Ref: CDC Paper No.

POLICY PAPER
For
CABINET DEVELOPMENT COMMITTEE

1 Sanitation Policy

The policy title is referred to as the sanitation policy. This policy has been made under the auspices of the Joint Water Sector Steering Committee, grouping all stakeholders of the water sector in Samoa.

This policy is presented to the Cabinet Development Committee by the Minister of Natural Resources and Environment.

2 Purpose of Submission

The purpose of the submission is to obtain the Cabinet Development Committee's endorsement of the proposed policy. The sanitation policy provides the planning and management framework necessary to improve sanitation services in Samoa. The policy aims to:

(a) Reinforce Government's approach to sustainable management by ensuring that all arms of government work together in the pursuit of shared wastewater management goals; and
(b) Establish a framework of incentives and regulation that encourages individuals, businesses, industries and communities to make choices that enhance best wastewater management practices.

3 Previous Reference

This policy is in line with the approved "Water for Life" Sector Plan, which sets out the broad strategies of wastewater management.

4 Requesting Agency

The request is made by the Ministry of Natural Resources and Environment.

5 Implementing Agency

The sanitation policy will be implemented by the Ministry of Natural Resources and Environment (the Planning and Urban Management Agency) in collaboration with other relevant ministries.

6 Other Relevant Ministries

Other relevant ministries include:

- Ministry of Natural Resources and Environment (the Water Resources Division and the Division of Environment and Conservation);
- Ministry of Works, Transport Infrastructure (the Asset Management Building Division);
- Ministry of Health (the Health Promotion and Preventative Health Services);
- Samoa Water Authority (the Wastewater Division);
- Ministry of Women, Community and Social Development (the Internal Affairs Division);
- Ministry of Finance; and
- Ministry of Education, Sport and Culture.

7 Background to the Formulation of the Policy Proposal

7.1 Overview

In October 2008, the Joint Water Sector Steering Committee of the Water Sector Support Programme and the Samoa Sanitation and Drainage Project approved the establishment of the National Sanitation Taskforce to develop a national sanitation policy. The National Sanitation Taskforce is comprised of representatives from the Ministry of Natural Resources and Environment specifically, the Planning and Urban Management Agency (Chair), the Water Resources Division, the Division of Environment and Conservation, the Samoa Water Authority, the Ministry of Works, Transport and Infrastructure, the Ministry of Women, Community and Social Development, the Ministry of Health and the Office of the Prime Minister and Cabinet. The term of reference for the Taskforce is to develop a policy to address wastewater management issues with the intention of overall improvements to sanitation services in Samoa.

7.2 Definition

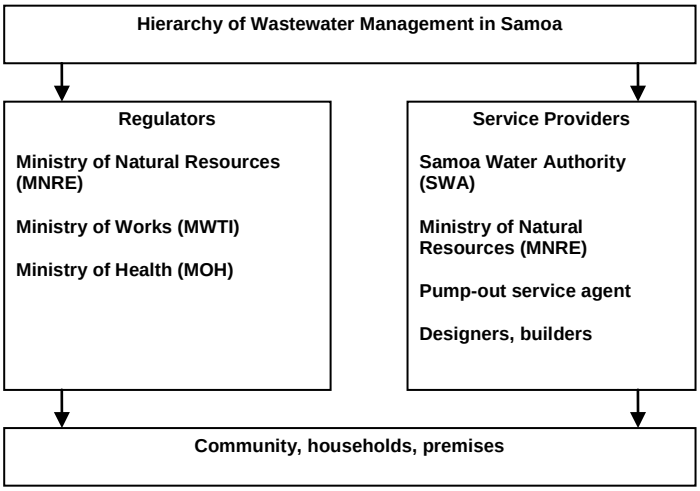
The sanitation policy focuses on what is commonly regarded as wastewater systems, management and infrastructure. Wastewater or contaminated water derived principally from residential dwellings, commercial businesses, institutions and industrial activities. See Annex 1 for glossary of terms.

7.2.1 Current Wastewater Management Systems in Samoa

In Samoa wastewater treatment technology has been limited to on-site treatment systems. On-site treatment options such as pit latrines and septic tanks represent the majority of domestic on-site wastewater system applications.

