

Regional Solid Waste Strategy Action Plan 2008 – 2010

Background:

As part of the monitoring and evaluation process for the implementation of the Pacific Regional Solid Waste Management Strategy, the Japan International Co-operation Agency (JICA) and the Secretariat for the Pacific Regional Environment Program (SPREP) convened a meeting for senior waste management representatives of Australia, the Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu at SPREP, Apia, Samoa on the 5th, 6th & 7th of November 2007. A number of JICA representatives were also in attendance but of particular note was the participation of Professor Sakurai from Okinawa University, a world expert on waste management. Professor Sakurai provided assistance in the delivery of presentation and educated many of the participants on issues relating to waste management.

SPREP would like to acknowledge JICA's assistance in holding this workshop and for solid and hazardous waste management in general in the Pacific region.

The purpose of this meeting was to re-visit regional priorities for the implementation of the Regional Strategy adopted by the 16th Annual SPREP meeting set at a similar meeting in late 2005. The country representatives shared their national activities and priorities and were briefed on up-coming partnership opportunities including the GEF Pacific Alliance for Sustainability (GEF-PAS) and the AFD/UNEP Solid Waste Initiative planned for late 2008.

The delegates then considered the region's highest priorities and where they particularly wanted SPREP to apply its resources. They are the following subjects, in their order of priority, as decided by the delegates:

- 1. Landfills**
- 2. Financing Waste**
- 3. Ensuring Political and Public support**

4. Bulky wastes
5. National Strategies
6. Training and Capacity Building
7. Regional Integration
8. Electronic waste
9. Waste Oil
10. Recycling
11. Legislation and enforcement
12. Organics and composting

The first three issues were strongly ahead of the rest. There are clear linkages between the various issues but it showed that the most urgent issues of disposal and funding the waste operations still continue to dominate the immediate imperatives. Largely, this is because waste minimization is having trouble keeping pace with the growth in waste driven by economic development, particularly on atolls and small islands where the current semi-aerobic landfill model is inappropriate. The JICA-financed Palauan “M-dock” landfill remediation where a semi-aerobic landfill has been built on an old waste pile offers a possible variation for atoll use. The Republic of the Marshall Islands recent success with the creation of the Majuro Atoll Waste Company and their waste separation facility suggests that a pilot atoll landfilling project could be located there. If successful, this could be a significant advance for atolls around the world.

Financing waste management is a limiting issue on nearly all of the Pacific Island countries. At the national level, much infrastructure and innovation has been project-funded from external sources but without sufficient attention internally to ensuring on-going financing. Also, in many countries, the national or federal governments have left local and state governments to handle daily operations but without access to sufficient funding to do an adequate service.

Finally, the mobilization of public and political support was seen as crucial to both financing waste management and keeping waste minimization as cost-effective as possible. Engaging the community is essential and great progress has been made on this over the last few years. Fortunately the Pacific region is democratic and so strong public support engenders strong political support. Improvements in waste management are mostly highly visible and so it is easier to build on success. SPREP’s most recent annual meeting heard repeated pleas by our member countries to keep waste management as a priority. The challenge for the Pacific region is to turn the political imperative into sensible sources of resources for efficient waste management.

Other issues noted were:

The need to improve the Focal point system of communication, the growing volumes of disposable Diapers (nappies), using sand as a landfill cover, efficient collection systems, hazardous materials and waste stream analysis.

While these issues did not rate as immediate in the prioritisation, SPREP recognises their importance and will continue to work to assist Members with finding management solutions.

2008 – 2010 Regional Solid Waste Action Plan

SPREP Activities	Members activities
<p>1. Landfilling / disposal remains a significant immediate issue, particularly for atolls. The preparations can often take 5 + years so good planning is essential. Goal: a semi-aerobic landfill on each high island and a pilot on an atoll.</p>	
<ul style="list-style-type: none"> • Technical assistance <ul style="list-style-type: none"> a) pilot on atoll disposal b) cover material • Support for donor liaison, finance packages & project proposals • Support management plans & monitoring • Awareness raising about problems & solutions 	<ul style="list-style-type: none"> • Waste characterization surveys • Initiate contact with donors • Share financial data • Estimate landfill lifespan • Initiate waste minimization programs to slow landfill consumption.
<p>2. Financing the necessary improvements to waste management is proving one of the biggest hurdles for the Pacific. Both internal operational funding and donor project funding are insufficient to deal with the current situation. Goal: All PICT's consider a Cabinet Options paper on financing waste</p>	
<ul style="list-style-type: none"> • Support for donor and govt. liaison <ul style="list-style-type: none"> a) Presentation to finance minister b) Identify opportunities e.g. private foundations, donor programs • Assist members with <ul style="list-style-type: none"> a) Cabinet Options paper b) Project proposals c) Contracts & private sector involvement • Guidelines, case studies & region's good practice 	<ul style="list-style-type: none"> • Quantify all costs of waste system • Work with SPREP on <ul style="list-style-type: none"> a) funding alternatives b) submissions to donors c) project proposals to donors • Ensure waste system is cost-effective as possible • Develop Cabinet Options paper

