1. Ministry: Ministry of Infrastructure and Sustainable Energy				
2. Position Title: Water Engineer	3. Salary Level: L9-7		4. Division: Wate	r and Sanitation Engineering Unit
5. Reports To: Principal Water and Sanitation Engineer	6. Direct Reports: Senior W	ater Engin	eer	
 7. Primary Objective of the Position: The primary focus is the implementation and delivery of key activities for Water and Sanitation Engineering Unit within the Ministry of Infrastructure and Sustainable Services. This position supports the mandate of WSEU, which is the management of water resources and water systems on the outer islands of Kiribati. 				
8. Decision Making Authority		K	ey Contacts	Frequency and purpose
Ministry of Infrastructure and Sustainable	e Energy			
Without referral to manager				
 Coordination of regular and reliable n freshwater resources in Kiribati, as un of the MISE 	0		reman, Water Officer, Water Ins	Monthly, quarterly or as required
 Updated and ongoing analysis of mor the WSEU and report on the findings 	iitoring data obtained from			
 Maintenance or service of monitoring monthly or as protocol dictates 	ng equipment is carried out			
After consultation with managers or others				
• Discuss the status of the freshwater reserve requirements;	ves, and current monitoring	Water En Sanitation	gineer / n Foreman	Regularly – Immediate Supervisor
• Keep updates on workplan and what they	y have been doing;			In times of urgency
• Written report of the status of the water re	esources to the MISE;			

Approved by: Reenate Willie Foon	Date of Issue: 26th June 2017

as to	Senior Water and Sanitation Engineer	
nembers of ciated with	All members of the WEU, the PUB, persons from other ministries and organizations associated with the supply of water, and members of the public	As required
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 12. External Stakeholders: Other Ministries Customers NGOs SOE's Communities 		
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	nembers of ciated with 10 Legal: Nation 12. Externa Other Custon NGOs SOE's Comm To be refer	as to Sanitation Engineer Sanitation Engineer All members of the WEU, the PUB, persons from other ministries and organizations associated with the supply of water, and members of the public 10 Legal: National Water Resources Polic National Sanitation Policy and Implet 12. External Stakeholders: • Other Ministries • Soners • NGOs • SOE's

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 Divisional/Departmental/Unit Plan: 				
Key Result Area/Major Responsibilities	Major Activities/Duties	Performance Measures/Outcomes		
 Coordination of regular and reliable monitoring of the status of the freshwater resources in Kiribati, as undertaken within the WSEU of the MISE Updated and ongoing analysis of monitoring data obtained from the WSEU and report on the findings Maintenance of monitoring equipment is ensured. 	 Evaluate the quantity of the water in the freshwater reserves in South Tarawa Evaluate the quantity of the water in the freshwater lenses of the outer islands Oversee the drilling of boreholes, as required. Use appropriate equipment (such as electromagnetic induction meter) to evaluate water reserves Investigate the sustainability of possible sources of potable water for South Tarawa and the Outer Islands Liase with personnel undertaking international aid projects activities relating to development of water reserves in Kiribati Undertake quarterly reporting of progress towards achieving water plans Write submissions for aid to assist in developing water reserves in Kiribati Monitor the effects of climate change on the water reserves in Kiribati Liaise with other relevant Ministries and Agencies in relation to the status of the water reserves and 	 Increase in efficiency of water and sanitation supply to the villages Water and sanitation supplies are adequately maintained An update database for Outer Island water and sanitation systems. Increase in volume of rainwater being collected and stored Reduction in water-borne illnesses Successful introduction of "user- pay" system for water supplies on outer islands Reduction in activities being illegally undertaken on water reserves Sustainable pumping rates are established for all pumped water sources The progress in carrying-out water plans is monitored Water plans are regularly reviewed and updated, 		

