

Environmental and Social Monitoring Report

January - June, 2014

Kiribati: South Tarawa Sanitation Improvement Sector Project

Prepared by Ministry of Public Works and Utilities, Government of Kiribati for the Asian Development Bank

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Government of Kiribati
Ministry of Public Works & Utilities



Semi Annual Safeguards Monitoring Report
Period: January – June 2014



*Grant-0263 KIR: South Tarawa Sanitation Improvement Sector
Project
G1 Project Management and Implementation, Community
Engagement and Capacity Development Activities*

SMEC International
in Association with Brisbane City Enterprises, SKM and ThEcoCare
October 2014

Report Name:	South Tarawa Sanitation Improvement Sector Project – Semi Annual Safeguards Monitoring Report January to June 2014
Project Number:	5119003
Report for:	Ministry of Public Works and Utilities (Asian Development Bank and AusAID)

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ISSUE REGISTER

Distribution List	Date Issued	Number of Copies
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Abbreviations and Acronyms

ADB	Asian Development Bank
ADF	Asian Development Fund
AFS	Audited financial statement
APs	Affected persons
AMAK	Aia Maea Ainen Kiribati (Kiribati Women's Association)
AUD	Australian Dollar
Ausaid	Australian Agency for International Development
Beka	I-Kiribati verb and noun for faeces/shit
BM&E	Benefit Monitoring and Evaluation
BoQ	Bills of Quantities
BTC	Betio Town Council
CDT	Capacity Development Training
CE	Community Engagement
CLTS	Community-led total sanitation
CQS	Consultant qualification selection
DMF	Design and monitoring framework
DTL	Deputy Team Leader
EA	Executing agency (MFED)
EARF	Environmental assessment and review framework
EIA	Environmental impact assessment
EM&A	Environmental monitoring and auditing
EMP	Environmental management plan
EPANET	Free software provided by the US Environmental Protection Agency for water system analysis
FA	Force Account
FGD	Focus Group Discussion
FMS	Financial Management System
FS	Feasibility Study
GACAP	Governance and anticorruption action plan
GAD	Gender and Development
GAP	Gender action plan
IA	Implementing agency (MPWU)
IC	Inspection certificate / International Consultants/ in charge (as appropriate to context)
ICB	International competitive bidding
IEC	Information, education and communication
IEE	Initial environmental examination
IFV	Imprest Fund Vouchers
KANGO	Kiribati Association of NGOs
KAP III	Kiribati Adaption Project – Phase III
KHA	Kiribati Housing Authority
KIT	Kiribati Institute of Technology
M&E	Mechanical and Electrical/ monitoring and evaluation (as appropriate to context)
maneaba	Open air meeting place
MELAD	Ministry of Environment, Lands and Agricultural Development
MFED	Ministry of Finance and Economic Development (ex MLED)
MHMS	Ministry of Health and Medical Services
MISA	Ministry of Internal and Social Affairs
MPWU	Ministry of Public Works and Utilities
MS	Microsoft
MTC	Marine Training Centre
NGO	Non-government organization
NIWA	New Zealand Institute of Water and Atmosphere

NZ	New Zealand
NZHC	New Zealand High commission
OD	Open defecation - defecation without a toilet into bush, fields or bodies of water
O&M	Operations and maintenance
ORS	Oral rehydration salts
PAI	Project administration instruction
PAM	Project administration manual
PAUS	Pacific Urban, Social Development and Public Management Division
PCF	Petty Cash Fund
PHAST	Public Health and Sanitation Transformation (WHO/Program in 1990's in Africa)
PIAC	Pacific Infrastructure Advisory Centre
PIU	Project implementation unit
PMO	Project Management Office (in MFED)
PPMS	Project performance monitoring system
PPTA	Project preparatory technical assistance (PPTA 7359 relates)
PRA	Participative rural appraisal
PS	Pumping station
PUB	Public Utilities Board
QBS	Quality-based selection
QCBS	Quality and cost-based selection
RF	Resettlement framework
RP	Resettlement plan
RRP	Report and recommendation of the President to the Board
SAPHE	Sanitation, Public Health and Environment Improvement Project
SC	Steering Committee
SCADA	Supervisory Control And Data Acquisition (system)
SCGMs	Gender Community Mobilizers
SMF	Sanitation Maintenance Fund
SOE	Statement of Expenditure
SOPAC	Applied Geoscience and Technology Division of Secretariat of the Pacific Community
SPRSS	summary poverty reduction and social strategy
SPS	Safeguard Policy Statement
SSS	Single Source Selection
STSISP	South Tarawa Sanitation Improvement Sector Project
TA	Technical Assistance
Temaiku	Place in South Tarawa (near the airport)
TNA	Training Needs Assessment
TOR	Terms of Reference
ToT	Training of Trainers
TUC	Teinainano Urban Council
<i>unimwane</i>	Male village elders

Executive Summary

This is a semiannual safeguard monitoring report covering the period from January 2014 to June 2014. The purpose of this Safeguards Monitoring Report (SMR) is to document the environmental management activities and compliance with the approved EMP for the first six months of 2014. The report is for the The South Tarawa Sanitation Improvement Sector Project, (STSISP) and reports on activities for the period associated with the project.

Since no construction work has commenced the report covers sub project status for the following:

- ICB 01 Rehabilitation of Sewerage and Saltwater Systems Betio, Bairiki and Bikenibeu;
- ICB 02 Upgrading of Ocean Outfalls at Betio, Bairiki and Bikenibeu; and,
- Candidate project, On-Site Sanitation Project.

ICB 01: The BEIA has been prepared and submitted in June to MELAD, together with the on-site sanitation BEIA. ICB 02: the bids for ICB 02 was cancelled as recommended in the conclusion of the Bid Evaluation Report submitted to MPWU June 2014.

ICB 01

All pre construction requirements as defined in the EMP have been implemented. A contract with Bidder, CCB Envico Pty Ltd has not been signed as of June 2014. The BEIA was deemed to be Satisfactory June 2014, post the submission to MELAD. Re settlement for PS6 and PS1 Bikenibeu continue. PS6 Owners have agreed to a “letter of understanding” (OAG). Ownership of PS 1 is under a court (Lands) case. Two of the three parties claiming ownership of the PS1 have agreed to the “Letter of Understanding”. The agreement for the third party at PS1 is continuing actively.

ICB 02

The Bid is recommended to be cancelled adopting the HDD methodology. The BEIA developed in March 2014 was split into a BEIA for ICB 01, and a BEIA for ICB 02. The PIU (SMEC) was informed in May 2014. No further work on ICB 02 has occurred.

On site Sanitation Candidate Sub Project.

The On Site sanitation BEIA submitted and deemed to be satisfactory by MELAD June 2014.

1 Introduction

1.1 Report Purpose and Rationale

This is a semi annual safeguard monitoring report covering the period from January 2014 to June 2014. The purpose of this Safeguards Monitoring Report (SMR) is to document the environmental management activities and compliance with the approved EMP for the first six months of 2014. This report is prepared in accordance with the environmental monitoring program as defined by ADB. As the first SMR, it will only cover the progress of the capacity Development Component of the project as well as the planning or preconstruction period of the project to upgrade the sewerage system of South Tarawa. In line with targets defined in approved environmental safeguard documents, and aimed at preventing or mitigating impacts, and in accordance with all the relevant specifications and standards of the Government of Kiribati (GoK), as well as the policies of the Asian Development Bank (ADB), this report will emphasize: (i) progress made in implementing the EMP, (ii) implementation of mitigation measures, (iii) Monitoring actions undertaken, as prescribed in the EMP, (iv) environmental compliance and (v) problems that have occurred and corrective actions taken.

1.2 The Project

The South Tarawa Sanitation Improvement Sector Project, (STSISP) was developed initially through an ADB Project Preparatory Technical Assistance (PPTA) contract with the consultant Fraser Thomas. Using the PPTA's information as a base the STSISP loan project was developed. In June 2012, SMEC won the contract with MPWU to undertake Project Management and Implementation, Community Engagement and Capacity Development Activities associated with the project.

