

This document has been prepared for the purposes of the **PPP IN INFRASTRUCTURE RESOURCE CENTER FOR CONTRACTS, LAWS AND REGULATIONS (PPIRC)** website. It is a sample document FOR REFERENCE PURPOSES ONLY and SHOULD NOT BE used as a "model". The inclusion of any legal materials on the PPIRC website does not mean that they are in any way approved, endorsed or recommended by the World Bank Group or its affiliates. Legal advice should be sought to determine whether a particular legal document is appropriate for any given project, and how the specific terms of the document should be adapted to fit the circumstances of that project

APPENDIX 2 TO WATER MANAGEMENT CONTRACT [004]

Appendix #2
Services Appendix

DESCRIPTION OF THE SERVICES
APPENDIX #2 TO THE GENERAL CONDITIONS
FOR A
MANAGEMENT CONTRACT
FOR THE PROVISION OF
WATER AND WASTEWATER SERVICES

**THE SERVICES APPENDIX
APPENDIX #2 TO THE GENERAL CONDITIONS**

ARTICLE 1 - INTERPRETATION

1.1 Definitions

“**Accounts Receivable**” has the meaning normally prescribed in International Accounting Standards;

“**Base Year**” means the one year period immediately prior to the Starting Date of the Contract;

“**Base Year Data Report**” is defined in SA Section 2.2(3);

“**Capital Investment Program**” is defined in SA Section 6.1(1);

“**Corrective Maintenance**” means the repair and correction of deficiencies, failures and malfunctions of the Facilities and the components therein of the type that were normally carried out by the Employer during the Base Year, but does not include the repair and correction of deficiencies, failures and malfunctions of the Facilities that are a result of the Operator’s performance or non-performance of Preventive Maintenance to the Facilities as required in the Contract;

“**Final Condition Survey**” is defined in SA Section 5.2.2(1);

“**Illegal Connections**” means connections to the water distribution and supply system which are not permitted by the Employer;

“**Operations and Maintenance Manuals**” is defined in SA Section 3.1.7(1)(a);

“**Preventive Maintenance Program**” is defined in SA Section 4.2(1)(a);

“**Raw Water Source**” means groundwater and surface waters sources as identified in the Facilities Appendix;

“**Safety Deficiencies Correction Plan**” is defined in SA Section 3.1.2(2);

“**Safety Program**” is defined in SA Section 3.1.3(1);

“**Standard Operating Procedures**” is defined in SA Section 3.1.6(1); and

“**Water Source Facilities Inspection Report**” is defined in SA Section 3.2.1(3)(b).

1.2 Supplementing the General Conditions

The provisions contained in this Service Appendix are intended to supplement the General Conditions for the purpose of providing greater specificity of the Services which the Operator shall perform.

ARTICLE 2 - SERVICES GENERAL

2.1 General Services to be Provided by the Operator

- (1) The Operator shall,
 - (a) operate the Facilities to carry out the pumping and transportation of water from the water sources and spring boxes, the chlorination of water and the distribution and supply of drinking water to the Customers;
 - (b) operate the Facilities to carry out the collection of wastewater and stormwater, the treatment of wastewater and the pumping and transportation of wastewater to the receiving bodies;
 - (c) maintain the Facilities to an improved standard of maintenance and develop a comprehensive maintenance management program for the Facilities;
 - (d) carry out rehabilitation and repair of the Facilities as set out in this Service Appendix;
 - (e) carry out all billings, collections and Customer service functions related to the new and existing Customers in the Service Area; and
 - (f) cooperate in the Authorities' implementation of the Capital Investment Program.

(2) Except as provided otherwise in the Contract, the Operator shall perform the same level operations and maintenance of the Facilities as were performed by the Employer in the Service Area in the Base Year.

(3) Except as provided otherwise in the Contract, the Operator shall perform the same billings, collections and customer service functions related to the Customers as were performed by the Employer in the Service Area in the Base Year.

(4) The Operator shall improve the management, operations, maintenance, rehabilitation and repair of the Facilities as specified in the Contract.

(5) The Operator shall improve billings, collections and customer service functions related to the Customers in the Service Area as specified in the Contract.