Figure 1 illustrates the various stakeholders involved in the wastewater management framework.

Figure 1: *Wastewater Management in Samoa*



Within the urban area there exist a few package plants for commercial properties and industrial wastewater systems that service industrial units, such as a factory. The Government is already implementing its plans to meet future demands. This includes:

- Construction of the Sogi Wastewater Treatment Plant and Low Pressure Reticulated Sewer System for the central business area including the National Hospital and the Fugalei market;
- Upgrade of approximately 100 domestic septic tank systems in the low-lying area of Apia via the rehabilitation programme;
- Construction of sanitary works at 119 schools under the Schools Sanitation Programme plus 3 District Hospitals; and
- Construction of septage disposal facilities on the two main islands: (a) Tafaigata and Togitogiga landfills in Upolu; and (b) Vaiaata landfill and Asau has been ear-marked in Savaii.

7.2.2 Performance of Wastewater Management Systems

There is currently limited information to document health and water quality problems resulting from poorly functioning systems. This is partly because of their widely distributed nature and the absence of a wastewater management information system. However, while complete quantitative information is lacking, several technical studies carried out over the last few years in Samoa consistently highlight that a substantial number of wastewater systems are not performing in a way that provides acceptable levels of treatment or environmental protection. The most recent information was presented by the Samoa Sanitation and Drainage Project which discussed in the Technical Assistance Note (TAN) No. 4 (2007) on-site sanitation issues[1]. For instance it demonstrated that 40 per cent of septic tanks overflow directly to surface drainage. It further points to the environmental conditions

[1] The Technical Advisory Note (TAN) No.4 prepared by the Project Implementation Assistance Consultancy led by GHD under the Sanitation component of the Samoa Sanitation and Drainage Project. The TANs objective was to present survey results, options and recommendations on how to treat sanitation activities in a holistic manner.

as less than ideal as the majority of the area is low-lying and has a particularly high water table.

Dorsch Consult final report (2004) commissioned by the European Union on the Rural Water Supply and Sanitation Study found that approximately 83 per cent of on-site systems in the rural area were subject to failure. The majority of septic tanks are not sealed so that sludge drains into the surrounding environment and the pump out of sludge is never or rarely required. The fundamental causes of these problems are likely to be related to any, or a combination of, poor subdivision planning, siting, design, construction, operation and maintenance. The survey highlighted that educating residents and landowners on both the initial construction as well as the operation and maintenance of their systems could improve the situation significantly (Dorsch Consult, 2004).

7.2.3 Environmental and Human Health Impacts

In situations where wastewater systems fail or under-perform, untreated or partially treated effluent may inadvertently contaminate surface and subsurface conditions. The pathogens and nutrients released from poorly performing systems can be harmful to humans and the environment. This poses significant and well-documented ecosystem and human health impacts that can include:

- Disease in people (particularly vulnerable groups) having direct contact with wastewater on the ground surface or consuming contaminated foods.
- Disease in people caused by drinking contaminated water, usually from groundwater bores that are located near to wastewater treatment and disposal systems or from contact with contaminated drains, streams, pools and beaches.
- Flies and mosquitoes breeding in ponding effluent.
- Economic impacts caused by having to close business operations.
- Economic impacts caused by environmental degradation on tourism.
- Deterioration of freshwater ecosystems due to reduced water quality.
- Permanent soil degradation.
- Nuisances such as weed growth.
- Potential odour generated from wastewater systems.

7.2.4 Regulatory and Institutional Context

There are several Acts in place that provides the legislative basis for controlling on-site wastewater systems; including:

- the Ministry of Health Act 2006
- the Health Ordinance 1959 (nuisances)
- the Ministry of Works Act 2002 Part IV (through the National Building Code 1992)
- the Planning and Urban Management Act 2004 (development consent, impact assessment and amenity issues)
- the Water Resource Management Act 2008

Other relevant legislation, include:

- the Samoa Water Authority (Sewerage and Wastewater) Regulations 2009
- the Waste Management Bill

- the Public Health Bill
- Drinking Water standards, 2008

The regulatory regime for wastewater management in Samoa includes multiple players, with different government authorities having distinct responsibilities for particular issues (see Table 1). The statutory context and requirements outlined in the regulatory framework applies under the relevant environment, planning, health and building law.