The scope of the Project comprises of five parts:

- Part A: Sanitation and Hygiene Practices:
- Part B: Collection Treatment and Disposal of Wastewater:
- Part C: Capacity Development of MPWU and PUB
- Part D: Sanitation Maintenance Fund
- Part E: Project Management and Implementation

1) Part A: Sanitation and Hygiene Practices

Design and implementation of: (a) a community awareness, education and participation program to enhance the understanding of the close links among health, hygiene, water use and sanitation practices; and (b) a media campaign to disseminate essential information relating to sanitation and hygiene practices.

2) Part B: Collection, Treatment and Disposal of Wastewater

- a) Rehabilitation of the existing sewerage systems in Bairiki, Betio and Bikenibeu, including procurement of sludge digester for septic tank effluent treatment, sewerage and septic tank cleaning equipment;
- b) Upgrading of works on 3 sewerage outfalls;
- c) Testing and installation of on-site sanitation equipment in 30 households
- d) Selection and implementation of other Subprojects outlined in Kiribati's Water Supply and Sanitation Roadmap and Investment Plan 2010-2030.

3) Part C: Capacity Development of MPWU and PUB

Design and implementation of an administrative and technical capacity development program within MPWU and the Public Utilities Board (PUB) to plan and manage water and sanitation services.

4) Part D: Sanitation Maintenance Fund

Establishment of a sanitation maintenance fund within the MPWU for the maintenance of sanitation and sewerage infrastructure in South Tarawa.

5) Part E: Project Management and Implementation

Via a competitive bidding process, SMEC Int'l. was awarded the supervision/management, contract to oversee the implement of the project. A second and parallel task was to help establish and support the Project Management Unit within MPWU with direct responsibility to implement the work, under SMEC's guidance.

The project is funded by the Australian Government, the Asian Development Bank, and the Government of Kiribati, through different financial mechanisms. The Implementing agency is MPWU, and the Executing Agency is MFED.

1.3 The ESR

Since no construction work has commenced and only the Sanitation Hygiene, Sanitation Maintenance Fund formulation components have commenced, this SMR will report on following five work areas:

- Rehabilitation of Sewerage and Saltwater Systems Betio, Bairiki and Bikenibeu, referred International Competitive Bidding contract (ICB 01 (Part B))
- Upgrading of Ocean Outfalls at Betio, Bairiki and Bikenibeu or ICB 02 (Part B):
- On-Site Sanitation Pilot Subproject (Part B);.
- Sanitation and Hygiene Practices Capacity Building (Part A); and
- Establishment of the Sanitation Maintenance Fund (Part D)

1.4 The Safeguards Monitoring Team

In the submission by SMEC, international environmental and social safeguards specialists were named and assigned the task of implementing environmental and social safeguard requirements of the project. They were to be assisted by national counterparts. This system has been in place since early 2013 and at present the environmental safeguards work is led by Mr. Geza Teleki, Environment Specialist (international) and Mr. Iannang Teaioro Safeguards Officer (National). The Social Monitoring is being led by Mr. Madhusudan Hanumappa Resettlement Specialist (international) with the national safeguards officer. To date the majority of field time has been provided by Mr. Teaioro.

2 Subprojects and Their Status

There are two main sub projects and one candidate project that are foreseen to have social or environmental impacts. These are as follows:

- ICB 01 Rehabilitation of Sewerage and Saltwater Systems Betio, Bairiki and Bikenibeu;
- ICB 02 Upgrading of Ocean Outfalls at Betio, Bairiki and Bikenibeu; and,
- Candidate project, On-Site Sanitation Project.

2.1 ICB 01

ICB 01 involves the rehabilitation of the existing sewerage system in Betio, Bairiki and Bikenibeu. The works will include cleaning and rehabilitation of the manholes, sewer runs, pump stations, replacing pumps, electrical control and power equipment associated with sewage collection. In addition the rehabilitation of the salt water flushing system forms a further part of the project. The system will generally adopt saltwater to flush the system. The saltwater will be conveyed from saltwater towers along pipes under gravity to the discharge points. The project includes the rehabilitation of the valves, fire hydrants, pipes and associated plant. Further included in the basic environmental Impact assessment (BEIA) associated with ICB 01 is the sludge digester facility proposed to be located on the causeway (Anderson Causeway) adjacent to the South Tarawa land fill site.

The Bids for ICB 01 were opened in January 2014, following a Bid Evaluation process one Bidder was identified to continue negotiations with MPWU. This was CCB Envico Pty Ltd from Australia. Negotiations occurred in Early June 2014. In order to secure approval to enter into a contract with CCB Envico several requirements were needed to be met including being awarded an Environmental License from MELAD and updating the resettlement Action Plan (RAP). Both these were worked on but as of June 2014, they had not been achieved. As there was not a contract with any of the bidding companies at June 2014, little work in regard to environmental and social safeguards occurred. The BEIA for ICB 01 was submitted to MELAD in May 2014 and found to be satisfactory, 20 June 2014.

2.2 ICB 02

ICB 02 involves the upgrading of three Ocean Outfalls at Betio, Bairiki and Bikenibeu. The original design was based on a Horizontal Directional Drilling approach, but the bids for ICB 02, received in June 2014, were cancelled as recorded in a Bid Evaluation Report, BER report submitted to ABD. The bids received far exceeded the budget and the decision to pursue the optional method of routing the outfalls over instead of through the reef was planned. Following June's decision to cancel ICB 02 a new work is to be developed for an alternative method to be developed around an over the reef approach. It was acknowledged by both the ADB and MELAD's EDC that this change would trigger the requirement for a full revised safeguard document and new approval steps. No work has occurred on ICB02 since June 2014.

2.3 Candidate Subproject: On-Site Sanitation:

This subproject was identified during the project preparation technical assistance phase of the South Tarawa Sanitation Improvement Sector Project (STSISP) 2009-11. It was planned as a long term sustainable approach for the low density settlement or rural areas of South Tarawa given the current high level of health problems that are directly associated with unhealthy sanitary practices and the vulnerable limited ground water (freshwater lenses) source

This subproject has been designed to:

- test a range of on-site sanitation systems installed on private property outside of the municipal sewer and water service areas of South Tarawa;
- evaluate and monitor each system's operating and maintenance requirements;
- define ways to manage any toxic, hazardous or contaminated wastes; and,
- record cultural and social acceptability of each system.

The groundwater quality at 15 of the 28 to 29 trial installations will be monitored before the systems are installed to establish existing conditions and monitored for three years after installation to track impacts. The results of this performance assessment will be utilized in the formulation of a national guideline for on-site sanitation, with a view to replicating successful installations at other locations.

Based on the above situation, it is essential that knowledge based on performance of various other on-site sanitation technology options on South Tarawa be documented, such that a range of appropriate, affordable and environmentally acceptable options could be identified and recommended for replication.

The On Site Sanitation Candidate Sub Project's design and Basic Environmental Assessment (BEIA) reporting requirements have been fully completed by MPWU and approved by both ADB and MELAD's ECD. On behalf of MPWU, the consultant prepared the BEIA, which was submitted to MELAD in early 2014 and approved on, 20 June 2014, including a certificate to proceed to implementation. The ADB had indicated that a new financial assistance mechanism outside the Project's present funding formula is being developed and will be finalized soon.