2.2 Base Year Data Report

(1) The Operator shall develop and submit to the Employer for review and approval a Base Year data report which describes,

- (a) the type and frequency of corrective maintenance carried out in the Base Year;

- (b) a summary of the operations and maintenance activities for the Facilities in the Base Year; and
- (c) a description of the billings, collections and Customer service functions in the Base Year.

(2) The Employer shall provide to the Operator all available data and information necessary to carry out the requirements of SA Section 2.2(1).

(3) The base year data report developed pursuant to SA Section 2.2(1) as approved by the Employer and an independent inspection agency (the “Base Year Data Report”) shall constitute the level of operations and maintenance and billings, collections and Customer service in the Base Year for the purpose of this Contract.

2.3 Water and Wastewater Operations and Maintenance Procurement

(1) The Operator shall procure goods and services for use in day to day operations and maintenance,

- (a) only to the extent set out in the Procurement Guidelines required by SA Section 2.3(2); and
- (b) only to the extent that the funds are available and forthcoming from the Employer.

(2) The Operator shall submit a proposed set of procurement guidelines to the Employer (the “Procurement Guidelines”). The proposed Procurement Guidelines shall include,

- (a) the Operator’s recommendations as to goods and services related to day to day operations and maintenance which the Operator should procure on behalf of the Employer; and
- (b) comprehensive procurement policies and procedures, including payment procedures, which the Operator will apply when procuring on behalf of the Employer with respect to day to day operations and maintenance expenses.

(3) The Employer shall review the Operator’s proposed Procurement Guidelines and approve or revise the guidelines.

(4) The Operator shall implement the approved Procurement Guidelines when procuring on behalf of the Employer with respect to day to day operations and maintenance expenses.

(5) The Procurement Guidelines shall not apply to purchases under the Operating Investment Fund.

ARTICLE 3 - WATER AND WASTEWATER OPERATIONS

3.1 General

3.1.1 Water Quality Sampling and Testing

(1) The Operator shall review existing water quality monitoring programs and develop and submit a water quality monitoring program (the “Water Quality Monitoring Program”) to the Employer for review and approval. The Water Quality Monitoring Program shall include, but not be limited to,

- (a) a monitoring program for all raw water sources managed by the Operator in the Service Area;
- (b) a program for water sampling throughout the water supply system which includes methodologies and locations of sampling and a program to monitor the chlorination process;
- (c) a program to ensure that water quality standards under the Applicable Law are being met or, if they are not being met, recommend remedial programs or other changes to attempt to reach compliance with the Applicable Law;
- (d) a wastewater effluent monitoring program; and
- (e) a protocol for immediate notification by the Operator to the Employer of any failure to meet water quality or effluent quality standards.

(2) The Employer shall review the Operator’s proposed Water Quality Monitoring Program developed pursuant to SA Section 3.1.1(1) and provide comments to the Operator within 30 days after the Operator submits the proposed program to the Employer.

(3) The Operator shall implement the Water Quality Monitoring Program as approved by the Employer.

(4) The Employer may, in its sole discretion, require the Operator to take samples on the Employer’s behalf for the purpose of allowing the Employer to review the testing and laboratory analysis program of the Operator.

3.1.2 Safety Conditions and Security of the Facilities

(1) The Operator shall conduct a physical inspection and review of the Facilities to identify any deficiencies related to the safety of the Facilities.

(2) The Operator shall prepare a comprehensive report to the Employer outlining any safety deficiencies at the Facilities and setting out a plan to correct the safety deficiencies (the “Safety Deficiencies Correction Plan”).

(3) The Operator shall implement the correction of safety deficiencies immediately upon completion of the Safety Deficiencies Correction Plan to the extent that funds are available in the Operating Investment Fund.

(4) The Operator shall ensure that the Facilities are protected from trespassers, vandals or other parties which do not have the Employer's or Operator's permission to enter onto the Facilities by providing security for the Facilities. Such security measures must be in place at all times, 24 hours a day, 7 days a week, during the term of the Contract.

3.1.3 Occupational Health and Safety

(1) The Operator shall submit to the Employer for review and approval, a comprehensive occupational health and safety program for the protection of Management Staff, Staff and all other persons who may attend at the Facilities (the "Safety Program"). The Safety Program shall be prepared in both English and [].