Table 1: *Regulatory and Institutional Responsibilities*

Authority	Legislative basis	Function	Issues/constraints
Ministry of Natural Resources and Environment			
Planning and Urban Management Agency	Planning and Urban Management Act 2004 and regulations	• Controls the impacts of structures and activities on the environment e.g. impacts of discharges from wastewater systems	Strengthened Integration and coordination
Division of Environment and Conservation	Lands, Survey and Environment Act 1989 Waste Management Bill 2008	• Landfill operation and management of sludge treatment, disposal, operation and management	
Water Resources Division	Water Resource Management Act 2008	• Protect water quality and watershed resources through monitoring, and appropriate management strategies	
Ministry of Works, Transport and Infrastructure			
Building Division	Ministry of Works Act 2002 (Part IV) (through the Building Code)	• Controls building quality including domestic septic system design and installation • CEO may designate road reserve for sewer network	Requires additional input from (a) the Ministry of Health (re no. and location of facilities, disposal of wastewater) and (b) Ministry of Natural Resources and Environment to certify building plans re alignment and ownership. But no provisions for coordinating roles Developing a program for on-going monitoring of authorised on-site systems.
Ministry of Health			

Health promotion and Preventative Services	Health Ordinance 1959, Board of Health Regulations No.6 and No.8[2]	• Requirement for buildings to have adequate provision for wastewater management • Promotes public health issues and solutions • Prevents outbreak of infectious diseases by stopping discharge of sewerage into receiving water	Strengthen partnership in implementing and enforcing the PUMA 2004 and the Building Code 1992
Samoa Water Authority			
Wastewater Division	Samoa Water Authority 2003 and Samoa Water Authority (Sewerage and Wastewater) Regulation 2009	• Develop, operate and maintain central Apia sewer system - control and monitor *tradewastes* • Selective re/construction of on-site systems	Future sustainability of providing septic Service provider
Ministry of Women, Community and Social Development			
Internal Affairs	Internal Affairs Act 1995	• To assist in educational activities delivered at the local village • To provide services for village development	
Ministry of Education, Sport and Culture			
Education		• To develop initiatives to introduce wastewater topics into the national education curriculum at targeted levels	
Land Occupiers and Property Owners			
All	Owners responsibility to satisfy the obligations of the relevant laws	• Construction, operation and maintenance of on-site systems	Liable for any nuisance a failing system may cause.

7.2.4.1 Development Control

The Planning and Urban Management Agency pursuant to the Planning and Urban Management Act 2004 is mandated to account for potential environmental impacts of a proposed system as part of the development consent assessment as well as resolving any negative amenity impacts associated with wastewater. Furthermore, the installation of

[2] Note: Health legislative reforms are currently being undertaken.

buildings on-site wastewater system requires authorisation via a Building Permit as provided by the Ministry of Works Act 2002.

The National Building Code 1992 has specific requirements covering design and installation of domestic on-site systems. In contrast, the Health Ordinance 1959 has powers that can be invoked if an existing system is creating a nuisance or public health risk. The Ordinance has been recommended by the Dorsch Consult (2004) report to require a review and update of those provisions. The key issues within this current regulatory framework include:

- The apparent overlap between public health 'nuisance' provisions and the environmental protection 'amenity' provisions.
- The mandatory referral system is not, if at all, effectively executed.
- Recognition that non-domestic wastewater systems are not prescribed under the Building Code.

The relevant authority's ability to monitor the construction and performance of approved on-site systems is limited for two key reasons:

(a) The above authorities are not able to directly recover the costs of monitoring approved activities, and
(b) They balance competing demands within limited financial, physical, and human resources for environmental monitoring and code compliance.

The result is that the authorities are restricted in their ability to monitor activities and often respond specifically to amenity or nuisance complaints.

