

REPORT ON

**TRAINING WORKSHOPS IN EFFECTIVE
MANAGEMENT OF HAZARDOUS MATERIALS,
HAZARDOUS WASTES AND CONTAMINATED SITES**

WORKSHOP REPORT

POHNPEI, FEDERATED STATES OF MICRONESIA

Submitted to :

South Pacific Regional Environment Programme
PO Box 240
Apia, Samoa

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ACRONYMS

AusAID	Australian Agency for International Development
DRC	Department of Resources and Conservation
EPA	Environmental Protection Agency
FSM	Federated States of Micronesia
HAZMAT	Hazardous Materials
JCB	Japanese Communications Building
PATS	Pacific Agricultural Training School
PCBs	Polychlorinated Biphenyls
PICs	Pacific Island Countries
POPs in PICs	Persistent Organic Pollutants in Pacific Island Countries
PPE	Personal Protective Equipment
SPREP	South Pacific Regional Environment Programme

1.0 INTRODUCTION

Management of hazardous materials, hazardous wastes and contaminated sites has become an increasingly important issue for Pacific Island Countries (PIC's). In 1997, AusAID, in conjunction with SPREP, implemented the Persistent Organic Pollutants in Pacific Island Countries project (POPs in PICs) to address this issue. As part of the POPs in PICs project, training workshops will be held in thirteen PICs to create awareness and understanding on the **effective management of hazardous materials, hazardous wastes and contaminated sites**.

A five day training workshop was held in Pohnpei during the period 12 to 16 March 2001, and was jointly attended by delegates from both Kosrae and Pohnpei. The workshop included interactive activities and exercises, site inspections and practical field demonstrations. The workshop was designed and delivered by Golder Associates under contract to SPREP with the following objectives:

- To upgrade Pohnpei's and Kosrae's capacity for the effective management of hazardous materials and hazardous waste;
- To upgrade Pohnpei's and Kosrae's capacity for effective management of contaminated sites;
- To encourage the development of specific strategies for managing hazardous materials in Pohnpei and Kosrae; and
- To raise awareness in Pohnpei and Kosrae communities of issues associated with the generation and management of hazardous wastes.

Prior to the workshop commencing, a Pre-Workshop Questionnaire was prepared and distributed to workshop participants. The purpose of the questionnaire was to obtain preliminary information on participants understanding of hazardous materials management and any desired workshop outcomes. No responses had been received at the time of preparing this report.

2.0 WORKSHOP PARTICIPANTS

2.1 Organisations Represented

A complete list of workshop participants is provided in Appendix A.

2.2 Organisations Not Represented

Several applicable organisations were unable to send a representative to the training workshop, including :

- Department of Education;
- Pohnpei Agriculture;
- Construction and Maintenance Division;
- Kolonia Town Government (in charge of aluminium recycling); and
- Department of Health Services.

3.0 MAJOR ISSUES IDENTIFIED

The following major in-country issues were agreed by workshop participants, in order of priority:

1. A lack of enforcement of existing environmental regulations;
2. Disposal of ship borne and bilgewater waste within bays and a lack of dockside waste receival facilities;
3. Imported goods cause a waste stream that remains on island; and
4. A lack of overseas markets for recyclable waste.

4.0 COUNTRY REPORT UPDATE

The following current information was obtained from participants and/or during site inspections:

- Pesticides formerly stored on-site at the Japanese Communications Building (JCB) have been removed to the adjacent agricultural storage shed. Signs of staining on floors and shelves are evident within the JCB where pesticides were formerly stored;
- Pesticides formerly stored at the PATS Agricultural Storage Shed have been removed and are now stored in the agricultural storage shed in Kolonia;
- A water tank in Danpei was imported from Enewatok following the 1950's nuclear testing program. Concerns have been raised regarding potential radiation contamination from former nuclear testing;

- Transformers and transformer oil stored at Kolonia Hospital have been removed, possibly to the power plant or landfill;
- Concern was raised regarding potential leaching of preservation chemicals from power poles. Reports of leaching into groundwater have been reported to a number of the workshop participants by the public and Government utility workers; and
- Approximately 300 used telecommunications lead acid batteries are located at the central Telecommunications depot and Kolonia Landfill. These batteries differ from car batteries being gel based rather than water based and are consequently difficult to drain and neutralise.

5.0 EVALUATION ISSUES

The following issues were noted in the daily workshop evaluation forms:

1. There is concern regarding radiation contamination and mitigation;
2. Further courses could be held to include more Government and business officials to participate;
3. Further information on suppliers of PPE and waste recycling facilities, as well as markets for disposal of various waste materials;
4. Include a recommendation that in the future, staff should be provided with training in safety and hazards management at relevant workplaces; and
5. Refresher courses would be useful to maintain training and further developments in hazardous waste management.