<p>3. Building public and political support for improved waste management will help both with financing and also reducing costs. Better communications is the key. Goal: Annual award for Pacific's most innovative waste community engagement</p>	
<p>1. Provide appropriate technical advice and information to support environmental education with</p> <ol style="list-style-type: none"> Waste Education Kit Teacher training Education for Sustainable Development Posters and colouring competitions <p>2. Raise waste profile with</p> <ol style="list-style-type: none"> Workshops for politicians & private sector Waste challenge between countries 19th SPREP Meeting country reports Public advocacy materials on benefits such as job creation, tourism & health benefits <p>3. Engage community and change behaviour</p>	<ul style="list-style-type: none"> • Form an Inter-agency committee to over-see waste • Engage community and change behaviour • Use SPREP to brief Ministers, senior administrators and private sector and help them prepare for the 19th SPREP Meeting country reports • Liaise with education authorities to assist them to incorporate Waste Education Kit into the curricula • Ensure "Country Profile" template is circulated to relevant agencies to prompt engagement • Raise waste profile with Clean-up programs, etc.

<p>4. Bulky waste like cars, tyres and white goods are taking up significant space in landfill or just rusting in place (RIP), breeding mosquitos and discouraging tourism. These can be recycled and provide some economic opportunities as well as cleaning up & reducing health costs, now that the metal price is high. Goal: Legacy wrecks removed & sustainable recycling programs commenced.</p>	
<ul style="list-style-type: none"> • Develop pilot project for possible French support on recycling organics on atolls • Explore opportunities for sub- & regional <ol style="list-style-type: none"> Collection projects Model contracts Shared infrastructures Model business plans • Develop <ol style="list-style-type: none"> Deposit and refund legislation a directory of recyclers & contacts • Assist with <ol style="list-style-type: none"> Feasibility studies Inventories of types and volumes Commercial negotiations 	<ul style="list-style-type: none"> • Decide whether you wish to be considered to participate in French project • Decide whether you wish to be considered to participate in French project • Identify a project control group and a suitable date for a commencement workshop & Contact SPREP for scheduling • Brief Minister on success of deposit refund system of recycling • Liaise with private sector (importers, spare parts and scrap recyclers) on their needs • Send SPREP information and data on system in your country

5. National Solid Waste Strategies are needed to communicate to direction and government policies to the rest of Government, the private sector, the public and donors.

Goal : By 19th SPREP meeting in Sept, 2008, all members should have a National Waste Strategy formally adopted by their government to guide planning.

<ul style="list-style-type: none"> • Continue support to members in drafting <ul style="list-style-type: none"> a) Hold workshops to develop NSWMS b) Put template and guideline on website c) Assist integration with RSWM Strategy • Link with capacity building and training • Assist members to include financing • Integrate with regional and in-country institutions 	<ul style="list-style-type: none"> • Request assistance from SPREP • Ensure disaster waste is included in Disaster Management Plans • Link Nat. Strategy to other relevant waste related strategies including medical waste strategy and NIPs • Integrate with regional and in-country institutions
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6. Training and Capacity Building remains essential to sustained progress and a positive career path for professionals.

Goal: a post-graduate course in waste and related skills available at Pacific tertiary institutions

<ul style="list-style-type: none"> • Continue with national, sub and regional training courses • Increase skill levels with <ul style="list-style-type: none"> a) Use projects to deliver training in waste & general skills (project & staff management) to in-country project control groups & train the trainer b) Inter-country attachments – mentoring scheme c) Integrate with regional and in-country institutions (e.g., Customs, Uni’s, Tech Colleges.) • Develop waste management as preferred career <ul style="list-style-type: none"> a) IWMA accreditation b) Waste network c) International volunteers • Circulate a newsletter to share Data & research 	<ul style="list-style-type: none"> • Identify suitable project to be used for capacity building workshops and program. • Develop a project control group covering the appropriate stakeholders • Identify individuals wishing to up-grade their formal qualifications • Contact SPREP with proposal in early 2008
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7. Electronic wastes are growing in volumes and represent both a bulky and sometimes toxic waste.

Goal: Create a system for collection and safe disposal of e.waste in at least one PICT.