7.3 Key Issues

Based on current information, wastewater management systems are an issue of national concern. The major barriers to improved sanitation services that have been identified, include:

- The current institutional and regulatory framework for effectively managing wastewater management systems is unclear.
- Lack of an overall strategic framework to plan for the future demands of wastewater management infrastructure.
- The absence of a sound governance system that provides regular monitoring and review of implementation actions as well as on-going maintenance, performance and certification.
- Lack of awareness of the importance of wastewater management systems performing to acceptable level to avoid and minimise the actual and potential public health and environmental impacts.
- Key stakeholders such as regulators, service providers, industry and community have limited, if any, technical skills and knowledge required to ensure satisfactory construction and performance of wastewater systems that meet regulatory standards.
- Affordability and fiscal issues present an obstacle for households and premises to identify appropriate wastewater management technology for application.

In conclusion, Samoa faces a significant challenge to improve the current wastewater management and sanitation situation.

8 Detailed Statement of the Proposed Policy

The sanitation policy is a holistic and integrated framework to improve wastewater management services in Samoa. The policy is committed to achieving the following outcomes:

(a) An enhanced bio-physical environment that does not compromise human health and safety.
(b) An improved and streamlined approvals process through all stages of the development including post-construction and the operational phase.
(c) Increased capacity of all relevant stakeholders on wastewater management issues.

9 Objective

The overall policy objective is to improve wastewater systems and management in Samoa.

9.1 Strategies for Achieving the Objective

The strategies outlined will be implemented on a stage basis and where appropriate concurrent.

Table 2: *Short/Medium/Long term Strategies*

Period	**Strategies**	**Timeframe**
Short term	▪ Nationwide education and awareness campaign ▪ Regulatory Framework strengthening ▪ Knowledge and capacity building ▪ Subsidy scheme ▪ Wastewater infrastructure planning ▪ Monitoring and review	0 – 5 years
Medium term	The continuous implementation of the above strategies and revisions where required.	5-10 years
Long term	▪ Development of a Wastewater authority to deal primarily with wastewater systems and waste.	10-20 years

9.1.1 Nationwide Education and Awareness Campaign

The Ministry of Natural Resources and Environment via the Planning and Urban Management Agency will lead the development of this campaign to provide the community with information. One of the key activities is to prepare and disseminate materials and reach out to all stakeholders. The nature of the materials will be oriented towards the users and will include technical and general information for general awareness to promote behavioural and attitudinal changes. Furthermore, information packages will also be developed reinforcing the regulatory context, design standards and best management practices. A communication strategy will require the relevant authorities to coordinate, publicise and promote best

wastewater management system performance, encourage users to play their part, and provide guidance such as incorporating water conservation measures.

The education and awareness campaign will develop specific objectives and learning materials adjusted for different target groups to achieve improved understanding of wastewater issues and the required change of attitudes and practice:

- The general public will be made aware of the importance of proper wastewater management and the negative impacts on human health and the environment if proper sanitation systems are not put in place and adequately maintained. In addition there will be information outlined in the strategy to address current practices. Furthermore, information will also seek to provide opportunities to fund investment activities. This aspect will be implemented by the Ministry of Women, Community and Social Development via the Internal Affairs Division and the Ministry of Education, Sport and Culture to primarily promote the educational part of the campaign. Village organisations such as the Pulenu'u, Komiti Tumama (Women's Committees) and Water Committees may be the most appropriate forums to deliver the message.

- The construction industry including engineers, contractors and local builders will be targeted with information on the proper design of on-site wastewater systems and the operations standards required by the relevant authorities. This activity is to be led by the Planning and Urban Management Agency with support from the Asset Management Building Division, and the Health Promotion and Preventative Health Services Division

- Supplemental to the campaign, will be a communication strategy within Government to ensure that all agencies and officials associated with wastewater management issues are fully aware of the importance of improving wastewater management and the components of the strategy.