(2) The Operator shall provide ongoing occupational health and safety training for the Management Staff and Staff in accordance with the approved Safety Program.

(3) The Operator shall regularly inspect the Facilities for safety deficiencies. The Operator shall carry out these inspections at least once every 90 days.

3.1.4 Inventory Management

(1) The Operator shall submit to the Employer for review and approval, an outline and description of the Operator's proposed Inventory Management Program.

(2) The Operator shall implement an Inventory Management Program to monitor Equipment, Materials and Supplies.

(3) Without limiting the generality of SA Section 3.1.4(1), the Inventory Management Program shall include, but not be limited to,

- (a) a record of the cost of material used subdivided by profit centres according to a chart of accounts codes;
- (b) a comprehensive analysis of Equipment, Materials and Supplies kept in storage as well as an analysis of acceptable minimum levels of Equipment, Materials and Supplies kept in storage and appropriate reorder levels;
- (c) an ability to carry out a stocktaking and inventory reconciliation process;
- (d) review procedures and forms;
- (e) internal system control methods, including audit trails; and
- (f) ABC-Analysis for stocks, costing and turnover.

3.1.5 Emergency Response Plans

The Operator shall familiarize itself with the existing Emergency Response Plans for the Service Area.

3.1.6 Standard Operating Procedures

- (1) The Operator shall,
 - (a) prepare or, where applicable, update in English and [], Standard Operating Procedures for the Facilities in accordance with generally accepted techniques used in the water and wastewater industry and professional engineering and consulting standards recognized by international professional bodies (the “Standard Operating Procedures”); and
 - (b) submit the Standard Operating Procedures to the Employer for review and approval.
- (2) Upon approval by the Employer of the Standard Operating Procedures, the Operator shall provide training to the Management Staff and Operations Staff as to the Standard Operating Procedures and shall ensure that the Standard Operating Procedures are implemented.
- (3) The Operator shall update the Standard Operating Procedures annually to reflect any changes to the Facilities and shall submit any revisions to the Standard Operating Procedures to the Employer for review and approval. The Operator shall prepare the revisions in English and [] and shall provide training to the Management Staff and Operations Staff as to the revisions to the Standard Operating Procedures.

3.1.7 Operations and Maintenance Manuals

- (1) The Operator shall,
 - (a) prepare, in English and [], Operations and Maintenance Manuals for the Facilities in accordance with generally accepted techniques used in the water and wastewater industry and professional engineering and consulting standards recognized by international professional bodies (the “Operations and Maintenance Manuals”); and
 - (b) submit the Operations and Maintenance Manuals to the Employer for review and approval.
- (2) The Operator shall ensure that the Operations and Maintenance Manuals are developed with respect to all Facilities in the Service Area and all equipment under the Operator’s control.
- (3) Within 30 days of review and approval of the Operations and Maintenance Manuals by the Employer, the Operator shall provide training to its Management Staff and Operations Staff as to the Operations and Maintenance Manuals.
- (4) The Operator shall update the Operations and Maintenance Manuals annually to reflect any changes to the Facilities and shall submit any revisions to the Operations and Maintenance Manuals to the Employer for review and approval. The Operator shall prepare the revisions in both English and [] and shall provide training to the Management Staff and Staff as to the revisions to the Operations and Maintenance Manuals.

3.1.8 Energy Management Plan

- (1) The Operator shall,
 - (a) develop and implement an Energy Management Plan designed to reduce the energy costs for operating and maintaining the Facilities; and
 - (b) provide a copy of the Energy Management Plan to the Employer in both English and [].

3.1.9 Illegal Connections

- (1) The Operator shall,
 - (a) develop a program for the identification of Illegal Connections (the “Illegal Connections Program”) to the water distribution and supply system and the sewer collection and transmission system of the Facilities and the conversion of these Illegal Connections into legally connected Customers; and
 - (b) submit the Illegal Connections Program to the Employer for review and approval.
- (2) The Operator shall implement the program for the identification of Illegal Connections and the conversion of these Illegal Connections into legally connected Customers.

3.1.10 Staff Training and Development

- (1) The Operator shall prepare and submit to the Employer for review and approval, a comprehensive training and development program for Staff (the “Training and Development Program”).
- (2) The Operator shall implement the approved Training and Development Program and shall update and monitor the program on an ongoing basis.