3 Monitoring Activities

3.1 ICB 01 Rehabilitation of Sewerage and Saltwater Systems Betio, Bairiki and Bikenibeu.

3.1.1 Environmental Safeguards (ICB 01)

The environmental assessment for the sewer system and sewage outfall rehabilitation subproject (the Core Subproject) was originally completed in 2011 as an ADB Initial Environmental Examination (IEE). That IEE was approved in 2012 by ADB and the Kiribati's Ministry of Public Works and the Ministry of Finance. However, the Environmental Conservation Division (ECD) of the Ministry of Environment, Agriculture and Land Development (MELAD), which is responsible for all environmental approvals, was not included in the review or approval process. On learning this, the ADB indicated that ECD needed to provide an approval before the work could proceed. A revised BEIA was submitted April 2014, the review was however put on hold by ECD upon learning that the methodology to be used for constructing the outfalls would likely change significantly. It is a requirement under the Environment Act that all activities and methodologies are fully addressed in the BEIA. ECD advised that BEIA submitted be split and for the sewer system and anaerobic digester component be separated from the sewage outfall works that that the two components be submitted as separate environmental assessment. A revised BEIA addressing the ICB 01 Rehabilitation of Sewerage System and saltwater flushing system at Betio, Bairiki and Bikenibeu was submitted to MELAD on 30 May 2014. On 20 June MELAD informed MPWU that the BEIA submitted for the ICB 01 was found to be Satisfactory and MPWU was informed of requirements for final public disclosure as well as an approval of the BEIA.

The guideline on mitigation and monitoring for ICB 01 is the BEIA's Environmental Management Plan. It defines mitigative and monitoring actions to be implemented by the proponent during the three stages of the subproject, namely 1) preconstruction, 2) construction and 3) operations. ICB 01 is still in the preconstruction stage and as such the measures defined for this stage are discussed in the following section.

For ease of presentation the approved EMP is reproduced the column entitled comments has been added to indicate the status of each mitigative measure.

3.1.2 Environmental Safeguard Mitigative and Monitoring Tasks (ICB 01)

From Table 1. Environmental Management Plan: Environment Monitoring Table (EMoT) of the BEIA for ICB 01: CSE =Construction Supervising Engineer



= fully compliant





= Not applicable at this time






= marginally compliant



= non compliant

Environmental Issue	Monitoring Details	Timing	Executing Unit	Reporting Responsibility	Update January to June 2014	Comment
1. Preconstruction Period						
1.1 Updated EMP and BEIA not provided to contractor	1.1 Confirm with all stakeholders that BEIA documentation has been received on later than 1 month before contractor mobilization	After the contractor has been selected but before mobilization	CSE	CSE	No Action	June 2014, bidder not selected as a contractor 
1.2 Resettlement /Loss or damage to property	1.2 Ensure that the scope of work is confined to what has been identified and necessary compensation mechanism are in place	Prior to commencement of work	CSE	CSE	On going discussions	Pump Station one, Five and Six Bikenibeu are not in Government Leased Land all other are. The GOK has agreed upon an amount for compensation for the owners of the pump stations being \$10,000 for PS 6 and \$10,150 for PS1. A letter of intention to accept the compensation and distribute between the owning parties was signed on 28 May 2014. The sum has been distributed to the land owners of PS 6 by the Lands department of MELAD. Ownership of PS 1 is under dispute and is currently a subject of the lands court. Three parties lay claim to the PS 1. Two of the three parties has signed the letter of intent to accept the compensation amount and to be distributed as per the finding of the land court. (May 2014, and 12 June 2014) One party is yet to sign the letter of intent. June 2014 the NIDSC informed that PS 5 to be relocated on Government Leased Land. 

Environmental Issue	Monitoring Details	Timing	Executing Unit	Reporting Responsibility	Update January to June 2014	Comment
1.3 Safety hazards to workers and local people, and effects of temporary worker populations in the area	1.3 Obtain written confirmation that Occupational Health and Safety measures are included in contract documentation and contractor has signed off.	Prior to commencement of work	CSE	CSE	No Action	June 2014, bidder not selected as a contractor 
1.4 Potential risks due to public not well informed on the grievance mechanism and how it is operated	1.4 File meeting minutes of public consultation for submission to ADB in semi-annual monitoring report	Prior to commencement of work	CSE	CSE	No Action.	June 2014, bidder not selected as a contractor The ICB 01 BEIA Submitted 30 May 2014 to MELAD was declared as satisfactory by MELAD in a letter to MPWU on 20 June 2014. Details of public consultation requirements were included in guidelines. The public consultation activities are planned for July 2014. Grievance mechanisms will be addressed during the consultations and in addition during pre construction meetings with the communities. 
1.5 Failure to brief and train MPWU and Contractor(s) in EMP implementation	1.5 File a written record of the training session provided by CSE for inclusion in the semi-annual report to ADB	Within 3 weeks of commencement of construction	CSE	CSE	No Action	June 2014, bidder not selected as a contractor 
2.0 Construction Period/3.0 Operating Period						
The 8 construction period and 3 operating period mitigative measures have not been listed or discussed here since there has been no action and this subproject has yet to be re-bid						

3.1.3 Other Environmental Safeguard Actions Taken

The implementation of environmental safeguards included inserting environmental clauses in bid documents. This was completed, and the following items were added prior the bid documents being released a call for proposals was announced:

The Following documents were issued to the Bidders,

VOLUME 1

PART 1

- 1) Signed Contract Agreement,
- 2) General Conditions of Contract
Appendix = General Conditions of Dispute Board Agreement
- 3) Particular Conditions
 - a Contract Data
 - b Specific Conditions
- 4) Contract Forms

PART II

Employer's Requirements
Addenda and Clarifications

PART III

Priced Bills of Quantities

VOLUME 2

Contractor's Tender

- 1) Signed Letter of Bid
- 2) Technical Submission
- 3) Pricing Schedule
- 4) Program of Works
- 5) Minutes of Negotiations
- 6) Contractor's Comments
- 7) Attachment A
- 8) List of Equipment

VOLUME 3

Tender Drawings

VOLUME 4

BEIA – Sewerage system and Anaerobic Digester – ICB01
Environmental Consultations
Environmental License
RAP – Resettlement Action Plan

The Following clauses relate to environmental issues Specifically:

- Volume 1, Part 2, Section 3 Particulars of Contract, Part B Specific Provisions 4.18 Protection of the Environment
- Volume 1, Part 2, Section 3 Particulars of Contract Part B Additional Clauses, 4.25 Safeguards
- Volume 1, Part 2, Section 5 Employers' Requirements. Technical Specification Division One General Specification, Section 1.4 General Requirements and Provisions
- 9 Possession of the site requires under part b, Environmental Management Plan
- 32 INCIDENT Management including Environment
- 34. Environmental
- PART 2: Supplementary Information Regarding Works to be procured
 - Personnel Requirements, Item 6 provision of an Environmental Safeguard Officer

- Part 3
 - Environmental Management Plan. With reference to the EMP and the BEIA

3.1.4 Social Safeguards

The Resettlement Action Plan originated from the work carried out by the PPTA. This was June 2011. The ICB 01 sub project, includes work on pump stations. All but three pump stations are located in Government Lease Land. The three pump stations that are not in Government Lease Land are all located in Bikenibeu, being Pump Station one, five and six. The pump station five is proposed to be re-located and effectively has been removed from the project, but included as a provisional item. Pump Station six, is owned by three parties. The ownership of Pump Station One is under dispute. There are three parties claiming ownership of this land. Currently the case is being addressed in the Land Courts.

During the period from January 2014 to June 2014, considerable discussions were carried out with the different parties that owned Pump Station 1, and 6 Bikenibeu. The OAG developed a “letter of intent”, indicating that the parties signing the letter agree to adhere to the terms, being acceptance of the compensation amount, as determined by Cabinet, and to distribute the sum fairly amongst the parties.

The three parties that own pump station 6 agreed to accept the amount offered and distribute it as per the Letter of intent and signed the letter 14 May 2014.

Two parties claiming ownership for PS 1 signed the letter of intent on 28 May 2014, and 12 June 2014. However one party consisting of five families did not sign this letter of intent during the report period.

The PIU carried out associated Socio Economic surveys with members from the three parties owning PS6.

This information has been added to the Social safeguard document that included a Resettlement Action Plan (RAP) that will be submitted prior to entering into a contract between a Bidder and MPWU. In accordance with this document (version to date) the extent of acquisition and social impacts is minimum. However, the adverse social impacts have been addressed and appropriate compensation will be or has been provided to the affected families. To date, there are no families that are being displaced or relocated from their original place of existence.