9.1.2 Regulatory Framework

Administration of the existing regulatory provisions under the policy will be the key to the success in improving the management of the sector. This strategy will identify and implement actions to effectively coordinate sanitation improvements, for example encourage efforts to improve cross-government coordination and administrative practices such as:

(a) Establishing the Sanitation Technical Committee, consisting of authorities having a functional interest, to assist the coordination and collaboration of efforts and actions. The Committee may comprise of members of the National Sanitation Taskforce. The Committee shall report to the Joint Water Sector Steering Committee.
(b) Ensuring that the regulatory authorities employ responsive enforcement actions where breaches of the law have been verified.
(c) Formalisation of institutional arrangements and operating procedures in a Memorandum of Understanding (or Service Level Agreements) outlining the objectives, roles, responsibilities and reporting requirements.
(d) The Asset Management Building Division is to establish a registration and certification of performance program for all wastewater management systems.
(e) The Asset Management Building Division in collaboration with the Planning and Urban Management Agency shall provide for the collection and maintenance of

accurate wastewater systems data and information in a database for monitoring and reporting.

(f) The Asset Management Building Division is to review and implement proposed modifications to the National Building Code 1992 for on-site treatment systems.

(g) The Planning and Urban Management Agency in collaboration with relevant authorities shall design, plan and conduct a comprehensive sanitary survey.

(h) The Water Resources Division is to undertake routine monitoring and reporting of water quality data from receiving environment 'hot spots'.

(i) Environmental impact assessment practice will be strengthened by requiring that health impact assessments are included.

(j) The Division of Environment and Conservation with the cooperation of sanitary contractors shall keep accurate records of sludge pump-out and disposal information.

(k) Samoa Water Authority to conduct regular testing of water quality at the point of discharge of the Wastewater Treatment Plant and any other outlets.

9.1.3 Knowledge and Capacity Building

Ensure key stakeholders participate in international competency based training to improve knowledge and up-skill professionals such as environmental health officers, government regulators, wastewater technicians in a range of wastewater topics such as design, technology and management of wastewater systems. It is common that those charged with the responsibility for aspects of on-site wastewater management approvals and inspections possess a less than comprehensive range of skills in the subject and would benefit from further training. This strategy provides an important measure of quality assurance for the government, the industry and general public. The strategy will identify key knowledge and capacity building priorities needed to support the on-going implementation of the sanitation policy. For example, relevant Government representatives to tap into accredited short courses, and upon completion, design and plan a series of workshops for other government representatives, the industry and other relevant stakeholders.

9.1.4 Subsidy Scheme

Establishment of a subsidy scheme administered by the Ministry of Health that will provide assistance with funding of necessary sanitary works. The scheme will be a partnership between the Government of Samoa and the recipient, aimed at primarily poorly performing and construction of new on-site systems to achieve good environmental outcomes and safe sanitary conditions.

This scheme will first be tested during a pilot phase to establish the appropriate criteria and level of incentives required to leverage domestic on-site wastewater system improvements. In addition, the scheme will consider targeting high risk areas and having different levels of subsidy according to risk assessment and ability to co-finance. The main objective of this funding will be to deal with the backlog of poorly designed systems and ensure that new wastewater systems meet the required standards and comply with the law.

The scheme will be required to comply in full with any requirements of the Planning and Urban Management Act and the National Building Code. The detailed criteria and processes

will be developed as part of a key element of this strategy and will focus on two key land use activities.

9.1.4.1 Residential Households

The key ingredients of the scheme will be people's ability to fund replacements or constructing new systems and the potential environmental and health risks associated with the site. The scheme aims to:

(i) replace poorly performing on-site systems; and
(ii) construct new on-site systems.

This scheme recognises that the cost of replacement and installation of new systems can often be beyond the ability of people to pay.

Pump-outs and collection of sludge will not feature in this scheme.

9.1.4.2 Educational Institutions and Community Facilities

As part of this scheme educational institutions and community facilities (schools, prison, and health centres) that have significant issues with their on-site wastewater system will be able to apply for a subsidy to fund the necessary sanitary works required to upgrade the facilities to the appropriate standards.

9.1.5 Wastewater Infrastructure Planning

This strategy establishes a sustainable approach to the provision of sanitary services. The development of a National Sanitation Master Plan will provide a strategic overview of Samoa's current public and private wastewater management assets and estimate future demands. This activity will be led by the Planning and Urban Management Agency in collaboration with other relevant authorities.