3.1.11 Vehicles and Equipment

- (1) The Operator shall repair and maintain all vehicles and equipment in accordance with the Preventive Maintenance Program.
- (2) For the purpose of this SA Section 3.1.11 vehicles and equipment shall include but not be limited to,
 - (a) all cars, trucks and four wheel drive vehicles whether provided to the Operator by the Employer or purchased by the Operator on the Employer’s behalf; and
 - (b) all construction equipment whether provided to the Operator by the Employer or purchased by the Operator on the Employer’s behalf

including, but not limited to, front end loaders, backhoes, welding machines, air compressors and mobile repair units.

3.1.12 System Mapping

- (1) The Operator shall carry out the process of mapping,
 - (a) the water and wastewater transmission lines; and
 - (b) the water distribution storage Facilities.
- (2) The Operator shall develop a comprehensive plan for mapping the water distribution and wastewater collection system.

3.2 Water Operations

3.2.1 Management of Water Sources Facilities

- (1) The Operator shall operate and maintain the facilities used in the extraction of water from the water sources.
- (2) The Operator shall manage the extraction of water from the water sources and direct water from the water sources into the distribution system in accordance with the instructions and schedules provided to the Operator by the Employer annually.
- (3) The Operator shall,
 - (a) carry out an inspection of the water sources Facilities identified in the Facilities Appendix;
 - (b) submit a report to the Employer identifying any deficiencies in the water sources Facilities and any changes which could be made to the water sources Facilities which would improve the production and collection of water from the water sources Facilities (the “Water Source Facilities Inspection Report”);
 - (c) upon approval by the Employer, correct any deficiencies in or make any changes to the water sources Facilities in accordance with the Water Sources Facilities Inspection Report in order to maximize the production and collection of raw water in the water sources Facilities; and
 - (d) establish and implement a comprehensive program of water sources protection and monitoring to the satisfaction of the Employer.

3.2.2 Pumping of Raw Water and Supply and Distribution to Customers

- (1) Without limiting the generality of SA Section 2.1 the Operator shall,
 - (a) ensure pump operability and functionality at all times including but not limited to, pumps related to the supply of water to individual buildings or groups of buildings;

- (b) ensure the operability of all booster stations at all times;
- (c) ensure main water pipe functionality at all times and the operability of all water line valves;
- (d) ensure that all meters associated with the pumping and transportation of water are accurate and fully functional;
- (e) engage in leak detection monitoring of the pumping and transportation of water;
- (f) manage, operate and maintain all catch basins;
- (g) manage all chlorination of water to ensure all water quality and Performance Standards are met;
- (h) conduct a water quality testing program before, during and after the chlorination of water in accordance with the Water Quality Monitoring Program;
- (i) advise the Employer as to new technologies which may be available to improve the treatment process and implement new technologies which have been approved for use by the Employer;
- (j) develop and implement a comprehensive field inspection program to monitor the supply and distribution of water to Customers and to monitor the Constancy of Supply to Customers;
- (k) monitor all water supply and distribution systems for the purpose of leak detection and water pressure measurement;
- (l) supply bulk water to areas outside the Service Area based on availability and as directed by the Employer;
- (m) monitor and record the data from the meters which measure bulk water which is supplied to areas outside of the Service Area;
- (n) monitor the connection between the main water pipes in the Service Area and water pipes which carry bulk water to areas outside of the Service Area;
- (o) install service connections, for new Customers, to the water distribution system in accordance with technical specifications provided to the Operator by the Employer;
- (p) manage the process whereby building owners carry out the construction of extensions to the water distribution network for the purpose of connecting new buildings and,

- (i) administer the approval and inspection process for the construction of extensions in accordance with the policies of the Authorities;
and
- (ii) connect the extension built by the building owner to the water distribution network;
- (q) manage all chlorination of water in the water supply and distribution facilities to ensure all water quality and Performance Standards are met;
- (r) manage, operate and maintain all fire hydrants and cooperate with the Ministry of Internal Affairs – Anti-Fire Service in all aspects of fire protection;
- (s) perform day to day repairs to the water supply and distribution facilities;
- (t) manage, operate and maintain all drinking water fountains;
- (u) conduct field inspections and collect data to demonstrate, to the Employer’s satisfaction, that Performance Standards are being met;
and
- (v) review the existing Pressure Zone Study and,
 - (i) develop a plan, for the review and approval of Employer, which sets out how the operations of the Facilities could be modified to take into account the recommendations of the Pressure Zone Study (the “Pressure Zone Operations Plan”); and
 - (ii) implement the recommended modifications of the Pressure Zone Operations Plan as reviewed and approved by the Employer.

