

REPORT ON

**TRAINING WORKSHOPS IN EFFECTIVE
MANAGEMENT OF HAZARDOUS MATERIALS,
HAZARDOUS WASTES AND CONTAMINATED SITES
WORKSHOP REPORT
YAP, FEDERATED STATES OF MICRONESIA**

Submitted to :

South Pacific Regional Environment Programme

PO Box 240

Apia, Samoa

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ACRONYMS

EPA	Environmental Protection Agency
FSM	Federated States of Micronesia
MRMD	-----
OPB	Office of Planning and Budget
PCBs	Polychlorinated Biphenyls
PICs	Pacific Island Countries
POPs in PICs	Persistent Organic Pollutants in Pacific Island Countries Project
PPE	Personal Protective Equipment
PW&T	Public Works and Transportation
SPREP	South Pacific Regional Environment Programme
TBA	To Be Announced
YMH	-----
YPS	Yap Power Station
YSPSC	Yap State Public Service Corporation

1.0 INTRODUCTION

Management of hazardous materials, hazardous wastes and contaminated sites has become an increasingly important issue for Pacific Island Countries (PICs). 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 delivered in **Chuuk, FSM** during the period 22-26, January 2001 for delegates from both Chuuk State and Yap State. The workshop included interactive activities and exercises, site inspections and practical field demonstrations. The workshops were designed and delivered by Golder Associates under contract to SPREP with the following objectives:

- To upgrade Yap's capacity for the effective management of hazardous materials and hazardous waste;
- To upgrade Yap's capacity for effective management of contaminated sites;
- To encourage the development of specific strategies for managing hazardous materials in Yap; and
- To raise awareness in Yap's 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. However no responses were received from workshop participants.

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 Planning and Statistics;
- Yap State Hospital;
- Department of Public Safety;

- Department of Public Works;
- Department of Education;
- Customs Department;
- Department of Public Health; and
- Members from the automotive industry.

3.0 MAJOR ISSUES IDENTIFIED

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

1. There is a need for **relocation and control over the existing landfill**.
2. There is a need for controlled local facilities for the **disposal of non-hazardous wastes**. It is important to ensure that hazardous wastes are restricted to designated hazardous waste storage areas and **separated from non-hazardous waste storage areas**.
3. There is a need to have the **draft pesticides regulations finalised** and put into action.
4. There is a need to **control imports** of hazardous chemicals.
5. There is a need for the enforcement of **proper worker safety training**.
6. There is a need to resume the **dismantling and removal of shipwrecks**, particularly those which contain hazardous wastes.
7. There is a need to administrate a **recycling facility** in association with the non-hazardous landfill.

4.0 COUNTRY REPORT UPDATE

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

- The pesticide storage site (Yap05) has deteriorated. The roof of the facility has partially collapsed causing leaks and flooding of the area. The drums are continuing to corrode and leak. Some of the contaminants have been moved to the EPA storage area;
- The Yap Power Station (Yap03) has installed an oil/water interceptor and commenced recycling of waste oil. There are 50 drums remaining from the original 148 drums of waste oil. Housekeeping practises on the site have generally improved.
- The Mobil Bulk Fuel Depot (Yap11) has made a number of improvements to its facility including containment structures, paving and fencing.
- The old airport (Yap06) site has deteriorated and the liquid asphalt has continued to spill and spread.
- The general municipal waste landfill (Yap02) site continues to deteriorate. The site contains a mixture of hazardous and non-hazardous wastes. There is no control of incoming wastes. The site is adjacent to a stream and approximately 2 km away from the ocean.

5.0 EVALUATION ISSUES

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

1. There is a need for first aid training and procedures to be implemented;
2. There was a request that Yap State be permitted to enter more participants in any future workshops.
3. There is a need to hold follow up workshops (ie. advanced management of hazardous materials training). There was also emphasis that the same participants should attend so that the participants are able to build on skills learned from the previous training.
4. There is a need for the improvement of legislation such that owners of hazardous chemicals are held responsible for the chemicals they use and import as well as the waste that they generate.
5. There is a need to keep the network and correspondence between participants active. As new information arises in terms of regulations being passed, systems put into action and new technical procedures being developed, the participants can draw on each other and avoid redundancy within FSM.