6.0 ACTION PLANS

6.1 General Action Plan

To address the identified major issues, during the workshop, participants developed and agreed to implement an Action Plan. A major initiative discussed by the participants involved the development of a “HAZMAT” (Hazardous Materials) Taskforce. The HAZMAT taskforce would be a key team in FSM consisting of representatives from the government, industry and private sector. The team would have a major role in initiating communications, awareness and enforcement of hazardous materials information and management plans. A copy of the Action Plan and organisations responsible for implementing each action, including the HAZMAT taskforce, is provided in Table 1 below.

Table 1 – General Action Plan for Pohnpei

ACTION	WHO	TIMELINE
Create HAZMAT taskforce	Attendees	July 2001
Post details of equipment supplier details on hazchems.com website	Environment Unit to seek assistance from SPREP	May 2001
Post details of recycling companies on hazchems.com web site	Golder	June 2001
Initiate hazardous materials management plan	HAZMAT Taskforce	March 2002
Create Contaminated Site Register based on POPs in PICs report	EPAs / DRC	September 2001
Create hazardous materials import / export database	National / State (Customs, Quarantine, Health, EPAs, DRC)	December 2001
Review, update or amend environmental regulations to improve enforcement ability	Heads of States / National EPAs, DRC and SPREP	March 2002
Publish bi-annual status report on status of POPs in PICs project (all phases)	Environment Unit to seek information from SPREP	September 2001
Develop hazardous materials information network in-country and regionally	HAZMAT Taskforce	September 2001
Initiate education program on hazardous materials and recycling in communities	EPAs / DRC / Education / HAZMAT Taskforce	April 2001
Provide examples of hazardous materials management plans	Environment Unit to seek assistance from SPREP	September 2001
Improve import regulations to include English translations on materials and health and safety training	HAZMAT Taskforce	March 2002
Initiate and update health and safety regulations	HAZMAT Taskforce	March 2002
Train-the-trainer programs in hazardous materials management	Environment Unit to seek assistance from SPREP	2002
Provision of suitable personal protective equipment (PPE)	HAZMAT Taskforce	March 2002

6.2 Action Plan for Existing Stockpiles

It was felt that control of existing stockpiles of hazardous waste material was reasonable given the level of technology available in country. Discussion of potential improvements to a stockpile of pesticides at the agricultural centre and of waste oil waiting recycling and/or incineration at the landfill facility and power station returned some commitments to improve storage within budgetary constraints.

7.0 RECOMMENDATIONS

Based on the training workshop outcomes, Golder Associates recommendations to achieve the defined project objectives in Pohnpei are outlined in Table 2 below.

Table 2 – Recommendations Arising From Workshop

RECOMMENDATION	RESPONSIBILITY
1. Initiate a hazardous materials management plan for Pohnpei.	HAZMAT Taskforce
2. Create a contaminated sites register for Pohnpei based on results of the POPs in PICs report and additional data attached to which is a database recording all hazardous material imported into the country.	EPA / National and State Customs and Quarantine Departments
3. Review and amend environmental regulations to improve enforcement ability by both the police and EPA officials.	Heads of State, EPA and FSM Department of Health, Education & Social Affairs, Environmental health Unit, FSM National Police
4. Post details of commercial companies who recycle waste materials in Asia, Australia and the USA.	Environment Unit to seek assistance from SPREP
5. Improve regulations to provide clear labelling of all imported material in English and provide safety training to the workforce	HAZMAT Taskforce, Pohnpei EPA, National and State Customs and FSM Quarantine Services
6. Provide train the trainer programs in hazardous materials management.	Environment Unit to seek assistance from SPREP

GOLDER ASSOCIATES PTY LTD

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APPENDIX A

Workshop Participants

WORKSHOP PARTICIPANTS

POHNPEI, FSM

<u>Name</u>	<u>Organisation</u>	<u>Position</u>
Kelly Samuel	FSM National Police	Law Enforcement Officer
Takasy T. Reim	FSM National Police	Law Enforcement Officer
John P. Wichep	FSM Quarantine Services	Plant and Animal Quarantine Coordinator
Matthias Mangmog	FSM Division of Marine Transportation	Marine Casualty Investigator
Maria Spegel	Pohnpei Waste Management Services	Electrician, Water Specialist
Elden Hellan	Pohnpei EPA	Executive Director
Saraphin James	Pohnpei Public Works, Transportation and Infrastructure	Construction Inspector
Rolston Tolenna	Micronesian Petroleum Company	Quality Inspector
Rullens Phillip	Pohnpei Utilities Company	Training & Safety Officer
Moses Pretrick	FSM Department of Health, Education & Social Affairs, Environmental Health Unit	Environmental Health Specialist
Bethany Black	Pohnpei EPA	Conservation, Education & Awareness
John Mooteb	FSM Department of Economic Affairs	Climate Change Coordinator

Facilitators:

Ken Gilbert	Golder Associates
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