3.3 Wastewater Operations

3.3.1 Collection, Treatment and Disposal of Wastewater

- (1) Without limiting the generality of SA Section 2.1 the Operator shall,
 - (a) install service connections, for new Customers, to the wastewater collection system;
 - (b) manage the process whereby building owners carry out the construction of extensions to the wastewater collection network for the purpose of connecting new buildings and,
 - (i) administer the approval and inspection process for the construction of extensions in accordance with the policies of the Authorities;
and

- (ii) connect the extension built by the building owner to the wastewater collection network;
- (c) regularly inspect surcharged sewers, identify causes of surcharging, recommend and, with the approval of the Employer, take corrective measures;
- (d) monitor for and respond to reports of flow blockages;
- (e) monitor the quality of industrial discharges into the wastewater collection system and Facilities;
- (f) manage, operate and maintain all wastewater collector sewers;
- (g) manage, operate and maintain all wastewater treatment facilities identified in the Facilities Appendix; and
- (h) manage, operate and maintain all storm sewers and sanitary sewers.

ARTICLE 4 - MAINTENANCE OF THE FACILITIES

4.1 Corrective Maintenance

- (1) The Operator shall carry out all Corrective Maintenance on the Facilities.

4.2 Preventive Maintenance Program

- (1) The Operator shall,
 - (a) develop a comprehensive, preventive maintenance program (the “Preventive Maintenance Program”) for the Facilities and submit the Preventive Maintenance Program to the Employer for review and approval; and
 - (b) upon the Employer’s approval implement the Preventive Maintenance Program.
- (2) The Preventive Maintenance Program developed by the Operator shall include but not be limited to,
 - (a) a program for all maintenance activities required to maintain any warranties on any component of the Facilities;
 - (b) a vehicle and equipment repair and maintenance record system;
 - (c) full planning and scheduling of all maintenance activities; and
 - (d) a detailed schedule of implementation for the Preventive Maintenance Program.

ARTICLE 5 - REPAIRS, REHABILITATION AND IMPROVEMENT OF THE FACILITIES

5.1 Repairs, Rehabilitation and Improvements under the Operating Investment Fund

(1) The Operator shall carry out only those repairs, rehabilitation and improvements to the Facilities which are set out in the Operating Investment Fund Appendix and only to the extent that they can be paid for from the Operating Investment Fund.

(2) The Operator shall carry out only those repairs, rehabilitation and improvements which are set out in the Annual Operating Investment Fund Plan pursuant to GC Section [3.12.4].

5.2 Inventory/Condition of the Facilities

5.2.1 Inventory/Condition Survey

- (1) The Operator shall,
- (a) complete a physical inspection of the Facilities,
 - (b) prepare a comprehensive, detailed and computerized data base of all components and major equipment of the Facilities (the “Facilities Data Base”); and
 - (c) identify any major deficiencies in the Facilities and prepare a report (the “Initial Condition Survey”) outlining the Operator’s findings and recommendations for the repair of major deficiencies.

(2) The Operator shall develop and implement a program to correct the deficiencies identified in the Initial Condition Survey, as part of the Annual Operating Investment Fund Plan.

- (3) The Operator shall update the Facilities Data Base annually.

5.2.2 Final Condition Survey

(1) Prior to the End Date, the Operator shall conduct a condition survey of the Facilities using the Initial Condition Survey as a guide (the “Final Condition Survey”). Based on the results of the Final Condition Survey, the Operator shall,

- (a) prepare and submit to the Employer for the Employer’s approval, a remediation plan to correct any remaining deficiencies in the Facilities; and
- (b) correct any remaining deficiencies in the Facilities which were identified in the Final Condition Survey, as approved by the Employer, and which can be corrected by using the funds remaining in the Operating Investment Fund.