6.0 ACTION PLANS

6.1 General Action Plan

To address the identified major issues, during the workshop participants developed and agreed to implement the Action Plan shown in Table 1 below.

Table 1 – General Action Plan for Yap

ACTION	WHO	TIMELINE	STATUS
Coordinating and implementing the closing, relocating and control over the existing landfill and the hazardous and non-hazardous waste in the landfill.	OPB, EPA, Public Health, Foreign Experts	12/01	
Finalising the Draft Pesticide Regulations	OPB, EPA, Department of Agriculture	06/01	
Coordinating funding for testing and cleanup of existing stockpiles	OPB, EPB, YMH, PW&T	10/01	
Resuming the dismantling and clean up of shipwrecks	OPB, MRMD, EPA, PW&T, R/D	06/01	
Organising a central location for hazardous waste storage	OPB, EPA, Foreign Experts, PW&T	06/01	
Administration of a recycling facility in association with the landfill.	OPB, Department of Tourism, R/D	12/01	

ACTION	WHO	TIMELINE	STATUS
Identifying, labelling and classification of chemicals on contaminated sites	YSPSC	04/01	
Education of necessary staff and enforcement of the use of PPE	YSPSC	04/01	
Seeking of assistance and provision of awareness to the Local Traditional Leaders and Councils	EPA	07/01	

6.2 Action Plan for Existing Stockpiles

A proposed action plan to manage existing stockpiles of hazardous materials was developed by participants, following the site inspections, as shown in Table 2.

Table 2 – Action Plan for Existing Stockpiles

SITE NO.	SITE ACTIVITY	PROBLEMS	ACTION	RESPONSIBILITY
Yap02	Yap Landfill	Uncontrolled spills and poor housekeeping	<ul style="list-style-type: none"> • Relocation of Landfill; • Implementation of site management practises; • Remediation of hazardous waste spills; and • Informing receptors (neighbouring residents) of hazards in the area. 	EPA, OPB, Public Health

7.0 RECOMMENDATIONS

Based on the training workshop outcomes, Golder Associates recommendations to achieve the defined project objectives in Yap are outlined in Table 3 below.

Table 3 – Recommendations Arising From Workshop

RECOMMENDATION	RESPONSIBILITY
1. Upgrade coverage of hazardous materials regulations (ie. imports, transportation, storage, handling, use and disposal).	Customs, EPA,
2. Undertake a public awareness campaign in 2001 to raise awareness of chemicals.	Education, EPA
3. Prepare an induction training module on chemicals safety for Yapese workers.	TBA
4. Set up a central location for hazardous materials distribution or storage site for Yap. Arrange for central purchasing of chemicals.	EPA
5. Establish a local chemicals information clearing house to support chemicals' users and allow site management plans to be developed.	EPA, Public Health
6. Implement first aid training specifically for exposure to hazardous materials.	TBA
7. Establish measures of enforcing existing regulations (ie. pesticides regulations once they are finalised)	EPA

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APPENDIX A

Workshop Participants

WORKSHOP PARTICIPANTS

YAP, FSM

Name

Organisation

Workshop Participants (18)

Julita Albert	Chuuk State, EPA
Kulian William	Chuuk State, Fire Division
Nathan Leedy	Chuuk State, EPA
Herry Silo	Chuuk State, Disaster Control Office
Ismael Mikel	Chuuk State, Department of Agriculture
Saimon Refit	Chuuk State, Department of Agriculture
Troy Larsen	Chuuk State, Department of Agriculture
Tarsis Takasy	CPUC
Mercy D. Sos	Chuuk State, EPA
Abdon S. Martam	Yap State, EPA
Elmud Yleizzle	Chuuk State, EPA
Aloysius Wag	Yap State, Environmental Health
Laurence Yug	Yap State, Environmental Health
Leonard D. Yinug	Yap State, EPA
Sichimichy Kichiro	Chuuk Transport
Francis Falan	Yap State Public Utilities Corporation
Herbert Osawa	Chuuk State, EPA
Curtis Sos	Chuuk State, EPA

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