Relevant details of the activities on the monitoring of the implementation of the RAP has been provided in the tables below.

Monitoring Indicators – Physical and livelihood Issues						Comments for July to September 2014
Sl. No.	Indicator	Present	Relocated	Post Implementation Scenario	Remarks	
1	Land Acquisition total area – permanent	108 m2	nil	108 m ²	NA	<ul style="list-style-type: none"> Pump Station 6 Bikenibeu Land Acquisition compensation \$10,000, accepted by 3 parties owning the land and amount disbursed in June 2014 Land Acquisition at PS 1 compensation \$10,150. The ownership of the land in question is in dispute by three parties. The Lands Court is currently hearing/considering the case. Two parties have signed a letter of intent indicating they will accept the compensation amount and abide by the ruling of the land court.
a	No. of owners identified	PS 6 Party 1=1 Party 2=1 Party 3=1 PS 1 The ownership is within the Lands Court Party 1=1 Party 2 = 1 Party 3= 5	Nil	Party 1=1 Party 2=1 Party 3=1 PS 1 The ownership is with n the Lands Court Party 1=1 Party 2=1 Party 3=5	NA	<ul style="list-style-type: none"> There are three owners for Pump Station 6 The ownership for PS 1 is under dispute and with the land court. Part one has one owner Part two has one owner Party three has five families
b	No. of owners compensation finalised	PS 6, Three PS 1 Nil	Nil	PS 6 compensation accepted PS 1 waiting for land court	NA	<ul style="list-style-type: none"> PS 6 has received the compensation between the three owning families PS 1 the compensation is earmarked. This awaits the Land Court finding and any such appeals.
c	No. of owners compensation paid – before civil works initiated	PS 6, Three PS 1 Nil	Nil	PS 6, Three PS 1 Nil	NA	<ul style="list-style-type: none"> NA
d	No. of owners compensation paid – after civil works initiated	See note	Nil	See Note	NA	<ul style="list-style-type: none"> If the Land Court makes a finding during the construction period commences then it will be resolved then, if not potentially afterwards
e	Utilisation of the compensation provided – productive purpose (document	NA				<ul style="list-style-type: none"> This will be established and details provided in the December 2014 Report

Monitoring Indicators – Physical and livelihood Issues						Comments for July to September 2014
Sl. No.	Indicator	Present	Relocated	Post Implementation Scenario	Remarks	
	the purpose)					
f	Utilisation of the compensation provided – unproductive purpose (document the purpose)	NA				<ul style="list-style-type: none"> This will be established and details provided in the December 2014 Report
2	Land Acquisition total area – Temporary	NA				<ul style="list-style-type: none">
a	No. of owners identified	PS 6 Party 1=1 Party 2=1 Party 3=1 PS 1 The ownership is within the Lands Court Party 1=1 Party 2 = 1 Party 3= 5	Nil	Construction not started No compensation allocated to any parties	NA	<ul style="list-style-type: none"> No bidder has been selected for the ICB 01 contract The (Eventual) contractor will use roads and access on some land of which these events have not occurred and hence no compensation allocated
b	No. of owners compensation finalised	nil	nil	nil	NA	<ul style="list-style-type: none"> No bidder has been selected for the ICB 01 contract hence no action.
c	No. of owners compensation paid – before civil works initiated	nil	nil	nil	NA	<ul style="list-style-type: none"> No bidder has been selected for the ICB 01 contract hence no action.
d	No. of owners compensation paid – after civil works initiated	nil	nil	nil	NA	<ul style="list-style-type: none"> No bidder has been selected for the ICB 01 contract hence no action.

Monitoring Indicators – Physical and livelihood Issues						Comments for July to September 2014
Sl. No.	Indicator	Present	Relocated	Post Implementation Scenario	Remarks	
e	Utilisation of the compensation provided – productive purpose (document the purpose)	NA				
f	Utilisation of the compensation provided – unproductive purpose (document the purpose)	NA				
3.	Learning – good practices/bad practices	NA				<ul style="list-style-type: none"> No bidder has been selected for the ICB 01 contract hence no action. No bidder has been selected for the ICB 01 contract hence no action. No bidder has been selected for the ICB 01 contract hence no action.

3.1.5 Social Safeguard Implementation Progress (ICB 01)

Monitoring Indicators – Physical and livelihood Issues						
Sl. No.	Indicator	Present	Relocated	Post Implementation Scenario	Remarks	Comments for January to June 2014
1	Land Acquisition total area – permanent	108 m2	nil	108 m2	NA	<ul style="list-style-type: none"> Pump Station 6 Bikenibeu Land Acquisition compensation \$10,000, accepted by 3 parties owning the land and presented to the parties June 2014 Land Acquisition at PS 1 compensation \$10,150. The ownership of the land in question is in dispute by three parties. The Lands Court is currently hearing/considering the case. Two parties have signed a letter of intent indicating they will accept the compensation amount and to adhere to the findings of the land court.
a	No. of owners identified	PS 6 Party 1=1 Party 2=1 Party 3=1 PS 1 The ownership is within the Lands Court Party 1=1 Party 2 = 1 Party 3= 5	Nil	Party 1=1 Party 2=1 Party 3=1 PS 1 The ownership is within the Lands Court Party 1=1 Party 2=1 Party 3=5	NA	<ul style="list-style-type: none"> There are three owners for Pump Station 6 The ownership for PS 1 is under dispute and with the land court. Part one has one owner Part two has one owner Party three has five families
b	No. of owners compensation finalised	PS 6, Three PS 1 Nil	Nil	PS 6 compensation accepted PS 1 waiting for land court	NA	<ul style="list-style-type: none"> PS 6 has received the compensation between the three owning families PS 1 the compensation is allocated and help with in the Government. This awaits the Land Court finding and any such appeals
c	No. of owners compensation paid – before civil works initiated	PS 6, Three PS 1 Nil	Nil	PS 6, Three PS 1 Nil	NA	<ul style="list-style-type: none"> Unknown outcome at this time
d	No. of owners compensation paid – after civil works initiated	See note	Nil	See Note	NA	<ul style="list-style-type: none"> If the Land Court makes a finding during the construction period commences then it will be resolved then, if not potentially afterwards

Monitoring Indicators – Physical and livelihood Issues						
Sl. No.	Indicator	Present	Relocated	Post Implementation Scenario	Remarks	Comments for January to June 2014
e	Utilisation of the compensation provided – productive purpose (document the purpose)	NA				<ul style="list-style-type: none"> To be established Report July – December
f	Utilisation of the compensation provided – unproductive purpose (document the purpose)	NA				<ul style="list-style-type: none"> To be established Report July – December 2014
2	Land Acquisition total area – Temporary Use	NA				<ul style="list-style-type: none"> NA
a	No. of owners identified	PS 6 Party 1=1 Party 2=1 Party 3=1 PS 1 The ownership is within the Lands Court Party 1=1 Party 2 = 1 Party 3= 5	Nil	Construction not started No compensation allocated to any parties	NA	<ul style="list-style-type: none"> No bidder has been selected for the ICB 01 contract The contractor will use the existing roads and access on some land of which these events have not occurred and hence no compensation allocated
b	No. of owners compensation finalised	nil	nil	nil	NA	<ul style="list-style-type: none"> No bidder has been selected for the ICB 01 contract hence no action.
c	No. of owners compensation paid – before civil works initiated	nil	nil	nil	NA	<ul style="list-style-type: none"> No bidder has been selected for the ICB 01 contract hence no action.

Monitoring Indicators – Physical and livelihood Issues						
Sl. No.	Indicator	Present	Relocated	Post Implementation Scenario	Remarks	Comments for January to June 2014
d	No. of owners compensation paid – after civil works initiated	nil	nil	nil	NA	<ul style="list-style-type: none"> No bidder has been selected for the ICB 01 contract hence no action.
e	Utilisation of the compensation provided – productive purpose (document the purpose)	nil	nil	nil	NA	<ul style="list-style-type: none"> No bidder has been selected for the ICB 01 contract hence no action.
f	Utilisation of the compensation provided – unproductive purpose (document the purpose)	nil	nil	nil	NA	<ul style="list-style-type: none"> No bidder has been selected for the ICB 01 contract hence no action.
3.	Learning – good practices/bad practices	nil	nil	nil	NA	<ul style="list-style-type: none"> No bidder has been selected for the ICB 01 contract hence no action.