5.3 Repairs, Rehabilitation and Improvements of the Facilities Under the Annual Operating Investment Fund Plan

- (1) The Operator shall,
 - (a) correct deficiencies identified in the Initial Condition Survey Appendix;
 - (b) develop a program to improve the measurement of water production including the measurement of Accounted for Water;
 - (c) identify, for the Base Year, Accounted for Water measurements for review and approval by Employer and increase Accounted for Water in accordance with the Performance Standards Appendix;
 - (d) improve the Constancy of Supply of water to Customers in accordance with the Performance Standards Appendix;
 - (e) install, repair and replace water meters in accordance with the Performance Standards Appendix;
 - (f) continue and enhance the existing leak detection and repair program in accordance with the Performance Standards Appendix;
 - (g) identify the frequency, in the Base Year, of breakdown repairs of the Facilities and develop and implement a program to reduce breakdown repairs of the Facilities in accordance with the Performance Standards Appendix; and
 - (h) identify response times, in the Base Year, and develop and implement a program to reduce response time for repairs with respect to water leaks and wastewater complaints.
- (2) The Operator shall repair, rehabilitate and improve the Facilities in accordance with the design standards provided by the Employer. The Operator may suggest appropriate design standards but the Employer shall make all final decisions in this regard.
- (3) The Operator shall develop the Annual Operating Investment Fund Plans so as to meet the requirements of this SA Section 5.3.

ARTICLE 6 - CAPITAL INVESTMENT PROGRAM

6.1 Operator Not Responsible But Shall Cooperate

- (1) The Operator shall not be responsible for carrying out the Capital Investment Program which is being carried out by the Employer (the “Capital Investment Program”).
- (2) The Operator shall cooperate with the Employer or its designates, at no cost to the Employer and at the Employer’s request, in the implementation by the Employer, or its designates, of the Capital Investment Program. The Employer will endeavour to cooperate

with the Operator to minimize the impact on the water and wastewater operations caused by the Capital Investment Program.

(3) The Operator's cooperation pursuant to SA Section 6.1 shall include but not be limited to,

- (a) advice to the Employer as to capital improvements to the Facilities which the Operator recommends should be investigated;
- (b) advice to the Employer as to the Operator's perspective on Capital Improvements which are suggested by the Authorities or Third Parties; and
- (c) a review of selected engineering reports related to the Capital Improvements, from an operational perspective.

(4) The Operator shall nominate an individual to act as a liaison between the Operator and the Employer, or the Employer's designates, with respect to cooperating with the Employer in the carrying out of the Capital Investment Program.

ARTICLE 7 - BILLING, COLLECTION AND CUSTOMER SERVICES

7.1 Information Systems – Billings, Collection and Customer Service

(1) The Operator shall review the existing computerized data base of Customers and water and wastewater connections and,

- (a) advise the Employer as to whether the data base system should be improved or replaced; and
- (b) implement its recommendations on approval by the Employer.

(2) The Operator shall develop, implement, or, where a system already exists, review and update a computerized administrative system including, but not limited to,

- (a) a computerized system for billing;
- (b) a computerized system to track collection and receivables; and
- (c) a computerized system for tracking,
 - (i) Customer requests and complaints; and
 - (ii) response time to Customer requests and complaints.

(3) The Operator shall ensure that the computerized administrative system is linked to and compatible with the other Employer systems where directed to do so by the Employer.

(4) The Operator shall develop, implement and update a computerized accounting system based on International Accounting Standards. This computerized accounting system shall be fully implemented by the end of the first Contract Year.

