

**PACIFIC  
WASTEWATER  
FRAMEWORK FOR ACTION**

**Majuro, 15 October 2001**

# CONTENTS

I.	VISION .....	1
II.	INTRODUCTION.....	1
III.	OVERVIEW OF THE GUIDING PRINCIPLES.....	3
IV.	STRATEGIC ACTIONS .....	4
V.	CONCLUDING STATEMENTS.....	13

## **I. VISION**

Protect the health of the people and safeguard our fragile environment through improved, effective and efficient management of wastewater.

## **II. INTRODUCTION**

The Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) identifies the priority for action on sewage. In the Pacific region, a consultation process was facilitated by SOPAC, SPREP, PWA and the UNEP/GPA Coordination Office on wastewater management. A Regional Wastewater Management Meeting was held 10-15 October 2001 in Majuro, Republic of Marshall Islands and was the latest in the consultation process, which included preliminary sessions in February and March 2001 in Auckland and Apia. The Majuro meeting was sponsored by the Governments of Belgium, New Zealand and Taiwan/ROC.

The meeting brought together representatives from 15 Pacific Island countries (American Samoa, Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, New Zealand, Niue, Papua New Guinea, Palau, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu), technical experts from in and outside the region, regional and international organisations (SOPAC, SPREP, SPC, PWA, WHO, UNESCO, UNEP/GPA), potential donors and NGO's, to complete the Pacific Wastewater Policy Statement and the Pacific Wastewater Framework for Action. Both documents will be submitted to governing bodies of regional organisations for their endorsement by the respective governing council national representatives.

The Pacific Wastewater Policy Statement sets out a framework of guiding principles and policies to guide future development and co-operation by the Pacific Island Countries (PICs). The Pacific Wastewater Framework for Action comprises a list of proposed actions to be undertaken at national and regional levels to achieve the goals that are laid out in the Pacific Wastewater Policy Statement and which refers to the GPA Strategic Action Plan and Guidance Document on Wastewater (UNEP/GPA, WHO, UNCHS-Habitat & WSSCC).

The Pacific Ocean covers some 18 million km<sup>2</sup> or about 36% of the earth's surface. Scattered throughout the Pacific are over 30,000 small islands and a number of larger islands (each over 2000 km<sup>2</sup> in area) that emerge from the sea floor of which about 1,000 islands are inhabited.

The natural environment throughout the Pacific Island Countries is extremely fragile and is highly vulnerable to both natural and human impacts. Natural hazards like cyclones, droughts, earthquakes and tsunamis may strike at any time and at most places within the Pacific Region. Human impacts include rapid urbanisation and waste and wastewater generation.

## ***Definition of Wastewater***

It is recognised that different countries and stakeholders have different interpretations of the terms *wastewater* and *sanitation*.

For the purpose of the Pacific Wastewater Framework for Action the terms *sanitation, public health and environment* refer to only those aspects of sanitation, public health and environment, which are directly linked to wastewater.

The term wastewater is defined as:

Any combination of discharge (liquor/effluent, sludge/biosolids) into the environment, with or without treatment, is defined as: human excrement (including zero waste discharge systems), effluent, flushing water, industrial water and stormwater (run-off caused by rain).

### III. OVERVIEW OF THE GUIDING PRINCIPLES

(as stated in the Pacific Wastewater Policy Statement)

#### **GUIDING PRINCIPLE 1:**

#### **NATIONAL WASTEWATER MANAGEMENT POLICIES AND REGULATIONS WILL BE APPROPRIATE AND ACCEPTABLE TO THE PEOPLE AND CULTURES OF THE PACIFIC ISLANDS.**

National PIC governments are required to place high priority on wastewater and sanitation issues in order to direct sufficient attention and resources to these areas in national development plans. Regional and national policies should define responsibilities leading to better co-operation between agencies and increased recognition of the linkages between good sanitation, improved public health, economic development, and a cleaner environment. An updated and consistent regulatory framework, combined with effective enforcement, will result in compliance with good practices, reduced pollution, equitable allocation of resources, and increased investment.