3.2 ICB 02. Design, Construction and Operation of Three new Ocean Sewage Outfalls At Betio, Bairiki and Bikenibeu; Replacement of Existing non-functioning systems

3.2.1 Environmental Safeguards

The original design for the Ocean Outfall sub-project, as developed by the PPTA, was based on a horizontal Directional Drilling Method (HDD). The concept included a HDD through the reef to emerge at a depth of 30 m. The international Bid resulted in the bids being over the estimated value of US\$4 m. The Bid Evaluation Report, recommended that the bid for ICB 02 Ocean Outfalls, Betio, Bairiki and Bikenibeu, (HDD) be cancelled was submitted the MPWU in June 2014. ADB decision on “objection”, or “no objection”, will be required to proceed. However, there has been preliminary work carried out on a work plan for further Ocean Outfall options based on the Over the Reef approach. The BEIA of April 2014 was submitted to ECD, however (as referred to in the ICB 01 Section), the ECD advised that BEIA submitted be split and the sewer system and anaerobic digester component be separated from the sewage outfall works and that the two components be submitted as separate environmental assessment. Ultimately the requirements and category for the Environmental Impact Assessment, will be directed by ECD. It is noted that the EIA (partial) resulting from the split of ICB 01 and ICB 02 BEIA, will be useful in a new study and preparing subsequent documentation to fulfill the requirements of ECD in relation to ICB 02

3.2.2 Social Safeguards

Developing safeguards for the ICB 02 Over the reef Ocean Outfall sub project, will rely on the configuration of the design to identify and ascertain any social impacts and as such has not been addressed as yet.

3.3 On-Site Sanitation Subproject

3.3.1 Environmental Safeguards (On Site Sanitation)

An application to undertake the On Site Sanitation Sub-project was filed with the Ministry of Environment, Agriculture and Land Development's (MELAD's) Environmental Conservation Division (ECD) responsible for EIA in Kiribati, to seek a ruling on the type of environmental assessment needed. On September 25th, 2013, ECD ruled that a Basic EIA or BEIA would be required.

The BEIA was completed submitted to MELAD's ECD in May 2014. The BEIA examined the potential impacts of the activities involved in installation and operation of a number of different types of single family toilets, and proposed mitigation and monitoring measures necessary to prevent and/or minimise impact, as well as a plan to track changes to the groundwater quality over a number of operating years. The ECD informed the MPWU that the BEIA for the On-site Sanitation Candidate sub Project was deemed satisfactory on 20 June 2014.

Since the STSISP sub-project eligibility criteria state that proposed sub-projects cannot have significant environmental or resettlement impact or require land acquisition. The On-Site Sanitation subproject was carefully structured to meet these criteria.. Although no work has started, the Environmental Monitoring Table from the BEIA's Environmental Management Plan has been reproduced to provide an indication of the extent of environmental safeguard planning completed to date.

Appendix 1, attached to this report, shows the groundwater testing plan, designed to ensure that the in site sanitation trail installations do not contribute the area groundwater contamination and help identify the specific waste management methods to be applied to various site conditions in S. Tarawa.

Appendix 2 provides a sample of one record for the second round of consultations with local home owners agreeing to participate in the On-Site Sanitation Trials.

Environmental Safeguards

Taken from the BEIA On site Sanitation, EMP: Environment Monitoring Table (EMoT)

Environmental Issue	Mitigation Measures	Monitoring Actions and Deliverable	Location	Time Frame	Executing Unit	Reporting Responsibility	Status June 30, 2014
1. PRECONSTRUCTION PERIOD -These are not actually impacts but rather failures to act, causing negative impacts during the construction period							
1.1 Design of toilet facilities not utilizing/applying best available contaminant control technology and procedures	1.1 All installations will be designed so as to discharge the absolute minimum amount of untreated waste and with a specific design boundary related to the distance to freshwater lenses and potable water wells. The design of dosing structures and sizing of leaching as well as denitrification trenches will need to be careful worked out (based on user-numbers).	1.1 Check designs to insure maximum inclusion of contamination prevention components including dosing systems, and various trenches	All locations of households	During the detailed design stage	MPWU Sanitary Engineer	MPWU	
1.2 Landowners not fully consulted re installation, location and timing of installation	1.2 At least 2 weeks before any work is to begin and after the second round of BEIA consultations the landowners will be briefed on the method, timing and operation of the installation they will receive. At that time landowners will be reminded of their responsibility in return for the free installation.	1.2 Provide records of landowner consultations	All locations of households	Prior to commencement of work	MPWU Sanitary Engineer	MPWU	The sub project or contract has not been sanctioned June 2014
1.3 Inappropriate site selection	1.3 Working closely with the landowner, the CSE will establish the exact (as best as possible) location of the installation. Parameters that will have to be specifically considered will be vertical distance to GW, horizontal distance to any potable water well, ease of service considerations, and prevailing wind direction in relation to dwellings, and shade.	1.3 Working with the 28 consultation agreements, define exact location on each property and record on consultation record. These records should be available for submission to MPWU and ADB as needed	All locations of households	Prior to commencement of work	MPWU Sanitary Engineer	MPWU	The sub project or contract has not been sanctioned June 2014 Initial Consultation has occurred with 28 locations/properties See appendix 1 of this report and Annex 3 of the On Site Sanitation BEIA, Example of site location 1, presented in Annex 2

Environmental Issue	Mitigation Measures	Monitoring Actions and Deliverable	Location	Time Frame	Executing Unit	Reporting Responsibility	Status June 30, 2014
1.4 Piezometers not installed or improperly installed	1.4 Piezometer installation at least 18) will begin as soon as the BEIA has been approved and bidding is underway, in order to establish baseline quality conditions for the surrounding freshwater lenses. With each installation water depth and proper function of the piezometer will be verified and each will be capped and sealed to avoid contamination	1.4 Complete inspection of each piezometer and prepare written record of checks and proper operation of each (18) piezometers.	At 18 sites as defined in Annex Table 1b and finalized by the sanitary engineer, working with the environmental specialist	At least 4 months prior to the start of construction	MPWU Sanitary Engineer and Int'l. Env. Specialist< with the PUB survey crew assigned	MPWU	No Action Waiting for contract to be sanctioned. June 2014
1.5 GW quality sampling not undertaken , undertaken not according to instructions or testing done in error	1.5 The MPWU technician crew designated to collect these samples will receive a two day training in sample collection, handling and analysis using a couple of actual sites as training piezometer locations. Technicians will be trained in instrument calibration The protocol for GW quality quality sample collection is defined in paragraph Error! Reference source not found. and Error! Reference source not found. tests will be performed for: <ul style="list-style-type: none"> • Conductivity (micro Siemens) • Salinity (g/L) • pH • Ammonia NH3-N (mg/L) • Nitrate NO4-N (mg/L) • Total Ortho-Phosphate (mg/L) • Faecal coliform and ecoli, presence, using the Colilert or Colilert-18 kits. As soon as the first set of samples are analysed, the international environmental specialist and sanitary engineer will examine the data in relation to comparable findings in other studies and provide opinion on the quality of the results.	1.5 Have available for review the GQ quality monitoring report, prepared according to the design defined in the BEIA	At all 18 piezometer installations	2 times before facilities are installed	MPWU survey crew	MPWU	No Action Waiting for contract to be sanctioned. June 2014