7.2 Billing

- (1) Without limiting the generality of SA Section 2.1, the Operator shall,
 - (a) read all Customer meters in accordance with instructions of the Employer;
 - (b) register all Customer meter readings in the computer data base;
 - (c) develop a monitoring program of random spot-checks to ensure the accuracy of the meter calibration and the meter reading process and provide written reports to the Employer on the results of the monitoring program;
 - (d) develop and implement a plan to ensure that,
 - (i) all Customer meters are accurate;
 - (ii) all Customer meters are read;
 - (iii) all meters are in suitable locations;
 - (iv) problems related to unprotected and unsealed Customer meters are resolved; and
 - (v) all Customers are registered;
 - (e) develop and implement a program to estimate consumption in circumstances where metering problems exist;
 - (f) provide advice as to methods to improve the meter reading process to ensure greater accuracy and to increase Accounted For Water;
 - (g) convert all meter readings to billings to Customers;
 - (h) identify consumption anomalies in Customer billings;
 - (i) identify meters which have not been read;
 - (j) review the existing system for the payment of bills by Customers and,
 - (i) recommend how the existing system can be improved or recommend a new system; and
 - (ii) implement either the new or the improved system on approval by the Employer.

(2) In addition to performing the basic billing and meter reading services set out in the SA Section 7.2(1), the Operator shall,

- (a) respond to reports of the malfunction meters from Customers, or meter readers, or others, within the time periods set out in the Performance Standards Appendix;
- (b) resolve Customer complaints with respect to bills within the time periods set out in the Performance Standards Appendix; and
- (c) improve the billing system in the Service Area so as to contribute to the increase in Accounted for Water by eliminating those factors causing unaccounted for water which are related to the billing system.

7.3 Collections

- (1) Without limiting the generality of SA Section 2.1, the Operator shall,
 - (a) collect all amounts due to the Employer related to the Services either through direct collection, banks, post offices or cashiers in billing offices or by other means as may be agreed to by the Employer;
 - (b) identify and record all outstanding accounts and take all necessary measures to collect outstanding accounts;
 - (c) submit monthly to the Employer a list of unpaid accounts with Customer names;
 - (d) develop collection procedures for approval by the Employer; and
 - (e) manage all aspects of both existing and new subscription contracts with Customers.

(2) In addition to performing basic collection services set out in SA Section 7.3(1), the Operator shall,

- (a) improve the collection of revenues from new sales of water and wastewater services in accordance with the Performance Standards Appendix;
- (b) improve the collection rate for Accounts Receivable in accordance with the Performance Standards Appendix; and
- (c) improve the billing system.

7.4 Customer Service

- (1) Without limiting the generality of SA Section 2.1, the Operator shall,
 - (a) carry out all customer service related to new water and wastewater connections;

- (b) receive and handle all customer complaints, including, but not limited to, complaints related to,
 - (i) water and sewerage bills;
 - (ii) malfunctioning or inaccurate meters;
 - (iii) meter readings;
 - (iv) water pressure;
 - (v) blockage of water and wastewater pipes;
 - (vi) leakage and damaged pipes; and
 - (vii) pipes installed on private properties;
 - (c) receive and respond to all requests related to,
 - (i) a change in meter location;
 - (ii) a change in Customer names; and
 - (iii) cancellation by Customers;
 - (d) review the advantages and disadvantages of implementing a water service disconnection program for Customers who fail to pay water bills and submit the analysis to Employer for review; and
 - (e) manage, operate and maintain the existing customer service offices to handle all inquiries promptly and in accordance with the Performance Standards.
- (2) In addition to performing the basic customer services set out in SA Section 7.4(1) the Operator shall,
- (a) develop and submit to the Employer for review and approval, a customer services training program for Staff who deal directly with Customers and implement that program by the end of the first Contract Year;
 - (b) develop, in coordination with existing programs a water and wastewater public information program to educate the public; and
 - (c) submit the public information program developed pursuant to SA Section 7.4(2)(b) to the Employer for review and approval.

ARTICLE 8 - MISCELLANEOUS REPORTS

8.1 Bi-Monthly Reports

(1) In addition to any other reports required by the Contract, the Operator shall, commencing forty five days after the Starting Dates, prepare and deliver to the Employer within 15 days after the end of each applicable month a bi-monthly report in English and [] which briefly summarizes the activities of the Operator in each of the following general areas,

- (a) water quality monitoring;
- (b) the conversion of illegal water connections;
- (c) staff training and development;
- (d) the municipal water sources Facilities and their management;
- (e) chlorination processes;
- (f) activities related to unaccounted for water;
- (g) constancy of supply;
- (h) wastewater operations including wastewater treatment processes;
- (i) preventive maintenance program;
- (j) corrective maintenance;
- (k) repairs and rehabilitation; and
- (l) billings and collections and all related financial information.

