment guidelines in line with best international practice, implemented (program) | 0 | 0 | 1 | 1 | 1 | 1 | 4 | Verification: WASA monthly monitoring reports; Semi-annual reports to IDB. |

| | | | | | | | | |
|---|-----|-----|-----|-----|-----|-----|-----|--|
| Environmental education campaigns implemented | 0 | - | - | - | 1 | 1 | 2 | Verification: Consultant Reports; Semi-annual reports to IDB. |
| Action plan for corporate governance implemented | 0 | - | 1 | 1 | 1 | 1 | 5 | This will be considered implemented when all actions included in the yearly corporate governance plan are implemented. For year one, the actions include (among others): the development of corporate governance policies; training in integrated Enterprise Wide Risk Management; legal analysis on the authority structure) Verification: Consultant reports; Semi-annual reports to IDB. |
| Action plan for commercial management implemented | 0 | - | - | - | 1 | - | 1 | This will be considered implemented when A new billing system will be purchased and installed; and when an information campaign on the new tariff system will be implemented. Verification: Consultant reports; Semi-annual reports to IDB. |
| Outcomes | | | | | | | | |
| Hours of preventative maintenance in the Malabar and San Fernando systems (hours/month) | 200 | 300 | 400 | 500 | 600 | 720 | 720 | Note: currently 80 hours/mth are spent on preventative maintenance of Malabar and 120 hours/mth on the San Fernando system. Verification: WASA internal reports, Semi-annual reports to IDB |
| New systems operated and maintained according to design specifications (system) | 0 | - | - | - | - | 2 | 2 | “New systems” comprises the new Malabar and San Fernando wastewater treatment plants, sewerage network, and pumping stations. Verification: WASA internal reports, Semi-annual reports to IDB |
| New systems designed, implemented, operating and maintained according to social and environmental specifications (system) | 0 | - | - | - | - | 2 | 2 | “New systems” comprises the new Malabar and San Fernando wastewater treatment plants, sewerage network, and pumping stations. |
| WASA with new set of corporate governance policies (approved by the Board) | 0 | - | 1 | - | - | - | 1 | Verification: Consultant reports; Semi-annual reports to IDB. Board minutes. |

| | | | | | | | | |
|---|---|---|---|---|-----|-----|-----|--|
| Corporate governance policies and compliance report disclosure of WASA's web page | 0 | - | - | 1 | - | - | 1 | Verification: Consultant reports; Project Monitoring and Evaluation System; WASA's web page. |
| WASA's audited financial statements available to the public | 0 | - | 1 | 1 | 1 | 1 | 4 | Verification: Consultant reports; Project Monitoring and Evaluation System; WASA's web page. |
| Percentage of WASA costumers served with new billing system (percentage) | 0 | - | - | - | 100 | 100 | 100 | Verification: WASA Financial Planning and Management report; Semi-annual reports to IDB. |

FIDUCIARY ARRANGEMENTS

Project: TT-L1026. Multi-Phase Wastewater Rehabilitation Program – Phase I
Executing Agency: The Water and Sewerage Authority (WASA)
Prepared By: Denise Salabie, Financial Management Sr. Specialist
Shirley Gayle Sinclair, Procurement Specialist

I. EXECUTIVE SUMMARY

- 1.1 The Executing Agency, the Water and Sewerage Authority (WASA), is a statutory body created under the 1965 Water and Sewerage Act and falls under the policy direction of the Ministry of Environment and Water Resources. The fiduciary arrangements for the project have been agreed with WASA, as it will have responsibility for the execution of the entire project.
- 1.2 The project has been assessed as having a low fiduciary risk. Supervision and mitigation actions will be focused on efforts to strengthen the accounting and financial reporting system for the project; build capacity as it relates to familiarity with IDB's fiduciary procedures and requirements; and implement measures to strengthen communication between the various divisions within WASA, which will lend support to the project.
- 1.3 The IDB's policies and procedures will be applicable to procurement and financial management overall. However, where consistent with IDB policies, WASA's fiduciary systems and procedures can be used for the administration and management of the project. The main examples are: (i) WASA's computerized accounting system will be used to facilitate all accounting transactions for the project, but will be supplemented by the use of an off-the-shelf accounting software for financial reporting purposes; and (ii) WASA's procedures for NCB and Shopping may be applied for national competitive bidding and price comparison. Nonetheless, for International Competitive Bidding (ICB) and Non Competitive Bidding, the Bank's policies for procurement will apply in accordance with the country thresholds table below (see policy references under Section I "Procurement Execution" below).