Environmental Issue	Mitigation Measures	Monitoring Actions and Deliverable	Location	Time Frame	Executing Unit	Reporting Responsibility	Status June 30, 2014
1.6 Inadequate GW quality and pre-construction mitigation reporting	1.6 CSE, working in close collaboration with the PUB survey crew will prepare a pre-construction monitoring completion report, including tables a graphs showing conditions at each piezometer as well as a completion checklist of the other actions defined above.	1.6 Obtain for the record and submit to MPWU the GW quality preconstruction monitoring report	For all sites	At least 2 week prior to the initiation of toilet installation.	MPWU and PUB Survey team	MPWU	No Action Waiting for contract to be sanctioned. June 2014
1.7 Installation fails to contain contamination and aggravates the pollution problem	1.7 Should the GW testing reveal an increase in contaminant levels such as with nitrate, and phosphate and the presence of bacterial indicators, a sewage collection contingency plan will be prepared by the sanitary engineer defining the steps needed to stop the contamination; most likely sewage removal using a suction tank and sealing the facility.	1.7 Confirm as a written note to file the submission of the contingency clean-up plan if installation(s) fail	For all sites	Within the 1 st month that the sanitary engineer is on the project	MPWU sanitary engineer	MPWU	No Action Waiting for contract to be sanctioned. June 2014 Sanitary Engineer not on project until project sanctioned
2. CONSTRUCTION PERIOD							
2.1 Failure to reconfirm access to property and specific demarcation of work area(s)	2.1 Contractor/installer will be required to notify the landowner one week before construction begins and at that time demarcate the work area and any sites where excavation will be needed	2.1 Obtain record of contractor notification as written notes with names and dates	All sites	1 week Prior to start of construction at any site	MPWU Sanitary Engineer and MPWU	MPWU	No Action Waiting for contract to be sanctioned. June 2014
2.2 Risks associated with not adhering to specifications provided	2.2 Timely monitoring on construction work progress to ensure specifications are adhered to and it is on schedule	2.2 CSE to Record as contractor action , notification by contractor of work and actions on landowner property	All sites	Continuously during construction	MPWU Sanitary Engineer and MPWU	MPWU	No Action Waiting for contract to be sanctioned. June 2014
2.3 Failure to properly handle wastes	2.3 Use of green bags and using dump truck currently operating on fix schedule for disposal of all wastes and removal of all construction wastes according to GOK regulations and standards	2.3 Inspect installation sites and have installation checklist to insure proper clean up, submit to CSE	All sites	Continuously during construction	Contractor	MPWU	No Action Waiting for contract to be sanctioned. June 2014
2.4 Accidental damage to property	2.4 Ensuring that all works operations take place in the presence of a supervisor nominated by the Contractor, who shall be responsible for taking all reasonable precautions to prevent damage to property. Operation of the grievance redress mechanism	2.4 Visit each landowner after installation and seek level of satisfaction and any follow-up actions needed by contractor/installer	All sites	Continuously during construction	Contractor /installer and sanitary engineer	MPWU	No Action Waiting for contract to be sanctioned. June 2014

Environmental Issue	Mitigation Measures	Monitoring Actions and Deliverable	Location	Time Frame	Executing Unit	Reporting Responsibility	Status June 30, 2014
2.5 Accidental damage to utilities	2.5 Ensuring that all works operations take place in the presence of a supervisor nominated by the Contractor, who shall be responsible for taking all reasonable precautions to prevent damage to property. Obtaining plans from the PUB showing the locations of pipelines and power cables Consultation with local residents on the location of utilities prior to commencing excavation operations	2.5 Request any complaints or issues arising from contractor not consulting with utilities or obtaining the proper building permits from all relevant utilities.	All sites	Continuously during construction	Contractor	MPWU	No Action Waiting for contract to be sanctioned. June 2014
2.6 Noise nuisance from construction activities.	2.6 Providing information to nearby residents about the duration of noise and dust generating operations. Planning of construction operations to minimize public nuisance. Limit construction operations to take place during daytime hours (8am to 5pm) only. Vehicles, plant and equipment are to conform to international of noise emission and upkeep, such as (i) Part 204 of US Federal Regulations - Noise Emission Standards for Construction Equipment (40 CFR 204) or (ii) Directive 2000/14/EC of the European Parliament and of the Council of 8 May 2000 on the approximation of the laws of the Member States relating to the noise emission in the environment by equipment for use outdoors	2.6 Visit all installations at least once and inquire about excessive noise and working beyond daylight hours and visual observations on construction equipment being used.	All sites	Prior to Contractor's Mobilization and Continuously during construction	MPWU sanitary engineer and Contractor	MPWU	No Action Waiting for contract to be sanctioned. June 2014
2.7 Dust emissions	2.7 Regular wetting or covering of stockpiled material to ensure dust is not given off in windy conditions and prompt distribution of stockpile within the household compound	2.7 Obtain record of dust control measures taken by contractor—also based on discussion with landowner	All sites	Continuously, during construction	MPWU sanitary engineer and Contractor	MPWU	No Action Waiting for contract to be sanctioned. June 2014
2.8 Exhaust emissions	2.8 Procurement of vehicles and plant that conform to international emission standards and maintenance to ensure continuing conformity. The Contractor will supply emission certificates for all vehicles, and submit records of maintenance and repair to the supervising engineer	2.8 Construction vehicle maintenance record and emission certificates collected from contractor and on file	All sites	At least at start of work	MPWU sanitary engineer and Contractor	MPWU	No Action Waiting for contract to be sanctioned. June 2014

Environmental Issue	Mitigation Measures	Monitoring Actions and Deliverable	Location	Time Frame	Executing Unit	Reporting Responsibility	Status June 30, 2014
2.9 Safety hazards to workers and the public	2.9 Implementation of Contractor's site safety plan The Contractor shall maintain a register of accidents detailing date, circumstances, severity, action taken and outcomes	2.9 Contractor to provide work safety rules to CSE	Work sites near each outfall location	Continuously, during construction	Contractor	MPWU	No Action Waiting for contract to be sanctioned. June 2014
3. OPERATION PERIOD							
3.1 Failure to maintain rehabilitation work completed as part of the construction mitigation tasks	3.1 MPWU will establish a schedule for the maintenance of areas disturbed by the construction and rehabilitated by the contractor. The maintenance cycle will be every 4 months, but with landowners sharing this responsibility.	3.1 CSE to have on file the schedule prepared and insure that it is with MPWU-PUB	Applicable to all sites	Within first month of start of operations of toilets	MPWU/PUB MPWU - sanitary engineer	MPWU/PUB	No Action Waiting for contract to be sanctioned. June 2014
3.2 Failure of MPWU's PUB to provide 28 landowner installations with training in operation & maintenance of their toilets	3.2 MPWU/PUB to conduct training sessions with landowner groups with similar toilet types on operation and maintenance	3.2 MPWU make available record of consultation and submit to ADB as part of semi-annual reporting	For All sites	Within first month of start of operations of toilets	MPWU/PUB , with help from MPWU - sanitary engineer	MPWU/PUB	No Action Waiting for contract to be sanctioned. June 2014 No Action Waiting for contract to be sanctioned. June 2014
3.3 Odour from VIP latrines and compost toilet	3.3 Cleanliness is maintained both within and outside. Regular awareness Regular painting maintenance is required on the vent pipe to maintain good ventilation	3.3 MPWU to confirm via inspection (at least 3X/yr.) that system is functioning	VIP latrines and compost toilets project site	Continuously, during operation	MPWU to implement awareness Household to implement the rest of the mitigation measure	MPWU/PUB	No Action Waiting for contract to be sanctioned. June 2014
3.4 Odour from trenches due to clogging	3.4 Monitoring is done at the inspection caps provided on a regular basis Removal of clog	3.4 MPWU to confirm via inspection (at least 3X/yr.) that system is functioning	All trenches	Continuously, during operation	Household with assistance from MPWU and CSE's sanitary engineer	MPWU/PUB	No Action Waiting for contract to be sanctioned. June 2014

