



Training Module

***Closing an Open Dumpsite and Shifting from
Open Dumping to Controlled Dumping and to
Sanitary Land Filling***



UNITED NATIONS ENVIRONMENT PROGRAMME

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to Controlled Dumping and to Sanitary Landfilling

PREFACE

Managing solid waste is one of the most daunting tasks for local governments worldwide. It is complicated by the failure to properly manage the continuing increase in waste generation, on one hand, and the decreasing availability of space for waste disposal, on the other. Failure to properly manage solid waste not only affects political careers, but also devalues land and, most importantly, contributes to communicable diseases. In spite of its crudeness and the health hazards, open dumping in pits, vacant lands, or water bodies has become a prevalent practice in developing countries because it is initially less expensive and easier than adopting an environmentally sound waste disposal system. Much progress has been attained in reducing the volume of waste that go to the disposal facilities through waste reduction, recovery, recycling and other programmes, but the residual wastes invariably end up in an open dumpsite.

Notwithstanding the constraints confronting local authorities, for the sake of human health and welfare, natural resources, especially land and freshwater, open dumpsites should not be allowed as a public facility. It is a matter of national policy that dumpsites be closed because of the adverse effects on society and the environment. It is incumbent upon both national and local authorities to adopt better and environmentally sound waste disposal methods by shifting from their current policy and practice of open dumping to controlled dumping and transition to sanitary landfilling. The sooner governments, especially at the local level, make and implement this decision, the sooner their towns and cities will enjoy sound waste management and disposal, and the less the risks will be to the health and lives of their communities.

A policy shift from open dumping to sanitary landfilling has implications on local preparedness to operate and manage a landfill as well as how the current dumpsites will be abandoned. Consequently, there is a need to build and enhance the technical and management capacities of local authorities. In recognition of this need and as part of the United Nations Environmental Programme's (UNEP) global effort to promote environmentally sound technologies, the International Environmental Technology Centre (IETC), develops training programmes for capacity building. This publication is a Training Module on Solid Waste Management designed especially for local authorities and their staff.

This Training Module has two parts, which are complementary:

- (1) How To Decommission or Close an Open Dumpsite in an Environmentally Sound Manner, Including Rehabilitation and Redevelopment
- (2) How To Shift from Open Dumping to Controlled Dumping and Eventually into Sanitary Landfilling.

The two parts have been combined into one training package since they refer to consequential activities that should not be treated independent of each other; many of the basic principles carry forward from one method to the next.

The Training Module is intended to provide local authorities with the basic knowledge and understanding of the skills required to close dumpsites and shift to controlled dumping and to sanitary landfilling so that they can make good policy analyses and informed decisions. Local chief executives, city or municipal planning officers, solid waste managers, landfill engineers and other decision makers involved in solid waste management will find the fundamental activities, procedures and recommendations necessary to make this transition and address their local situation.

This Training Module is a joint publication of UNEP-IETC and the Department of Environment and Natural Resources (DENR) of the Philippines. It is the result of a recommendation from the ASEAN Regional Workshop on Solid Waste Management, held at Clark Field, Pampanga, Philippines, in September 2001, and co-organized by UNEP-IETC and DENR.

This Training Module is not intended for use as reference or basis for designing a landfill facility. The services of a competent and professional landfill engineer should be engaged for such a purpose.

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LIST OF ACRONYMS

ASSHTO	American Society of State Highway Transportation Organization
COD	Chemical Oxygen Demand
DTIE-IETC	Division of Technology, Industry and Economics-International for Environmental Technology Centre
DENR	Department of Environment and Natural Resources
EnRA	Environmental Risk Assessment
EPM	Environmental Planning and Management
ESD	Environmental and Sanitation Division
GSO	General Services Office
LGUs	Local Government Units
MRF	Materials Recovery Facility
ROAP	Regional Office for Asia and the Pacific
SDS	Total Dissolved Solids
SWAPP	Solid Waste Management Association of the Philippines
SWM	Solid Waste Management
TOC	Total Organic Carbon
UNCHS	United Nations Centre for Human Settlement
US-AEP	United States-Asia Environmental Partnership

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