8.2 Annual Report

The Operator shall, within 30 days after the last business day of each Contract Year, submit to the Employer an annual report in English and [] summarizing the activities of the Operator in the previous Contract Year in the areas described in SA Section 8.1.

This document has been prepared for the purposes of the
PPP IN INFRASTRUCTURE RESOURCE CENTER FOR CONTRACTS, LAWS AND REGULATIONS (PPPIRC)
 website. It is a sample document FOR REFERENCE PURPOSES ONLY and SHOULD NOT BE used as a "model".
 The inclusion of any legal materials on the PPPIRC website does not mean that they are in any way approved,
 endorsed or recommended by the World Bank Group or its affiliates. Legal advice should be sought to determine
 whether a particular legal document is appropriate for any given project, and how the specific terms of the document
 should be adapted to fit the circumstances of that project

TABLE OF CONTENTS

ARTICLE 1 - INTERPRETATION	2
1.1 DEFINITIONS	2
1.2 SUPPLEMENTING THE GENERAL CONDITIONS	2
ARTICLE 2 - SERVICES GENERAL.....	3
2.1 GENERAL SERVICES TO BE PROVIDED BY THE OPERATOR.....	3
2.2 BASE YEAR DATA REPORT	3
2.3 WATER AND WASTEWATER OPERATIONS AND MAINTENANCE PROCUREMENT.....	4
ARTICLE 3 - WATER AND WASTEWATER OPERATIONS.....	5
3.1 GENERAL	5
3.1.1 <i>Water Quality Sampling and Testing</i>	5
3.1.2 <i>Safety Conditions and Security of the Facilities</i>	5
3.1.3 <i>Occupational Health and Safety</i>	6
3.1.4 <i>Inventory Management</i>	6
3.1.5 <i>Emergency Response Plans</i>	6
3.1.6 <i>Standard Operating Procedures</i>	7
3.1.7 <i>Operations and Maintenance Manuals</i>	7
3.1.8 <i>Energy Management Plan</i>	8
3.1.9 <i>Illegal Connections</i>	8
3.1.10 <i>Staff Training and Development</i>	8
3.1.11 <i>Vehicles and Equipment</i>	8
3.1.12 <i>System Mapping</i>	9
3.2 WATER OPERATIONS	9
3.2.1 <i>Management of Water Sources Facilities</i>	9
3.2.2 <i>Pumping of Raw Water and Supply and Distribution to Customers</i>	9
3.3 WASTEWATER OPERATIONS	11
3.3.1 <i>Collection, Treatment and Disposal of Wastewater</i>	11
ARTICLE 4 - MAINTENANCE OF THE FACILITIES.....	12
4.1 CORRECTIVE MAINTENANCE	12
4.2 PREVENTIVE MAINTENANCE PROGRAM.....	12
ARTICLE 5 - REPAIRS, REHABILITATION AND IMPROVEMENT OF THE FACILITIES 13	
5.1 REPAIRS, REHABILITATION AND IMPROVEMENTS UNDER THE OPERATING INVESTMENT FUND	13
5.2 INVENTORY/CONDITION OF THE FACILITIES.....	13
5.2.1 <i>Inventory/Condition Survey</i>	13
5.2.2 <i>Final Condition Survey</i>	13
5.3 REPAIRS, REHABILITATION AND IMPROVEMENTS OF THE FACILITIES UNDER THE ANNUAL OPERATING INVESTMENT FUND PLAN.....	14

ARTICLE 6 - CAPITAL INVESTMENT PROGRAM	14
6.1 OPERATOR NOT RESPONSIBLE BUT SHALL COOPERATE.....	14
ARTICLE 7 - BILLING, COLLECTION AND CUSTOMER SERVICES	15
7.1 INFORMATION SYSTEMS – BILLINGS, COLLECTION AND CUSTOMER SERVICE	15
7.2 BILLING	16
7.3 COLLECTIONS	17
7.4 CUSTOMER SERVICE	17
ARTICLE 8 - MISCELLANEOUS REPORTS.....	19
8.1 BI-MONTHLY REPORTS.....	19
8.2 ANNUAL REPORT	19