II. EXECUTING AGENCY'S FIDUCIARY CONTEXT

- 2.1 WASA's Project Management Office (PMO) will have overall responsibility for the implementation and administration of the project. The PMO will have fiduciary support from:
 - a. The Project Accounting Department, Finance Division - responsible for facilitating the payment process as well as reporting on the use of the project funds disbursed by the Government of Trinidad and Tobago and other lending agencies.
 - b. Purchasing and Stores Division - responsible for procurement.

- 2.2 WASA's computerized accounting system, Alcie, will be used to facilitate payments and for basic financial reporting of the project. As the Alcie system is unable to produce financial reports in a comprehensive manner for projects, the Project Accounting Department will use Peachtree Accounting Software for the accounting and financial reporting of the IDB funded project, as a supplement to the Alcie system.

III. FIDUCIARY RISK EVALUATION AND MITIGATION ACTIONS

- 3.1 The SECI evaluation tool was used to assess the fiduciary risk of the project. Based on the assessment, the project fiduciary risk is low. The following areas of risk were highlighted by the risk assessment exercise conducted by the fiduciary specialists:

| RISK | RISK | MITIGATION MEASURES |
|--|------------|--|
| Institutional weaknesses due to the use of non-integrated electronic systems for accounting, financial reporting and budgeting. | Low | An integrated accounting system, which was implemented in early 2012 for another IDB funded project, TT-L1018, should be further customized so that it can also facilitate the accounting for this project (TT-L1026). |
| Alignment of WASA's and IDB's procurement policies for ICB and individual consultants. | Medium-Low | Increase the level of awareness of IDB's policies in relation to same; Review of the reporting mechanism to align with the requirements of the IDB; obtain support of the Tenders Committee members to ensure expedited internal reviews and more efficient project execution. |
| Lack of awareness of IDB procurement, disbursements and financial reporting procedures. | Low | Continue to provide training to WASA personnel on the Bank's fiduciary requirements. |
| Poor internal communication between technical and support services (Finance, Project Planning Unit, Project Implementation Office and Purchasing and Stores Division). | Medium | Review of the communication network with a view to a more effective inter- departmental reporting; creation of an executing working group with representatives from different divisions. |

IV. ASPECTS TO BE CONSIDERED IN THE SPECIAL CONDITIONS OF CONTRACT

- 4.1 The fiduciary arrangements that should be considered in the Special Clauses are described below:
- a. **Dedicated personnel:** within WASA should be identified to support the fiduciary (procurement and financial management) planning and management of the project.
 - b. **Annual audited financial statements:** of the project are to be submitted to the Bank within 120 days after the close of the fiscal period in addition to Final Audited Financial Statements which are due for submission to the Bank within 120 days of the close (last disbursement date) of the Project.
 - c. **Exchange rate:** For purposes of justification of expenses to the Bank (including reimbursements), if the project expenses have been incurred in local currency, the equivalent amount to be reported in the project currency, shall be determined using the effective exchange rate of the payment date, without regard to the source of the financing used.

V. FIDUCIARY ARRANGEMENTS FOR PROCUREMENT EXECUTION

5.1 The procurement fiduciary arrangements establish the conditions applicable to all procurement execution activities in the project.

1. Procurement Execution

a) NCB Country Thresholds (see table below for each category)

It was determined that the “Rules and Procedures for the Invitation and Consideration of Tenders for the Award of Contracts for Articles, Works and Services for the Water and Sewerage Authority”, dated April 1997 are generally consistent with Bank policies on procurement of goods and works, and selection and contracting of consultants. Accordingly, WASA’s procurement policies may be used with the following adjustments to ensure alignment with the IDB’s Procurement Policies:

- **Contractors Registry**

WASA may utilize its register of contractors provided that the register remains open to allow new contractors to be enlisted. Notwithstanding, for each procurement to be conducted by National Competitive Bidding, an advertisement shall be issued, publicizing the bid and informing the potential contractors on how to access registration.