#### **GUIDING PRINCIPLE 2:**

#### **APPROPRIATE NATIONAL INSTITUTIONS, INFRASTRUCTURE AND INFORMATION WILL SUPPORT SUSTAINABLE WASTEWATER MANAGEMENT.**

Clearly defined responsibilities for all stakeholder organisations in wastewater management can prevent fragmented and uncoordinated plans and actions and improve linkages to other sectors. A specific national agency responsible for wastewater management can be considered to enhance performance. Strengthened institutional capacities and the collection and dissemination of data and information will support appropriate technology selection, increase system performance, increase the understanding of subsequent environmental and public health impacts, and demonstrate the need for water conservation and natural disaster preparedness.

#### **GUIDING PRINCIPLE 3:**

#### **BETTER ACCESS TO FUNDING WILL IMPROVE SERVICE DELIVERY, AND DEVELOP THE PRIVATE SECTOR.**

Adequate government financial support, alternative financing mechanisms and improved internal cost-recovery are prerequisites to sustain maintenance and attract external investment.

#### **GUIDING PRINCIPLE 4:**

#### **COMMUNITY PARTICIPATION IN WASTEWATER MANAGEMENT AND SANITATION, WILL ENSURE EQUITABLE BENEFIT WITH RECOGNITION OF SOCIO-CULTURAL SENSITIVITIES.**

Wastewater management and sanitation issues should receive a higher public profile. Public awareness by the community of socio-cultural, economic, environmental and public health impacts on wastewater management will ensure ownership.

#### **GUIDING PRINCIPLE 5:**

#### **VIAABLE AND SUSTAINABLE LEVELS OF SKILLED AND KNOWLEDGEABLE PEOPLE WITHIN THE WASTEWATER SECTOR AND COMMUNITIES WILL IMPROVE WASTEWATER MANAGEMENT.**

Appropriately trained and experienced urban and rural wastewater professionals are needed to develop projects and operate facilities, at both the technical, managerial and community participation levels. Increased training enables communities and individuals to take responsibility for operating and maintaining their systems.

## IV. STRATEGIC ACTIONS

### **GUIDING PRINCIPLE 1:**

**NATIONAL WASTEWATER MANAGEMENT POLICIES AND REGULATIONS WILL BE APPROPRIATE AND ACCEPTABLE TO THE PEOPLE AND CULTURES OF THE PACIFIC ISLANDS.**

**Policy 1.1:** Governments will consider the wastewater and sanitation sector as a priority for improvement and investment.

**Policy 1.2:** Governments will develop national wastewater and sanitation policies and regulations that are consistent with international and national laws, regulations, technical standards, and obligations.

**Policy 1.3:** Governments will develop and implement appropriate wastewater - and associated - regulatory frameworks, compliance and enforcement requirements that benefit the specific cultures, customs, economies and environment of the people of the Pacific.

**Policy 1.4:** Government regulations will require regular system performance reporting.

**Policy 1.5:** Governments and regional organisations will co-operate to develop and sustain regional and national capacities in compliance monitoring, including technical and financial resources and data acquisition.

**Policy 1.6:** Government and service provider decisions on wastewater management will be transparent to improve accountability, donor and investor acceptance.

**Policy 1.7:** Governments and regional organisations, the private sector and NGOs will actively co-operate to ensure that wastewater management policies and plans are integrated into the national development policies and plans and other cross-sectoral initiatives.