Environmental Issue	Mitigation Measures	Monitoring Actions and Deliverable	Location	Time Frame	Executing Unit	Reporting Responsibility	Status June 30, 2014
3.5 Insect problems	3.5 Drop hole is sufficiently covered with appropriate lid when not in use. Vent is covered with non-corroding mesh wire to stop insect from entering the substructure through the vent pipe. The interior of the superstructure is made dark to allow insect to move out from the superstructure toward the light	3.5 MPWU to confirm via inspection (at least 3X/yr.) that system is functioning	VIP latrines and Compost toilet project sites	Continuously, during operation	Household and contractor	MPWU/PUB	No Action Waiting for contract to be sanctioned. June 2014
3.6 Leakage from trenches due to lack of maintenance	3.6 Household should also report suspicious odour from trenches. Regular monitoring and maintenance	3.6 MPWU to confirm via inspection (at least 3X/yr.) that system is functioning	Location of trenches	Continuously during operation	MPWU/STSI SP	MPWU/PUB	No Action Waiting for contract to be sanctioned. June 2014
3.7 Effects of using aqua privy, PIV latrines and compost toilets substructures as dumping pits	3.7 Regular awareness on the proper use and training in and assistance with use of composted materials	3.7 MPWU to confirm that the training of landowners included specifics on these toilet types.	Sites with aqua privy, compost toilet .microflush toilets and VIP latrines	Continuously during operation	MPWU/STSI SP	MPWU/PUB	No Action Waiting for contract to be sanctioned. June 2014
3.8 Failure to properly remove and free up clogged trenches processed sludge and compost material from ecosan and microflush toilets	3.8 MPWU/PUB will discuss with all 28 installation landowners, the maintenance requirement for their system, define a schedule and assist with the implementation. MPWU/PUB will also insure that landowners have and wear appropriate protective clothing, e.g., foot ware, gloves, when working with the stabilized materials De-sludging truck should be used at all times	3.8 MPWU to confirm via inspection (at least 3X/yr.) that system is functioning	All sites	As appropriate during operation	MPWU/PUB /Household and CSE's Sanitary engineer	MPWU/PUB	No Action Waiting for contract to be sanctioned. June 2014
3.9 Operating period monitoring not undertaken or undertaken improperly	3.9 MPWU/PUB will undertake the GW quality monitoring using the piezometers installed, exactly as undertaken during the preconstruction sampling program, based in a schedule of 3X/year for hears 1, 3 and 5.	3.9 MPWU to retain the annual GW quality monitoring report for each of the monitoring years (1,3,5) and have submit with reporting to ADB	For All 18 sites	Starting 4 months after the installations, and 3X/year for the three years defined	MPWU/PUB /Household and CSE's sanitary engineer	MPWU/PUB	No Action Waiting for contract to be sanctioned. June 2014

Environmental Issue	Mitigation Measures	Monitoring Actions and Deliverable	Location	Time Frame	Executing Unit	Reporting Responsibility	Status June 30, 2014
3.10 The toilet system contingency plan as defined in Item 1.7 above is not completed and/or not passed on into the operational phase	3.10 MPWU/PUB will confirm that a contingency plan is in place to remove and clean up any facility that has shown that it does not function and is contributing to further degradation of the freshwater lenses	3.10 MPWU to have in hand a contingency plan to clean up if system installed does not work.	Applicable to all sites	At start of operation period	MPWU/PUB /Household and CSE's sanitary engineer	MPWU/PUB	No Action Waiting for contract to be sanctioned. June 2014
3.11 Poor maintenance leading to risk of GI and other communicable diseases	3.11 As part of the monitoring program, FC and Ecoli measurements will be taken, as well as samples of the processed compost from the dry-systems	3.11 MPWU/PUB to include FC.ecoli bacterial indicator tests for the GW sampling as well as testing of compost materials taken from the dry toilet systems. 3x/yr for years 1, 3 and 5.	Applicable to all sites	For three years as defined	MPWU/PUB /Household and CSE's sanitary engineer	MPWU/PUB	No Action Waiting for contract to be sanctioned. June 2014

PUB= Public Utilities Board of MPWU, responsible for waste management

3.3.2 Social Safeguards

Land rights and coastline/lagoon rights are subject to traditional ownership. Decisions are made by landowners and village communities. Therefore getting approval for the installation of on-site sanitation facilities from the land owners, or those who live and use the candidate land area, is essential. During 2011, considerable time was spent on meeting with each landowner, gaining agreements on the installations and recording these discussions in individual reports.

The Candidate Sub Project has changed in some regard since the initial consultations. A new round of discussions with potential land owners may be required if in the interim period land ownership may have changed and some owners may have changed altered their decisions as to construction of toilets on their property.

3.4 Sanitation and Hygiene Practices Capacity Building (Part A)

3.4.1 Environmental And Social Safeguards

There are no safeguard issues relating to the work associated with this program. The aim of the program is to increase the awareness of the public, through community based activities and associated engagement, of the need for hygienic sanitation practices.

3.5 Establishment of the Sanitation Maintenance Fund (Part D)

3.5.1 Environmental And Social Safeguards

The Sanitation Maintenance fund designed to be used for the initial maintenance of the rehabilitated sewer system and Ocean Outfalls. To date there has been a SMF Accounting Manual developed. Future work on the governance of the SMF is to take place. No safe guard issues have been triggered

4 Conclusion

4.1 ICB 01, Environmental and Social Safeguards:

- All preconstruction requirements as defined in the subproject's EMP have been implemented
- As of June 2014 the bidder had not entered into a contract with MPWU hence construction period safeguard monitoring activities have not been implemented.
- Resettlement related activities associated with PS 1 and 6, Bikenibeu continue, PS 6 owners have signed a letter of intent to accept compensation. PS 1, ownership is disputed and two of three potential owners have signed a letter of intent. The third party is engaged with discussions. The compensation amount is held with Government

4.2 ICB 2 Three Ocean Outfalls

- The ICB 02 Ocean Outfalls Betio, Bairiki and Bikenibeu (HDD) Bid Evaluation Report recommends that ICB02 be cancelled.
- The BEIA for ICB 01 and ICB 02 was submitted to ECD and subsequently, following a request, ICB 01 was split and re-presented to ECD. No further work on EIA for ICB 02 has occurred
- No work has proceeded on ICB 02 since the submission of BER to MPWU.As

4.3 On Site Sanitation Environmental Safeguards:

- The BEIA for this subproject has been completed approved by both ADB and MELAD's ECD.
- The Onsite sanitation project was to be sanctioned by June 2014, but this has not taken place.

4.4 Sanitation and Hygiene Practices Capacity Building (Part A)

- Community Engagement continues, with 26 Communities engaged during this period. There are no safe guard impacts

4.5 Establishment of the Sanitation Maintenance Fund (Part D)

- No direct work on the SMF occurred during the report period

Appendix 1 Sites for Trials of On-Site Sanitation Technology Types

From Annexure 1a BEIA On Site Sanitation Sites for trial of on-site sanitation technology types

Sr. No.	Code	Location	Beneficiary	PE	GW Depth (m)	EC μ S	Con-straints	Remarks/ Considerations In Technology Option Selection	Recommended System (no environmental safeguards input)	Environmental Safeguard Team Recommendation
1	BN1	Bonriki	BukeataBeero	10	3	756	OK	Adjacent to beach, airport and water reserve	Dual Pit(below ground),VIP, microflush	Not suitable: GW contaminated. Discharge directly to coral sand and GW table 2.75-3m depth. Microflush OK
2	BN2		KamakiMoote	30	3.1	756	OK	Same as above. SHARED TOILET.	Dual Pit(below ground),VIP	Not suitable: GW contaminated. Discharge directly to coral sand and GW table 2.75-3m depth
3	BN3		TaabuaTabuaka	8	3.2	1,205	OK	Deeper water table allows pour flush leach pit type toilets	Dual Pit (below ground) Pour flush	Not suitable: GW contaminated. Discharge directly to coral sand and GW table 2.75-3m depth
4	BN4		TiatarenTokarake	11	2	1,698	OK	Close to sea. Shell fish gathering	ST(pour flush) + N trench	Not suitable: GW contaminated. Discharge directly to coral sand and GW table 2.75-3m depth
5	BN5		KauananoTakakike	16	0.6	1,580	OK	Use central area. Could raise ground. SHARED TOILET.	Dual Pit (above ground)VIPD + sealed ET	Ok
6	TMK1	Temwaiku	EriatiTebutonga	16	0.5	1,634	area + gwl	Fish ponds all around house. SHARED TOILET.	Dual Pit (above gnd)VIPD + sealed ET	OK
7	TMK2		TioTebabure	12	0.5	1,888	area + gwll	Same as above	Dry compost/Ecosan + ET	OK
8	TMK3		TebauTaurabwakai	12	0.5	1,020	area + gwll	Same as above	Dry compost/Ecosan + ET	OK
9	BIK1	Bikenibeu	RikaareKatokiau	7	1.2	11,500	proximity to sea	Close to sea. Constrained site	Microflush	Not suitable: GW contaminated. Discharge directly to coral sand and GW table 2.75-3m depth. Microflush OK





