



**Solid Waste Management & Resource Mobilization Center (SWMRMC)**

# **Solid Waste Management Technical Guideline for Municipalities of Nepal**



Government of Nepal  
Ministry of Local Development  
Solid Waste Management & Resource  
Mobilization Center

# **SOLID WASTE MANAGEMENT TECHNICAL GUIDELINE FOR MUNICIPALITIES OF NEPAL**



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## Foreword

As per the Local Self-Governance Act, the municipalities of Nepal have been conducting the Solid Waste Management (SWM) activities within their jurisdiction which are so far limited to street sweeping, waste collection, transportation and final disposal. For effective and sustainable SWM, however, the activities related to 3R (Reduce, Reuse and Recycle) along with proper treatment of the waste are required for ensuring the decent sanitary conditions of the people and environment as a whole.

Owing to the rapid growth of population and unplanned urbanization, SWM has emerged as a serious environmental issue for local bodies. To confront with this problem, high priority should be accorded to SWM activities. In this connection, Ministry of Local Development (MLD) has already submitted a new legislation on SWM to the Parliament. Furthermore, MLD has been encouraging the municipalities to implement SWM activities, particularly for developing the landfill sites by providing substantial amount of assistance through the Local Development fund called "Reserve Fund" being operated under MLD.

In this regard, it is hoped that the Solid Waste Management Technical Guideline for Municipalities of Nepal, prepared by SWMRMC with the support of UN-HABITAT, will be helpful for municipal staffs and other concerned organizations to understand the basics of SWM system and implement it into their working fields as far as practicable within local conditions. This Guideline will help the concerned institutions perform their task effectively for the betterment of the people and the beautification of the city.

My sincere gratitude goes to the UN-HABITAT for supporting to develop this Guideline. MLD also looks forward to receiving similar support from UN-HABITAT in the future.

**Krishna Gyawali**  
Secretary  
Ministry of Local Development  
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## Foreword

Solid waste generation and management is closely related to human living that has followed humanity through its various phases of development. Solid Waste Management (SWM) is one of the high priority service sectors of local governments especially in urban areas of Nepal. The task is continuously growing as extensively heavier and costlier every year in all towns and municipalities due to uncontrolled urbanization, desegregated wastes, social political conflicts and lack of sound waste management laws, policies and practices.

The policy of decentralizing solid waste management authority and service delivery responsibility to the local bodies has been institutionalized through the Local Self Governance Act (LSGA) 2055. Under the Act, municipalities are responsible for collection, transportation and final disposal of solid waste within their territory.

In response to LSGA, municipalities have been conducting SWM activities like street sweeping and collection and final disposal of wastes in dumping and landfill sites. However, due to the lack of policy guideline and inadequate financial, technical and human resources, scientific sustainable and environmentally friendly utilization of waste involving appropriate and technologies is still a for cry. Hence, it has become highly essential to make proper policy guidelines and build municipal capacity for effective and sustainable solid waste management.

In order to provide basic and advanced solid waste management services to the public and also to save environment from degradation, waste management services provided by municipalities required simple and effective legislation and guidelines as well as enforcement mechanism. The policy and legislation should clearly identify the responsibilities of the concerned stakeholders including the government organizations, municipalities and communities and as well the private sector etc.

It is in this context that Solid Waste Management and Resource Mobilization Center is publishing the 'Solid Waste Management Technical Guideline for Municipalities of Nepal'. I believe that this Guideline will be helpful for the municipal staff and other stakeholders in dealing with solid waste management activities.

The Guideline is prepared with the technical support of UN-HABITAT and I would like to extend my sincere thanks to them for their cooperation, hoping that such kind of cooperation will continue in the future also.

**Dr Sumitra Amatya**

General Manager  
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## Foreword

With the rapid urbanization in the world, Solid Waste Management has emerged as one of the major challenges of urban authorities of developing countries. Solid Waste Management is one of the core responsibilities of urban authorities. However, the challenge is triggered more due to the rapidly increasing volume of waste, insufficient availability of resources, expertise, and management mechanisms leading towards threatening the health of urbanites and urban environmental pollution. Municipalities of Nepal is also encountering the same challenges in regards of Solid Waste Management.