### **OVERALL OUTCOME:**

**Appropriate and acceptable integrated national wastewater management policies and regulations in place.**

<b>Proposed Actions</b>	<b>Responsibility</b>
1. Prepare policy or issues paper on the need for prioritising wastewater and sanitation sector for improvements, cross-sectoral actions and integration into national development plans.	Government departments Service providers
2. Education and awareness on policies and regulations across all sectors with special focus on decision makers.	Governments
3. Identify and review policies and regulations on regional and national level and involve stakeholders and regional organisations	Regional organisations Governments
4. Review regulations from other countries and identify those suitable as models for Pacific Island Countries.	Regional organisations

<b>Proposed Actions</b>	<b>Responsibility</b>
5. Organise a review meeting involving all sectors, to agree on the need or otherwise, for national regulations and to recommend appropriate actions.	Governments
6. Implement recommendations.	Governments
7. Establish appropriate guidelines and systems for reporting on service delivery, and enforcement of regulations.	Governments

**GUIDING PRINCIPLE 2:**

**APPROPRIATE NATIONAL INSTITUTIONS, INFRASTRUCTURE AND INFORMATION WILL SUPPORT SUSTAINABLE WASTEWATER MANAGEMENT.**

**Policy 2.1:** Governments will review and specify roles of, and facilitate coordination between existing agencies, and where appropriate, create specific responsible agencies for wastewater management.

**Policy 2.2:** Governments will ensure that wastewater technologies and related infrastructure are appropriate to meet national and local priorities and needs, within the constraints of available finance and other resources, while recognising the need for protection of human health and the environment.

**Policy 2.3:** Governments, service providers, institutions and regional organisations will collaborate throughout the region to improve timely access to and sharing of available data and research on appropriate wastewater technologies and the dissemination and implementation of wise practice guidelines.

**Policy 2.4:** Wastewater reduction (water demand management and conservation, zero discharge toilets) and reuse strategies will be developed and adopted by governments without compromising public health.

**Policy 2.5:** Governments and regional organisations will co-operate to develop and sustain regional and national water quality monitoring programmes and the use of this information (e.g. benchmarking) to improve wastewater management and environmental protection.

**Policy 2.6:** Governments, regional organisations and other stakeholders will cooperate to develop integrated wastewater management plans to effectively address the impacts of contingencies, emergencies and disasters.

**OVERALL OUTCOME:**

**Sustainable wastewater management through the use of appropriate institutions, infrastructure and information.**

<b>Proposed Actions</b>	<b>Responsibility</b>
1. Identify: <ul style="list-style-type: none"><li>- the key agencies/stakeholders involved with the management of wastewater, and environmental health</li><li>- their roles and responsibilities</li><li>- activities they undertake in wastewater and environmental health</li><li>- lead agencies for specific national activities.</li></ul>	Governments
2. Establish mechanism for maintenance of data collection, on wastewater management (standards, regulations, and monitoring) and environmental health impacts.	Governments Regional organisations UN and donor agencies NGO's
3. Develop national guidelines on wise practice approaches to assessing and managing wastewater system requirements, that incorporate sound environmental health principles.	Governments Regional organisations

<b>Proposed Actions</b>	<b>Responsibility</b>
4. Review existing wastewater technologies and infrastructure and recommend strategies for improvement.	Governments Service providers NGOs Regional organisations
5. Develop a national monitoring capacity, building on existing and new resources, to provide initial baseline data, and long-term quality assurance.	Governments NGOs Regional organisations
6. Promote awareness of links between and means of integration of, wastewater management plans to effectively address contingencies, emergencies, and disasters.	Governments NGOs Regional organisations

**GUIDING PRINCIPLE 3:**

**BETTER ACCESS TO FUNDING WILL IMPROVE SERVICE DELIVERY, AND DEVELOP THE PRIVATE SECTOR.**

**Policy 3.1:** Governments, regional organisations, donors, the private sector and NGOs will co-operate to develop innovative approaches to existing funding structures and establish mechanisms to improve cost-recovery.

**Policy 3.2:** Where appropriate, governments, regional organisations and NGOs will co-operate to attract the private sector to invest in wastewater management through private-public partnership and other mechanisms.

**Policy 3.3:** Governments, donors and regional organisations will co-operate to develop appropriate service delivery and funding mechanisms to equitably address the wastewater management needs of both the urban and rural community.