- **Bid Opening**

The time for bid opening shall be immediately after the time for the receipt of bids, and shall be announced, together with the place for bid opening, in the Invitation to Bid. The Borrower shall open all bids at the stipulated time and place.

b) ICB

5.2 WASA’s Rules and Procedures for Contracts require the approval of the Authority’s Tenders Committee before International Competitive Bidding can be carried out, and potentially limits individual consultant competition, by requiring a more involved process than that set out in the IDB’s procurement policies. Consequently, procurement processes at the international competitive bidding thresholds (ICB) and selection of individual consultants will follow the Policies for the Procurement of Works and Goods Financed by the Inter-American Development Bank (GN-2349-9), and the Policies for the Selection and Contracting of Consultants Financed by the Inter-American Development Bank (GN-2350-9).

5.3 It is to be noted that the option to use the IDB’s procurement guidelines is expressly provided for in the WASA’s Rules and Procedures for Contracts document: “Where finance in relation to the Articles, Works or Services is provided by a lending agency/institution e.g. World Bank, Inter-American Development Bank, Caribbean Development Bank etc. the Procurement Guidelines of the lending agency/institution shall apply and take precedence over those included in these Rules provided that the acceptance of such guidelines is part of the Loan Agreement.”

c) **Non Competitive Procurement**

As is standard, all procurement by single source or other non- competitive modality shall be in accordance with IDB's Procurement Policies and will require no objection.

d) **Shopping**

e) **IDB's policies will be followed**

f) **General Procurement Notice**

5.4 WASA has agreed that prior to any procurements being initiated for this project, the agency will prepare and submit to the Bank a draft General Procurement Notice, using the Bank's standard format.

- a. **Procurement of Goods, Works, and Non-Consulting Services:** The procurement plan for the Program is summarized below, and indicates the procedure to be used for the contracting of works, services and non-consulting services. The review of technical specifications in all cases, during the process of selection is the responsibility of the sector specialist of the project.
- b. **Procurement of Consulting Services:** The procurement plan indicates the procedure to be used for the procurement of consultancy services, and the method of selecting consultants. The Borrower is responsible for preparing and implementing the project, and therefore for preparing the TORs, short lists, selecting the consultants, and awarding and subsequently administering the contract, in accordance with the relevant procurement policies and guidelines.
- c. **Selection of Individual Consultants:** This is to be carried out in accordance with Section V (Selection of Individual Consultants) of GN-2350-9 paragraphs 5.1-5.4.
- d. **Training:** The detailed procurement plan indicates to which consultancy services training and workshops are applicable.
- e. **Recurring Expenses:** Include payment of utilities and other office operating expenses of WASA.
- f. **Advance Contracting/Retroactive Financing:** Section 1.9 of the IDB's procurement policies allows for retroactive financing and advance contracting where the procurement procedures, including advertising, are in accordance with the Bank's procurement policies, in order for the eventual contracts to be eligible for Bank financing.
- g. **Domestic Preference:** Determining whether it is appropriate and necessary to use domestic preference in the evaluation of bids should be guided by Appendix 2 of GN-2349-9 (par. 1-6).

2. Country Threshold Table (US\$ Thousands) for Trinidad & Tobago (www.iadb.org/procurement).

| Works | | | Goods | | | Consulting Services | | Limit for Ex-Post Revision |
|---|------------------------------|----------------------------|-----------------------------------|------------------------------|----------------------------|-------------------------------|---------------------------------|----------------------------|
| International Competitive Bidding | National Competitive Bidding | Shopping/ Price Comparison | International Competitive Bidding | National Competitive Bidding | Shopping/P rice Comparison | International Competitive Bid | Short Lists Solely by Nationals | |
| + 3,000 | 250 -3,000 | -250 | + 250 | 50-250 | -50 | N/A | -200 | 12 months |
| Ex Ante Review | Ex Post Review | Ex Post | Ex Post Review | Ex Post Review | Ex Post Review | Ex ante | Ex Post Review | |
| Individual Consultants: will be reviewed ex ante for services at or above US\$100,000. For amounts below US\$100,000, such procurements will be reviewed ex post. | | | | | | | | |
| Direct contracting: contracts valued above US\$5,000 will be reviewed ex ante. | | | | | | | | |