The strategy would ensure that cost-effective decisions could be made with regard to the short, medium and long-term sanitation facilities and any further expenditure on wastewater management would be in accordance with an overall time-based capital improvement and investment plan. The master plan will provide guidance to effectively plan proposed and future assets in a way which achieves the objective set out in this policy. It will also identify areas that would benefit from the extension of the reticulated system as well as recommending appropriate technologies for future investments including on-site systems and disposal facilities. In addition, the master plan will identify priority investment plans for financing wastewater management systems over the next 20 years.

9.1.6 Monitoring and Review

Monitoring is imperative to verify whether policy objectives have been achieved. Elements of this policy will be monitored and reported and will rely on the provision of a range of quantitative and qualitative information. The Sanitation Technical Committee will be responsible for monitoring and reviewing the policy.

The review date of the proposed policy is 3 years from the formal adoption date. Progress monitoring and reporting will be conducted annually. As a result of the review, some revisions to policy targets may be required in order to:

(a) Update or remove those targets that have proven to be unclear, unable to be adequately measured, unworkable, or out of date in their allocation of responsibility for action.
(b) Reflect changes in the wider wastewater management landscape.
(c) Better reflect progress against the targets and, where necessary, set new targets.
(d) Better reflect the current state of knowledge of wastewater management in Samoa.

9.2 Targets

The policy targets include improved water quality, raised awareness, certified and approved on-site facilities.

9.3 Expected Benefits from the Policy Initiative

The anticipated benefits are as follows:

(a) Increased general awareness of the importance of proper wastewater management systems to significantly reduce public health risk and in doing so, minimise negative impacts on the environment.
(b) Strengthened wastewater sector with improved accountability and coordination amongst stakeholders and importantly the relevant authorities.
(c) Improved institutional capacity to effectively and efficiently administer regulations and provide technical advice.
(d) Improved wastewater management system performance.
(e) On-going government commitment to the sustainability of wastewater management infrastructure.

9.4 Relationship to the Strategy for the Development of Samoa and Sectoral Strategies

9.4.1 Strategy for the Development of Samoa

The Strategy for the Development of Samoa (SDS) 2008 – 2012 identifies wastewater management as an important issue and provides for the continual improvement to sanitation services in Samoa. Pursuant to Priority Area 1, Goal 2 *Economic Infrastructure*, the SDS recognises the importance of adequate sanitation services to alleviate health risk to people and for protecting the environment. Sanitation issues are further reinforced in the SDS under Priority Area 3, Goal 7 *Environmental Sustainability*.

The SDS provides linkages to the United Nations Millennium Development Goal (MDGs). It adds that Samoa's contribution to addressing MDG Goal 7 "Ensure Environmental Sustainability" is through various actions in the sector. Overall, the SDS sets out the key issues related to wastewater management and provides broad mechanisms for strengthening sanitation services at the sector level.

9.4.2 Water for Life Strategy

Sanitation efforts are made stronger with the cross-linkage to Samoa's Water for Life Strategy: Water Sector Plan and Framework for Action 2008 - 2013.

10 Budget Implications

10.1 Capital Investment Required

Capital investment costs are likely to include:

- Development of the national education/awareness campaign.
- Preparation of a national sanitation master plan.
- Capacity building/training of key personnel.
- Subsidy scheme for replacement of and construction of new on-site wastewater systems.
- Investment in upgrading wastewater systems for public/community facilities.
- Extension of Apia off-site waste water system.

10.2 Recurrent Costs

Establish and sustaining new government positions:

- The Planning and Urban Management Agency's Senior Environmental Health/ Engineer – permanent post and running costs.
- The Asset Management Building Division Senior On-site System Inspector – permanent post and running costs.
- The Ministry of Health – Principal and Senior Sanitation Officers.

10.3 Revenue Generation

The centralised reticulated wastewater management systems will be managed under the Samoa Water Authority who will set tariffs to cover operation and maintenance costs.

10.4 Proposed Sources and Conditions of Finances

For the effective implementation of the policy it is anticipated that funds will be sourced from three channels, they are:

(a) The national budgeting process (via ministry output expenses).
(b) Key development partners such as the European Union (via the Water Sector Support Program) and the Asian Development Bank.
(c) Individual and institutional contributions.