**OVERALL OUTCOME:**

**Improved service delivery through increased access to funding and involvement of the private sector.**

<b>Proposed Actions</b>	<b>Responsibility</b>
1. Carry out a review of systems currently used throughout the region and internationally, for funding wastewater services. Report findings in a form suitable for use by government decision makers.	Governments Regional organisations
2. Develop and implement awareness raising programmes across all levels, on the need for funding mechanisms.	Governments
3. Choose and adopt the most appropriate mechanisms (from above review).	Governments
4. Identify stakeholders, and especially possible private sector partners and establish a national working party (or similar) for discussions/decision making over privatisation of wastewater systems.	Governments
5. Review current wastewater systems and identify areas/aspects that could be improved through the involvement of the private sector.	Governments
6. Invite proposals from the private sector, review and implement.	Governments
7. Establish appropriate guidelines and reporting systems for monitoring service delivery, including financial efficiency, service quality, and service distribution across different sectors of the community (e.g. urban vs. rural).	Governments Regional organisations

**GUIDING PRINCIPLE 4:**

**COMMUNITY PARTICIPATION IN WASTEWATER MANAGEMENT AND SANITATION, WILL ENSURE EQUITABLE BENEFIT WITH RECOGNITION OF SOCIO-CULTURAL SENSITIVITIES.**

**Policy 4.1:** Governments, regional organisations and NGO's will co-operate to promote and develop education and awareness of wastewater and sanitation issues within national and local government, while incorporating existing social and cultural values.

**Policy 4.2:** Governments, regional organisations and NGO's will co-operate to promote and develop community education and awareness of public health and environmental issues as related to wastewater while incorporating existing social and cultural values.

**Policy 4.3:** Governments, service providers and NGO's will in partnership with community agencies determine their respective roles and responsibilities, and will develop and implement culturally appropriate strategies and activities to ensure the implementation of wastewater programmes.

**Policy 4.4:** Governments, service providers and NGO's will ensure rural and urban communities will be given opportunities for active participation in the choice, development and implementation of wastewater and sanitation projects and on-going operation and maintenance of its facilities.

**Policy 4.5:** Planning of wastewater facilities will ensure acceptable access for all, with special regard to women, the disadvantaged, the disabled and those in rural and remote communities.

**Policy 4.6:** Service providers will take into account traditional knowledge and practices complemented by new approaches to wastewater management.

**OVERALL OUTCOME:**

**Equitable benefit to the entire community that incorporates social and cultural values through active community participation.**

<b>Proposed Actions</b>	<b>Responsibility</b>
1. Conduct survey and collect information / data on the social and cultural aspects / characteristics of the community population.	Regional organisations National government Local government Community
2. Develop and implement national and local public awareness and education campaigns.	Regional organisations National government Local government Community
3. Use local theatre groups and media in raising awareness programmes.	Regional organisations National government Local government Community

Proposed Actions	Responsibility
4. Identify key stakeholders to determine their roles and responsibilities within the community.	Governments Service providers NGOs Community / Women
5. Create a task force that has representation of all stakeholders that will facilitate the development and implementation of cultural appropriate strategies and activities of wastewater management programmes. The taskforce will have a fair representation that will include women, disabled and disadvantaged.	All key stakeholders
6. Enhance or improve participation of community in the development and implementation of community-based strategies and activities through / by:  - holding regular meetings/seminars/workshops - identifying and reviewing existing systems - developing where appropriate wise alternatives - establishing community capacity building programmes - identifying and securing assistance and funding for community involvement.	Community Governments NGOs Regional organisations
7. Include public information components in costing for all development programmes.	Governments
8. Promote the use of community consultative committees in development programmes.	Community
9. Perform gender assessment studies in wastewater management and where appropriate stress the need for gender issues to be included into project planning.	Governments Regional organisations
10. Conduct research into the traditional practices and determine whether or not these can be adapted to suit the present situation and new development programmes.	Governments Regional organisations NGOs

**GUIDING PRINCIPLE 5:**

**VIALE AND SUSTAINABLE LEVELS OF SKILLED AND KNOWLEDGEABLE PEOPLE WITHIN THE WASTEWATER SECTOR AND COMMUNITIES WILL IMPROVE WASTEWATER MANAGEMENT**

**Policy 5.1:** Governments, regional and international organisations will cooperate to develop and implement effective human resource development programmes for wastewater management and related personnel (including planners, management and enforcement professional) with particular attention to up-skilling the local workforce.