Note: Amounts for ex post and ex ante review are applicable based on the capacity of the executing agency and complexity of procurements. These amounts may be adjusted by the Bank, as capacity is improved, and as agreed with the executing agency.

3. Procurement Plan (PP)

Main Procurement Activities

| Activity | Procurement Method | Estimated Date | Estimated Amount US\$ |
|---|--------------------|----------------|-----------------------|
| Works | | | |
| Construction (and Operation) of San Fernando WWTP and Sewer | ICB | Jan 2013 | 146,380,000 |
| Construction (Operation) of Malabar WWTP and Sewers | ICB | Jan 2013 | 88,000,000 |
| Goods | | | |
| Customer database & new billing engine and software integration (purchase and installation) | ICB | Jan 2014 | 2,600,000 |
| Equipment for sewer maintenance | ICB | Jan 2014 | 200,000 |
| Equipment for water quality monitoring | ICB | Jan 2014 | 250,000 |
| Consulting services | | | |
| Training for water quality monitoring | CQS | Jan 2014 | 50,000 |
| Training activities on O&M and BO contract management | QCBS | Jan 2014 | 100,000 |
| Environmental Education Campaign | CQS | Jan 2014 | 50,000 |
| Corporate Governance Consultant Individual Consultant | IIC | Jan 2013 | 227,500 |
| Corporate Governance Consultant Firms | QCBS | Jan 2013 | 550,000 |
| Consulting Services | | | |
| Supervision of Construction of San Fernando WWTPs | QCBS | Jan 2013 | 3,000,000 |
| Supervision of Construction of Malabar WWTPs | QCBS | Jan 2013 | 2,500,000 |

4. Procurement Supervision

5.5 Supervision will be ex ante for ICB levels and for all direct contracting above US\$20,000. All other procurements will be supervised ex post, unless otherwise agreed. Ex post procurement review should take place at least once every 12 months, in accordance with the supervision plan of the project. Ex post review may be conducted by Bank staff, expert consultants, or as part of the regular audit of the project. Selection of consultants will be reviewed ex ante for amounts exceeding US\$50,000.

5. Other Requirements

- 5.6 Use of Electronic Procurement System: The IDB/World Bank on-line Electronic Procurement Execution System (known by its Spanish acronym as SEPA) was introduced in Trinidad in August 2010. It is expected that the executing agency will use the SEPA program for management of its procurement plan and activities.

6. Records and Files

- 5.7 The Project Management Office (PMO) will have responsibility for maintaining the files and records of the project. Records and files should be managed and updated in a timely and organized manner in accordance with accepted best practices; and kept for up to three (3) years beyond the end of the operation's execution period.

VI. FIDUCIARY ARRANGEMENTS FOR FINANCIAL MANAGEMENT

A. Programming and Budget

- 6.1 At the Executing Agency, WASA, the capital budget is prepared by the Project Management Office (PMO); whilst the recurrent budget is prepared by the Finance Division based on inputs from the other divisions within WASA. Both budgets are reviewed by the Chief Financial Officer and then submitted to the Chief Executive Officer before submission for Board approval. Once Board approval is received, the budget is submitted to the line ministry for approval and inclusion of the capital budget in the Draft Estimate of Expenditure which is then submitted to the Ministry of Finance for approval and inclusion in the Public Sector Investment Program (PSIP) of the country's budget.