11 Legislative Implications

There are no legislative implications associated with this proposal. However, there will be opportunities to review relevant legislation aimed at streamlining the approvals processes and enforcement procedures.

12 Human Resources Implications

12.1 Employment Creation

12.1.1 Government

Due to the policy framework and implementation plan, it is imperative that additional staff positions are established and funded. These positions are as follows:

(a) The Planning and Urban Management Agency (MNRE) to establish a new senior position as Environmental Health/Engineer for managing wastewater issues.
(b) The Building Division (MWTI) to establish a new senior position specifically to (i) accept, review and approve on-site systems, and (ii) manage on-site wastewater systems.
(c) The Ministry of Health to establish a Principal and Senior Sanitation Officers.

12.1.2 Private Sector

Professional engineers will be required to design and certify proposed wastewater systems and provide an engineer's report for difficult and sensitive sites as part of the required information to supplement proponent's development consent and building permit applications. Environmental specialists will also be required to include as part of an environmental impact assessment and evaluation of actual and potential health impacts.

12.2 Training Programme Required

The effective administration of the regulatory context requires qualified and experienced staff for the policy to be recognised as an important intervention that improves the overall performances of wastewater systems. Training opportunities are offered by well recognised industry specialist in the region such as Australia and New Zealand. Training would help address the problem of administering the legal framework and also providing further technical 'know how' on a range of topics such as site and soil assessments, wastewater characteristics, placement and local issues, treatment technologies, installation and management, inter alia. Accessing overseas and in-country training programmes is highly encouraged.

12.3 Technical Assistance Requirements

Technical assistance will be required to complete some key tasks identified in the implementation plan, such as:

(a) Design, plan and implementation of comprehensive sanitary surveys for Samoa.
(b) Implement institutional strengthening and capacity building program.
(c) Develop the national sanitation master plan.

(d) Design a subsidy scheme.
(e) Develop a national programme between Government and the private sector for de-sludging.

13 Proposed Implementation Schedule

The proposed implementation schedule is as follows in Table 3:

Table 3: *Proposed Implementation Plan*

Step/Deliverable	Start Date	End Date	Lead Agency
Sanitation Policy Development			
Commence the development of a policy framework for sanitation	October 2008	June 2009	MNRE/PUMA
Discussion Documents completed	October 2009	August 2009	MNRE/PUMA
Open, timely and targeted consultation with all relevant stakeholders	July 2009	August 2009	MNRE/PUMA
Targeted consultation process	March 2009	August 2009	MNRE/PUMA
Policy completed and adopted by Government	August 2009	September 2009	MNRE
Education and Awareness Campaign			
Planning approach finalised – methods, management arrangements, resourcing and detailed implementation plan	September 2009	Ongoing	MNRE/PUMA, MESC, SWA
Develop information material, newsletters, brochures, media releases, advertisements, banners, etc	September 2009	Ongoing	MNRE, MOH, MWTI, SWA, MESC
Community workshop series	November 2009	Ongoing	MNRE/PUMA, MWTI/AMB, MOH, MESC
Administrative arrangements developed	September 2009	November 2009	MNRE/PUMA
Annual 'wastewater day'	TBD	Ongoing	MNRE, SWA, MOH, MWTI
Institutional Framework			
Continuation of current institutional and regulatory arrangements	Ongoing	Ongoing	MNRE, MWTI, MOH
Administrative arrangements and operating procedures developed	September 2009	November 2009	MNRE,PUMA
Consultation and development of a Memorandum of Understanding with the relevant	September 2009	November 2009	MNRE, MOH, MWTI