Although, few municipalities have developed innovative approaches to manage waste through effective participation of Local Communities and Private Sector but the challenge is to guide municipalities for effective and sustainable management of generated solid waste in environmentally friendly manner.

There are various national policies that have mandated municipalities for managing solid waste but no technical guidance in this field is reflected. Thus, in partnership with Ministry of Local Development / Solid Waste Management and Resource Mobilization Center "Solid Waste Management Technical Guidelines for Municipalities of Nepal" has been developed to provide basic guidance on general principles for managing urban Solid Waste.

In this regard, I believe that this technical guideline on municipal solid waste management will assist the policy makers and especially municipalities of Nepal to practise appropriate solid waste management system promoting local technologies. I also believe that this guideline serves as a valuable reference to the municipalities of Nepal that reflects practical steps for planning and implementing integrated solid waste management more effectively and efficiently.

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# CONTENTS

<b>1.0 INTRODUCTION</b>	<b>7</b>	<b>6.8 Landfill Closure</b>	<b>36</b>
1.1 Urban Environment in Nepal	7	6.9 Environmental Monitoring	36
1.2 Solid Waste & its Management	8	6.10 Case Study: Karauti Danda Landfill: A Model Local Initiative	37
1.3 Solid Waste Management in Nepal	9	6.11 Summary of Activities for Step 5	39
1.4 Objectives	10		
1.5 Organization of These Guidelines	10		
<b>STEP 1:</b>		<b>STEP 6:</b>	
<b>2.0 ASSESS EXISTING SITUATION ON GENERATION AND MANAGEMENT OF SOLID WASTE</b>	<b>11</b>	<b>7.0 ESTABLISH A SYSTEM FOR SPECIAL &amp; HAZARDOUS WASTE MANAGEMENT</b>	<b>40</b>
2.1 Waste Generation Rate	11	7.1 Generation of Hazardous Waste	40
2.2 Waste Characteristics	12	7.2 Management of Health Care Waste	40
2.3 Assessment of Waste Management System	13	7.3 Guidelines for Health Care Waste Management	40
2.4 Summary of Key Activities for Step 1	14	7.4 Steps for Effective Health Care Waste Management	42
<b>STEP 2:</b>		7.5 Management of Industrial Waste	43
<b>3.0 PREPARE PLANS FOR INTEGRATED SOLID WASTE MANAGEMENT SYSTEMS</b>	<b>15</b>	7.6 Management of Construction and Demolition Debris	43
3.1 Why Plan?	15	7.7 Case Study: Health Care Waste Management in Hetauda	43
3.2 Integrated Solid Waste Management	15	7.8 Management of Animal Waste	44
3.3 Hierarchy of ISWM	16	7.9 Management of Dead Animals	44
3.4 Integrated Sustainable Waste Management	16	7.10 Summary of Activities for Step 6	44
3.5 Planning for ISWM	17		
3.6 Strategic Planning	17	<b>STEP 7:</b>	
3.7 Operational Planning	18	<b>8.0 MOBILIZE LOCAL COMMUNITIES</b>	<b>45</b>
3.8 Summary of Key Activities for Step 2	19	8.1 Objectives of Community Mobilization	45
<b>STEP 3:</b>		8.2 Tools for Community Mobilization	45
<b>4.0 DESIGN AND IMPLEMENT AN EFFECTIVE WASTE COLLECTION SYSTEM</b>	<b>20</b>	8.3 Guidelines for Community Mobilization and Participation	45
4.1 Waste Separation & Storage at Source	20	8.4 Summary of Activities for Step 7	47
4.2 Waste Collection System	20	<b>STEP 8:</b>	
4.3 Equipment for Waste Collection and Transportation	21	<b>9.0 ENCOURAGE PRIVATE SECTOR PARTICIPATION</b>	<b>48</b>
4.4 Sweeping of Streets and Public Places	21	9.1 Types of Private Sector Participation	48
4.5 Waste Transportation	23	9.2 Risks Associated with Private Sector Participation	49
4.6 Waste Transfer	23	9.3 Process of Involving Private Sector	49
4.7 Planning and Implementing Efficient Waste Collection Systems	23	9.4 Role of Municipality in PSP	50
4.8 Summary of Key Activities for Step 3	25	9.5 Summary of Activities for Step 8	51
<b>STEP 4:</b>		<b>STEP 9:</b>	
<b>5.0 MAXIMIZE WASTE REDUCTION, COMPOSTING AND RECYCLING</b>	<b>26</b>	<b>10.0 STRENGTHEN INSTITUTIONAL FRAMEWORK</b>	<b>52</b>
5.1 Waste Reduction	26	10.1 Organizational Structure	53
5.2 Principles of Waste Composting and Recycling	26	10.2 Human Resource Management	53
5.3 Recycling of Inorganic Waste	27	10.3 Information Management	53
5.4 Recycling of Organic Waste	27	10.4 Summary of Activities for Step 9	54
5.5 The Process of Composting of Organic Waste Involves	28	<b>STEP 10:</b>	
5.6 Guidelines for Preparing Waste for Composting	28	<b>11.0 STRENGTHEN FINANCIAL MANAGEMENT FOR SWM</b>	<b>55</b>
5.7 Guidelines for Making Compost from Waste	29	11.1 Cost of SWM	55
5.8 Marketing Compost	30	11.2 Improving Cost Effectiveness	55
5.9 Summary of Key Activities for Step 4	31	11.3 Financing Solid Waste Management	56
<b>STEP 5:</b>		11.4 Financial Management	57
<b>6.0 DEVELOP AND OPERATE SANITARY LANDFILL FOR NON-RECYCLABLE WASTE</b>	<b>32</b>	11.5 Summary of Activities for Step 10	57
6.1 Controlled dumping	32	<b>12.0 References</b>	<b>58</b>
6.2 Sanitary landfill	33	<b>13.0 For Further Information</b>	<b>59</b>
6.3 Site Selection for Sanitary Landfills	34	<b>14.0 Glossary*</b>	<b>61</b>
6.4 Development of a Sanitary Landfill	34	Annex 1: 15.0 Basic Data on Municipalities	64
6.5 Leachate Management	35	Annex 2: 16.0 Estimates of Waste Generation & Collection in Municipalities	66
6.6 Landfill Gas Management	35	Annex 3: 17.0 Example of a Proposal for 3 ton/day Community Compost Plant	68
6.7 Operation of a Sanitary Landfill	36	Annex 4: 18.0 Checklist for Feasibility Study of Public Private Partnership Projects	71