**Policy 5.2:** Governments, local institutions, regional and international organisations will work together in the development of regional and national training courses in support of human resource development programmes.

**Policy 5.3:** Governments, regional organisations and NGOs will promote and facilitate the development and training of communities and individuals to strengthen and assist their participation in wastewater management.

**Policy 5.4:** Governments, regional organisations, donors, the private sector and NGOs will work together to secure funding in support of human resource development policies and training programmes.

**OVERALL OUTCOME:**

**Wastewater management has improved, as a result of a viable and sustained level of skilled and knowledgeable people within the wastewater sector and communities.**

<b>Proposed Actions</b>	<b>Responsibility</b>
1. Review the need for increased capacity and management training in human resources development and planning.	Governments Service providers Regional organisations Co-operating agencies International counterparts
2. Carry out training needs analysis (TNA) for workforce and community groups to identify gaps in existing training, including communities and individuals. This should include reviews of current programmes, who needs training, the type of training required, and resources needed.	Governments Service providers Regional organisations Co-operating agencies International counterparts
3. Identify funding sources for training programme development.	Governments Service providers Regional organisations Co-operating agencies
4. Develop island specific training programmes and pilot projects, identify resources for delivery (e.g. staffing, equipment etc.), secure funding and implement them.	Governments Service providers Regional organisations Co-operating agencies NGOs
5. Evaluate performance of human resource development planning based on improved wastewater management.	Governments Service providers Regional organisations Co-operating agencies International counterparts

<b>Proposed Actions</b>	<b>Responsibility</b>
6. Periodically go back to Actions 1 and 2 to assure sustainability.	Governments Service providers Regional organisations Co-operating agencies International counterparts

## **V. CONCLUDING STATEMENTS**

The meeting appreciated the financial support of the Government of Belgium, through the UNEP/GPA Coordination Office, and the Government of New Zealand to organise the Regional Wastewater Meeting. The meeting further acknowledged the support of the Republic of the Marshall Islands for hosting the meeting and the support from the Government of Taiwan/ROC.

The meeting acknowledged the support of the CROP organisations, SOPAC and SPREP for organising the meeting, and all member countries and organisations represented who provided resource persons.

The meeting agreed that the Pacific Wastewater Policy Statement and Framework for Action provide valuable tools to develop national policies and strategies to support national sustainable development within the existing framework for the region as well as the GPA framework.

The meeting recommended that the text of the Pacific Wastewater Policy Statement and the Pacific Wastewater Framework for Action be submitted to the SOPAC Governing Council for its consideration and endorsement.

The meeting recommended that following the SOPAC Council Meeting, the Secretariat pass the policy and framework for action to other regional organisations and other policy bodies as appropriate for consideration.

The meeting invited the UNEP/GPA Coordination Office to facilitate the presentation of the Pacific Wastewater Policy Statement and Framework for Action at the First Intergovernmental Review Meeting of the Implementation of the Global Programme of Action (GPA), scheduled for 26-30<sup>th</sup> November 2001, in Montreal. UNEP/GPA Coordination Office was requested to assist PIC representatives to attend the meeting and provide opportunities to interact with donors to secure funding for demonstration projects.

The meeting recommended that a Pacific Wastewater Focal Group be established to continue the dialogue on wastewater in the region.

The meeting recommended that Pacific Island Countries develop National Frameworks for Action and establish National Wastewater Focal groups.