regulators			
Develop and implement agreed measures to collect, store, share and manage data on wastewater system for environmental and public health outcomes.	October 2009	January 2010	MNRE, MOH, MWTI
Develop a report framework for reporting performance of wastewater systems	October 2009	February 2010	MNRE/PUMA, MWTI, SWA, MOH
Develop and maintain best practice guidelines to minimise the costs and risks associated to wastewater management	October 2009	Ongoing	MNRE, MOH, MWTI, SWA
Knowledge and Capacity Building			
Targeted consultation process	August 2009	Ongoing	MNRE/PUMA, MOH, MWTI, SWA
Conduct training needs analysis and investigate training opportunities	September 2009	Ongoing	MNRE, MOH, MWTI, SWA
Implement skills and capacity building program to improve technical competencies	September 2009	Ongoing	MNRE
Targeted workshop series for industry groups and community	February 2010	Ongoing	MNRE/PUMA, MWTI, MOH
Participation in international conferences, studies, workshops where relevant to Samoa	Ongoing	Ongoing	MNRE, MWTI, SWA, MOH
Subsidy Scheme			
Develop criteria and processes	September 2009	February 2010	MOH, MNRE/PUMA, MWTI, SWA
Advertise and promote scheme via brochures, posters, notices	February 2010	Ongoing	MOH
Administer and manage application and award process	February 2010	Ongoing	MOH
Sanitary assessments	Ongoing	Ongoing	MNRE/PUMA, MOH
Wastewater Infrastructure Planning			
Develop and implement a comprehensive sanitary survey	September 2009	Ongoing	MWTI, MNRE, MOH
Develop sanitation master plan	October 2009	April 2010	PUMA, SWA
Develop a sanitation asset management plan	January 2010	June 2010	PUMA, SWA
Monitoring and Review			
Establish measures for the evaluation of the ongoing effectiveness of the policy	March 2009	Ongoing	MWTI, MNRE, MOH
Annual implementation progress reports	Ongoing	Ongoing	PUMA
3-year review report	September 2011	September 2013	MNRE/PUMA/DEC/WRD, MOH, MWTI

14 Comments by Other Relevant Ministries

The following authorities were consulted in the preparation of this proposal: Ministry of Finance, Ministry of Health, Ministry of Women, Community and Social Development, Ministry of Works, Transport and Infrastructure, Samoa Water Authority, and the Office of the Prime Minister and Cabinet.

15 Recommendations to be Considered by the Cabinet Development Committee

It is recommended that the Cabinet Development Committee:

1. Approve the national sanitation policy as the key policy instrument for addressing wastewater management issues.

2. Agree that a critical next step will be communicating this policy both within the public sector and with key stakeholders, which will need to outline a clear set of national objectives.

3. Agree that the National Sanitation Taskforce is to become the National Sanitation Technical Committee that comprises of representatives of Ministry of Natural Resources and Environment namely, the Planning and Urban Management Agency, the Division of Environment and Conservation, the Water Resources Division, the Ministry of Health, the Ministry of Works, Transport and Infrastructure, the Ministry of Women, Community and Social Development. This Committee is to administer the implementation of the sanitation policy.

4. Direct the wastewater management officials, lead by the Planning and Urban Management Agency, to consider what further steps, if any, could be used to raise awareness of wastewater management issues.

16 Signature of Responsible Officer of Initiating Agency

Chief Executive Officer
Ministry of Natural Resources and Environment

17 Date of Submission

00 Month 2009

ANNEX 1: Glossary

Blackwater	Liquid and solid human waste and the carriage waters generated through toilet usage
Centralised Wastewater Treatment System	The collection of wastewater from homes and commercial facilities in an urban area that consists of a sewer network (reticulation) with a centralised treatment facility.
Desludging	Removal of the accumulated sludge and scum from the septic tank.
Effluent	Treated or untreated liquid discharged from a sewerage treatment plant.
Health Impact Assessments (HIA)	Procedures to provide decision-makers with information about how any policy, programme or project may affect the health of people.
Health risk	The potential impacts of biological, physical, chemical or social agents on a specified human population.
On-site wastewater treatment system	The collection, treatment and disposal of wastewater from an individual home or commercial facility on the same property as it is generated.
Septage	The liquid, solid and semisolid material that results from wastewater pre-treatment in a septic tank, which is removed from the system by pump-out/desludging operations.
Sludge	The semiliquid solids settled from wastewater.
Wastewater	The contaminated water produced from domestic activities in dwellings, institutions or commercial or public facilities consisting of greywater and blackwater. This does not include surface water or stormwater.