<ul style="list-style-type: none"> • Support members in drafting <ul style="list-style-type: none"> a) Hold workshops to develop e-waste component of the NSWMS b) Put template and guideline on website c) Assist integration with RSWM Strategy • Link with capacity building and training • Assist members to include financing through existing national and regional recycling initiatives • Integrate with regional and in-country institutions • Disseminate results/reports of the regional e-waste project • Explore opportunities for sub- & regional <ul style="list-style-type: none"> a) Collection projects b) Model contracts c) Shared infrastructures d) Model business plans • Develop <ul style="list-style-type: none"> a) Deposit and refund legislation b) a directory of recyclers & contacts • Assist with <ul style="list-style-type: none"> a) Feasibility studies b) Inventories of types and volumes c) Commercial negotiations 	<ul style="list-style-type: none"> • Undertake a desk top survey of e-waste information and inventories including a review and compilation of e-waste information at the national level • Undertake field work and surveys (estimates) to: <ul style="list-style-type: none"> a) prepare and carry out surveys (estimates) of e-waste generators b) prepare and carry out surveys (estimates) of e-waste collectors, handlers and storages facilities etc c) plan and perform e-waste collecting and recycling visits d) collect all the data and analyse them and prepare a national report on the field work and surveys • Evaluate the national data on import and export of e-waste including: <ul style="list-style-type: none"> a) Review and compilation of national data b) Preparing and carrying out surveys (estimates) of customs officers and studying the information management systems c) collecting all the data and analyse to prepare a national report on the import and export of e-waste
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8. Waste Oil, while not a “solid” waste, is clearly a serious pollution threat for PICTs. Much is stored or disposed of inappropriately in the absence of alternatives.

Goal: The extent of the problem and management options are documented.

<ul style="list-style-type: none"> • Liaise with SOPAC on sub or regional strategy • Collate existing information of current and potential volume of fuel/oil importation from PICT’s. • Also provide information of waste oil collection volumes for current treatment schemes. • Collate existing information from PICT’s of current and potential waste oil recovery and treatment schemes. • Develop and recommend appropriate and innovative strategies to PICT’s to optimize existing waste reception, management and geographical locations whenever practicable and affordable. 	<ul style="list-style-type: none"> • Liaise with private sector to gather information for data collections: • Provide information on fuel/oil importation. • Provide information on waste oil collection volumes • Provide information on current waste oil treatment schemes
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9. Recycling can reduce waste to landfill but also provide both economic and social positives. The high transport costs mean the systems must be very cost-effective. SPREP has guidelines available on website & on “Rubbish is a Resource” DVD.
Goal: Sustainable recycling programs for at least aluminium, steel & PET in all PICTs

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| <ul style="list-style-type: none"> • Explore opportunities for sub- & regional <ol style="list-style-type: none"> a) collection projects b) Model contracts & business plans c) Shared infrastructures • Develop <ol style="list-style-type: none"> a) Deposit and refund legislation b) A directory of recyclers & contacts • Assist with <ol style="list-style-type: none"> a) Feasibility studies b) Inventories of types and volumes c) Commercial negotiations | <ul style="list-style-type: none"> • Develop laws requiring plastic identification numbers for containers • Brief Ministers on success of deposit refund system of recycling • Liaise with private sector (importers, spare parts & scrap recyclers) on needs • Send SPREP information and data on system in your country |
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10. Legislation and enforcement provides a level playing field for private enterprise but legislation without enforcement only rewards non-compliance – the exact opposite to the desired outcome. Enforcement is expensive so efficiency is vital.
Goal: Pollution prevention laws which are deterrent and enforceable in at least 3 PICs.

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| <ul style="list-style-type: none"> • Assist with <ol style="list-style-type: none"> a) Drafting b) Enforcement strategies c) Legal advice | <ul style="list-style-type: none"> • Determine specific goals and the on-going budget for enforcement • Send SPREP information on the effectiveness of existing laws, enforcement and capacity of institutions |
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11. Organics represent the majority of the waste to landfill. Garden waste, paper and cardboard are the source of most of the damaging leachate, greenhouse gases and odours. They also represent a valuable resource which should be composted and used in improving the produce & diets of the Pacific while reducing water & chemical use.
Goal: An integrated system of Diet improvement, home gardening and composting in at least 4 PICT's

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| <ul style="list-style-type: none"> • Develop pilot project for possible French support on recycling organics on atolls • Focus on possible products, their collection systems and uses • Develop a detailed “how to” guide • Identify pre-requisites for a successful system such as complementary home gardening • Produce an educational Pacific composting poster with banana circles and garden piles | <ul style="list-style-type: none"> • Decide on participation in French project • Identify a project control group and a suitable date for a commencement workshop • Increase contact with SPREP |
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12. Maintain Regional Solid Waste Strategy, Action Plan and co-ordination
Goal: A vibrant and widely used Waste Network and Forums

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| <ul style="list-style-type: none"> • Distribute 08/09 Action Plan • Ensure all information is on SPREP website • Encourage participation in Forum • Develop email network of waste professionals | <ul style="list-style-type: none"> • Use Action Plan for planning • Ensure action is widely distributed to waste stakeholders • Participate in Forum, network • Use SPREP website • Communicate successes & problems |
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