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11.1 PQR (Position Qualification Requirement):		
12. Key Challenges	13. Selection Criteria	
	 Responsible directly to his/her immediate supervisor which is the Water Engineer. Carry out any other duties that falls within the National Conditions of Service as may be required from time to time. 	
	Attend relevant training courses as deemed necessary by management.	
	• Ensure that all elements of both the National Water Policy and the National Water Plan that relate to water quality, and that are the responsibility of the MPWU, are carried out.	
	Prepare budgets for the water monitoring activities of the WEU.	
	Organise the purchase, testing and calibration of required equipment and purchase of replacement items.	
	Maintain and update a manual on practices involved in determining the status of the freshwater lens.	
	• Alert relevant personnel in the MPWU, and if needs be in government, of any concerns with water quality or quantity.	
	lenses. This will require attendance at relevant water-related committee meetings.	

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	Approved by: Reenate Willie Foon	Date of Issue: 26th June 2017

1. Problem Solving:

Problem solving is an extremely large component of this position. Some of the problems encountered will include (but are not limited to):

- 2. On-the-ground problems encountered when obtaining data from boreholes, due to difficulties getting readings at some boreholes, equipment problems, unusual readings etc. The person will be required to determine what is causing the problem, and what can be done to overcome them. Experience will be the primary guide in these matters.
- 3. When analysing the data, the person will find anomalous readings for many of the boreholes. It will be necessary for them to determine if these are real or the result of bad data, how significant they are, and what is the best approach to take in dealing with the data from each borehole. While they may be able to obtain some guidance from experts in Australia (via emails), due to the lack of capacity in the WEU, it is unlikely that they will be able to obtain much assistance in these matters locally. However if an experience hydrogeologist is employed by the WEU, this person would be able to provide the water monitoring officer with much advice.

4. Decision Making:

Decision making will also be a large component of this position. Decisions to be made will include (but are not limited to):

Education: *Essential*

The person for this position should have the following attributes:

Essential

- Bachelor of Engineering (Civil or Environmental) or Bachelor of Science (with majors in geology, hydrology or physics)
- 1 year working experience in water quality monitoring, training technical staff, water assessment, water resource investigations or related working experience.
- Excellent written communication skills in English

Experience:

Highly Desirable

Master of Engineering (Civil or Environmental) or Master of Science (with majors in geology, hydrology or physics) or related field

Job Training: N/A

Prerequisite:

a. Key Attributes (Personal Qualities):

- Knowledge
- Strong knowledge of hydrological and geological processes
- Understanding of the hydrogeology of coral atolls
- Skills:
- Fluency in the analysis and interpretation of data using computer applications such as Microsoft EXCEL.

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	Approved by: Reenate Willie Foon	Date of Issue: 26 th June 2017
	Approved by: Reenate White Fool	Date of 1980e. 20° Julie 2017

- what to do with anomalous data (this is both a problem-solving and decision-making issue). The results of the analysis may vary considerably depending upon the decisions made in this regard;
- how often boreholes and wells need to be monitored (although there will be baseline recommendations, unusual conditions may necessitate more regular monitoring, or occasionally less regular monitoring);
- determine when the status of the freshwater lens is of sufficiently poor quality so as to require attention by senior management and/or government (in such a case the person would be required to brief the senior personnel, and possibly recommend action required);
- when to replace equipment (this will involve the commitment of funds, which will not be the candidate's responsibility, but they will need to provide advice on the matter).
- 5. Special working conditions:

Candidate must be in good physical condition to undertake regular, physically demanding field work and will be willing to travel to any islands in Kiribati when required

- Member of professional body of geoscientists or engineers
- Hands-on skills required for the installation, operation and maintenance of household and community water and sanitation systems.
- Good team management skills

Attributes

- A meticulous personality, very good attention to detail, and a methodical outlook
- A conscientious character, with a strong desire to know the status of the water resources in Kiribati in order to ensure a reliable supply of potable water
- A visionary spirit, and an ability to find creative solutions
- Highly self-motivated and conscientious person who does not require regular supervision
- Creative
- Organized
- Hardworking
- Productive
- Reliable
- A good team worker

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