

REPORT ON

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

WORKSHOP REPORT

KOSRAE, FEDERATED STATES OF MICRONESIA

Submitted to :

South Pacific Regional Environment Programme
PO Box 240
Apia, Samoa

DISTRIBUTION:

1 Electronic Copy - SPREP (Draft and Final)
5 Bound Copies - SPREP (Final copy only)
1 Copy - Golder Associates Pty Ltd

April, 2001

00639026(BS)

TABLE OF CONTENTS

SECTION	PAGE
1.0 INTRODUCTION.....	1
2.0 WORKSHOP PARTICIPANTS	1
2.1 Organisations Represented.....	1
2.2 Organisations Not Represented	1
3.0 MAJOR ISSUES IDENTIFIED	2
4.0 COUNTRY REPORT UPDATE	2
5.0 EVALUATION ISSUES	3
6.0 ACTION PLANS.....	3
6.1 General Action Plan	3
6.2 Action Plan for Existing Stockpiles	4
7.0 RECOMMENDATIONS.....	5

LIST OF TABLES

Table 1	General Action Plan for Kosrae
Table 2	Recommendations Arising from Workshop

LIST OF APPENDICES

Appendix A	Workshop Participants
------------	-----------------------

ACRONYMS

AusAID	Australian Agency for International Development
DRC	Development Review Commission
EPA	Environmental Protection Agency
FSM	Federated States of Micronesia
HAZMAT	Hazardous Materials
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 Kosrae's and Pohnpei's capacity for the effective management of hazardous materials and hazardous waste;
- To upgrade Kosrae's and Pohnpei's capacity for effective management of contaminated sites;
- To encourage the development of specific strategies for managing hazardous materials in Kosrae and Pohnpei; and
- To raise awareness in Kosrae and Pohnpei 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

All organisations that expressed an interest in attending the workshop were present.

3.0 MAJOR ISSUES IDENTIFIED

Management of the following hazardous materials and hazardous wastes, was identified by workshop participants as being of major concern in Kosrae:

1. Medical Waste;
2. Car Batteries;
3. Waste Oil;
4. Transformer Oil;
5. Pesticides;
6. Photo Processing Chemicals;
7. Car Bodies; and
8. Alkaline Batteries.

4.0 COUNTRY REPORT UPDATE

The following current information was obtained from participants during the workshop:

- A number of municipality landfills were not identified or recorded during the Phase 1 POPs in PICs survey. Participants have indicated that there may be hazardous chemicals located in many of these landfills;
- Stores of waste oil and / or land contaminated by waste oil being spilled or discharged to ground is an issue at many municipality depots;
- Small stockpiles of waste oils and antifouling and / or rust proofing paint are stored on the site at the Kosrae Harbour;
- Surplus asphalt left over from a number of different road projects is located at various locations around the island; and
- Several marinas located around the island contain small stockpiles of used oil and rubbish.

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 Kosrae

ACTION	WHO	TIMELINE
Create HAZMAT taskforce	Attendees	July 2001
Post details of equipment supplier details on hazchems.com website	Golder	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)	EnvironmentUnit 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	EnvironmentUnit, to seek assistance from SPREP	2002
Provision of suitable personal protective equipment (PPE)	HAZMAT Taskforce	March 2002

6.2 Action Plan for Existing Stockpiles

Development of specific action plans for existing stockpiles in Kosrae was difficult given the small number of representative delegates and inability to visit sites discussed. However, based on discussions with delegates present, it was felt that control of existing stockpiles of hazardous waste and hazardous materials was reasonable given the level of technology available in country.

7.0 RECOMMENDATIONS

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

Table 2 – Recommendations Arising From Workshop

RECOMMENDATION	RESPONSIBILITY
1. Initiate a hazardous materials management plan for Kosrae.	HAZMAT Taskforce
2. Create a contaminated sites register for Kosrae 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 SPREP
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, EPA, National and State Customs and FSM Quarantine Services in conjunction with Golder
6. Provide train the trainer programs in hazardous materials management.	Environment Unit to seek assistance from SPREP

GOLDER ASSOCIATES PTY LTD

Ken Gilbert
Workshop Facilitator

Allan Boase
Project Manager

I:\NTSERVER1\DATA\OVERSEAS.00\00639026_SPREP\39026RBS_FINAL_KOSRAE.DOC

APPENDIX A

Workshop Participants

WORKSHOP PARTICIPANTS

DELEGATES FROM KOSRAE ATTENDING WORKSHOP IN POHNPEL, FSM

<u>Name</u>	<u>Organisation</u>	<u>Position</u>
Thansley R. Kinere	Kosrae Dept. of Public Works	Equipment Supervisor
Katchuo William	Kosrae Dept of Health Services	Health Inspector/Sanitarian
Ishmael L. Lebehn	FSM Dept of Economic Affairs	Program Manager
Larson Livae	Development Review Commission	Administrative Officer
Andy George	Development Review Commission	Project Development Coordinator
Timothy Timothy	Kosrae Utilities Authority	Administrative Manager
Rooston Abraham	Fisheries Development Division	Fisheries Specialist

Facilitators:

Ken Gilbert	Golder Associates
-------------	-------------------