## Abbreviations

BCC	Behaviour Change Communication
BOD	Biochemical Oxygen Demand
CBS	Central Bureau of Statistics
CDM	Clean Development Mechanism
COD	Chemical Oxygen Demand
EIA	Environmental Impact Assessment
EM	Effective Microorganisms
HDPE	High Density Polyethylene
IEC	Information, Education and Communication
IEE	Initial Environmental Examination
ISWM	Integrated Solid Waste Management
LDPE	Low Density Polyethylene
PE	Polyethylene
PET	Polyethylene Teraphthalate
PVC	Polyvinyl Chloride
MLD	Ministry of Local Development
MSW	Municipal Solid Waste
NGO	Non Government Organization
NPC	National Planning Commission
SWM	Solid Waste Management
SWMRMC	Solid Waste Management and Resource Mobilization Centre
SWOT	Strength, Weakness, Opportunities and Threats
TNA	Training Needs Assessment

## List of Tables

Table 1.1:	Urbanization in Nepal
Table 4.0:	Equipment for waste collection and transportation
Table 5.0:	Comparison of different levels of composting
Table 6.0:	Controlled Dump and Sanitary Landfill
Table 8.0:	Strategies for Various Stages in Behaviour Change Communication

## List of Figures

Figure 1.1:	Public Opinion on Main Environmental Problems in Urban Areas
Figure 1.2:	Waste Generation, Recycling & Disposal
Figure 2.2:	Composition of Waste in Nepal
Figure 3.3:	ISWM Hierarchy
Figure 3.4:	Integrated Sustainable Waste Management Model
Figure 3.6:	Planning Hierarchy
Figure 4.6:	Split Level Transfer Operation
Figure 5.2:	Recycling of Materials
Figure 6.2:	Sanitary Landfill
Figure 6.9:	Process of Landfill Development and Operation
Figure 8.0:	Stages of Behaviour Change
Figure 9.0:	Recommended Process for Private Sector Participation in SWM
Figure 10.0:	Elements of Organizational Capacity Building