Sr. No.	Code	Location	Beneficiary	PE	GW Depth (m)	EC μ S	Con-straints	Remarks/ Considerations In Technology Option Selection	Recommended System (no environmental safeguards input)	Environmental Safeguard Team Recommendation
10	BIK3		KatoangeUbaitoi	15	1.5		v small lot	All 3 lots immediately adjacent to PUB Wastewater. SHARED TOILET.	ST(pour flush) + N trench	Not suitable: GW contaminated. Discharge directly to coral sand and GW table 2.75-3m depth
11	BIK4		TaranikoTauraioi	10	2	1,975	v small lot	Same as above	ST(pour flush) + N trench	Not suitable: GW contaminated. Discharge directly to coral sand and GW table 2.75-3m depth
12	BIK5		TaoueaMareko	20	2	2,580	v small lot	Same as above. Shared toilet.	Aqua privy + ET	OK
13	BNG1	Bangantebure	Tabeta	30	1.3	2,320	v small lot	3 small lots in cluster. SHARED TOILET.	ST(pour flush) + Trench	Not suitable: GW contaminated. Discharge directly to coral sand and GW table 2.75-3m depth
14	EIT1	Eita	NabuakaTekinano	9	1.2		OK		ST(pour flush) + N trench	Not suitable: GW contaminated. Discharge directly to coral sand and GW table 2.75-3m depth
15	EIT2		KamatieTekarara	15	1.5	660	OK	SHARED TOILET.	ST(pour flush) + N trench	Not suitable: GW contaminated. Discharge directly to coral sand and GW table 2.75-3m depth
16	AMB1	Ambo	TimiRaubaneki	60	1.5	5,020	OK	Large collective site. SHARED TOILET.	ST(pour flush) + Trench	Not suitable: GW contaminated. Discharge directly to coral sand and GW table 2.75-3m depth
17	ANT1	Tengaruru	Otealabeta	8	0.5	1,385	constrained	Close to water on all sides - approx 6m clearance only	Dry compost/Ecosan + ET	OK
18	ANT2		IoaneRuuta	5	0.5	1,339	OK	Same as above	Microflush-biofil	OK
19	ANT3		TekaneneTeuribaba	10	0.5	3,360	OK	Same as above	Dual Pit (above gnd)VIPD + sealed ET	OK
20	TEA1	Teoraereke	TekieraBaare	12	1.2	2,429	OK	Plent of room but close to sea. Possible hard coral below	ST(pour flush) + Trench	Not suitable: Discharge directly to coral sand and GW table 2.75-3m depth

Sr. No.	Code	Location	Beneficiary	PE	GW Depth (m)	EC μ S	Con-straints	Remarks/ Considerations In Technology Option Selection	Recommended System (no environmental safeguards input)	Environmental Safeguard Team Recommendation
21	TEA2		KarouaRabangaki	10	1.4	2,429	Constrained	area	Aqua privy + ET	OK
22	TEA3		TeraimwemweMaaua	10	1.4	993	V constrained	area	Aqua privy + ET	OK
23	TEA5		MannauaTimon	30	1.6	2,356	close to sea	Toilet to be on sea side but. SHARED TOILET.	Aqua privy + ET	OK
24	TEA6		AtiinTeetu/AkamatangBiribo	10	1.6	3,380	constrained	2 houses, toilet on boundary with access each side	ST(pour flush) + N trench	Not suitable: Discharge directly to coral sand and GW table 2.75-3m depth
25	BET1	Betio	KobaiaTakarara	40	1.1		very constrained	Very small lot, 3 lots together. COMMUNITY TOILET.	Dual Pit (above gnd)VIPD + sealed ET	Not suitable: Discharge directly to coral sand and GW table 2.75-3m depth
26	BET2		Kakuba	15	1.1		very constrained	Locate at rear behind front toilet. SHARED TOILET.	Microflush-biofil	Not suitable: Discharge directly to coral sand and GW table 2.75-3m depth
27	BET3		Torote	12	1.1	1,096	very constrained	Locate near access road	Dry compost/Ecosan + ET	OK
28	BET4		Nikora	9	1	2,640	very constrained	No room. All too close to well. Must be zero discharge	Dry compost/Ecosan + ET	OK

Notes

- House owners of BIK2 and TEA4 have opted out of the trials.
- PE : Population equivalent.
- gwl: Depth to groundwater table.
- EC: Electrical conductivity in micro Siemens in the groundwater samples drawn from the site.Value 2500uS/cm for electrical conductivity as used by MPWU was selected as the cutoff indicator for fresh and brackish water
- ST: Septic tank.
- N Trench: Nitrogen removal trench.
- VIPD: Ventilated improved pit latrine (double pits).
- ET: Evapotranspiration trench.

Appendix 2 Sample Summary Of Site Surveys At 28 Proposed South Tarawa On-Site Sanitation Toilet Installations taken from Annex 3 of On Site Sanitation BEIA

No. 1 SITE ID: BN1	VILLAGE: Bonriki (Nth of Airstrip)	GPS LOC N: 01,22' 54.2"
NAME: BukeataBeero	NO. PEOPLE: 10	E: 173, 09' 11.0"
WELL INFO EC: 756uS DEPTH BELOW GROUND: 3mtrs		
COMMENTS Coral line pit pour flush.		
Well pumped from some distance to household	Neighbours well	
		
Existing pit toilet	Existing pit toilet	
		

Appendix 3 Documents Prepared by the Project Implementation Organisation

The Project PIU presently comprising the Consultant (SMEC) prepares documents for submission to Implementing Agency, the MPWU, the Executing Agency (MPHED) and the ADB. **Table A.2** report briefly lists the documents prepared by the PIU Consultant.

Table A.2: Overview of Documents Prepared by the PIU Consultant

Document name or title	Deadline for submission	Actual submission dates	Recipient and status
Revised PPMS	28 Feb 2013	In process	In process
Sanitation Maintenance Fund Manual	No official deadline	22 Jan 2013	Included as draft in App 2 of QPR1
Resettlement Plan	No official deadline	22 Jan 2013	Included as draft in App 9 of QPR1
BEIA for Core subprojects – revised draft	31 st Dec 2013	20 th Dec 2013 – to MELAD and MPWU	MPWU forward to MELAD
Draft Bid Evaluation reports for ICB01 and ICB02	1 month after bid opening – ICB01 13th Feb 2014, ICB02 10th Mar 2014	BER ICB01 – 1st draft 11th Feb 2014, BER ICB02 – 1st draft 27th February 2014	Draft BERs reviewed by independent ADB specialist and revised with ADB comments
BEIA for ICB 01/ICB 02		April 2014	Submitted to MELAD / Review MELAD
Revised BEIA ICB 01		30 May 2014	Submitted to MELAD Following instructions from MELAD the report submitted April 2014 was to be split up into two documents and the ICB 01 re submitted only without the reference to ICB 02
BEIA On Site Sanitation		May 2014	Submitted to MELAD and Review MELAD