B. Accounting and Information Systems

- 6.2 WASA's accounting system, Alcie, will be used for accounting transactions under the project and to facilitate basic financial reporting. As the Alcie system is unable to generate financial reports in a comprehensive manner for projects, the Project Accounting Department will use Peachtree Accounting Software for the accounting and financial reporting of the IDB funded project, as a supplement to the Alcie system.
- 6.3 In addition to the Audited Financial Statements that are referred to in Section IV (iii) of this document, other financial reports that will be required for the project are Financial Plans; Reconciliation of the Advance of Funds; Financial Execution Status reports, to be submitted semi-annually as part of the progress report of the Project; and any other reports, audited or unaudited that may be reasonably requested by the Bank.

C. Disbursements and Funds Flows

- 6.4 WASA's Finance Department will facilitate all accounting transactions under the project, in collaboration with the PMO. A separate bank account will be opened for the project.
- 6.5 The main disbursement methodology that will be used for the project is the advance of funds. Advances will be made based on liquidity needs of the project. Other

disbursement methodologies that will be used on a smaller scale are the Reimbursement of Payments Made and Direct Payment to Supplier methodologies.

- 6.6 Based on the low risk of the project, disbursements will be ex-post, except for Requests for Direct Payment to Suppliers. The Executing Agency will be responsible for the maintenance of adequate and original documentation to support disbursement requests.
- 6.7 All expenses must be expressed in the currency of the project, U.S. dollars. The exchange rate methodology, as agreed with Executing Agency, is outlined in Section IV (ii) of this document.

D. Internal Control and Audit

- 6.8 The internal control system of the Executing Agency is considered acceptable and as such, will be incorporated into the internal control system that will be established for the project. The system to be established should provide reasonable assurance that: (i) the project funds are used for their intended purpose; (ii) project assets are properly safeguarded; (iii) project transactions, decisions, and activities are properly authorized and documented; and (iv) project transactions are executed in accordance with the established policies and procedures delineated in the legal agreements. In order to enhance the internal control system of the project, it has been recommended that the Internal Audit Department of WASA periodically audits the project.

E. External Control and Reporting

- 6.9 The Executing Agency will be required to submit the Audited Financial Statements, indicated in Section 4.1(b) of this document. The audit will be done in accordance with International Auditing Standards. The Terms of Reference will be agreed on between the Executing Agency and the Bank, and will include at a minimum, the requirement to audit basic financial statements of the project, review internal controls and carry out ex post disbursement and procurement reviews.
- 6.10 The Executing Agency will have the option of using: (i) their current auditors, once eligible to audit IDB funded projects; or (ii) a competitive process to select the auditors for the project. The Bank and Auditor General will concur with the selection. The final decision will be based on a cost benefit analysis to be done by the Executing Agency and concurred by the Bank. Audit fees will be eligible for funding from the loan resources.

F. Financial Supervision Plan

- 6.11 The Financial Supervision Plan of the project is prepared based on the fiduciary risk of the project. As the Executing Agency has been rated with a low fiduciary risk, the frequency of inspection visits will be low. Despite this, there will be regular communications and desk reviews during the initial implementation of the project. Supervision will be focused initially on: (i) the accounting and reporting system for the project, since this was flagged during the institutional assessment and risk workshop with stakeholders; and, (ii) the implementation of procedures for the financial management and procurement of the project, so as to ensure that the Executing Agency is familiar with Bank procedures and requirements, and is compliant with the agreed upon procedures.

G. Execution Mechanism

- 6.12 The project will be executed by the Project Management Office (PMO) of WASA with support from various divisions within WASA. As the organizational structure and procedures within WASA is diverse and often complex, a working group with a representative from the line Ministry of Environment and Water Resources and representatives from the relevant divisions within WASA will be formed so as to improve communication and facilitate the timely execution of the project.

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-____/12

Trinidad and Tobago. Loan ____/OC-TT to the Republic of Trinidad and Tobago
Multi-Phase Wastewater Rehabilitation Program – Phase I

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Republic of Trinidad and Tobago, as Borrower, for the purpose of granting it a financing to cooperate in the execution of a multi-phase wastewater rehabilitation program - I. Such financing will be for an amount of up to US\$246,500,000 from the Ordinary Capital resources of the Bank, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted on _____ 2012)

LEG/SGO/IDBDOCS-37221924
TT-L1026