

Waste Management during the COVID-19 Pandemic

From Response to Recovery



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Foreword by Mr. Keith Alverson

The COVID-19 pandemic is posing enormous challenges at every level of society and across economic sectors. Despite occasional rhetoric to the contrary, there is never a simple trade-off between health care concerns and economic ones. Rather, there are many actions to take across a wide health care and economic spectrum that deliver positive outcomes with regard to both COVID-19 as well as social and economic resilience. For solid waste management, municipalities are faced with the challenge of continuing essential services of waste collection and management while at the same time accounting for growing streams of potentially infectious waste, and protecting the lives of formal and informal workers. One of the primary messages from UNEP is to use existing waste management systems to their fullest, whenever possible. There's an old saying in emergency management: "disaster is the wrong time to exchange business cards", similarly in the midst of a pandemic is usually the wrong time to try to install new health care waste management systems and practices from scratch.

This said, the COVID-19 pandemic disaster, unlike earthquakes or tropical storms, will not be over in a matter of hours or days. It will be with us for another year at least, and possibly for several more years. Indeed, we face the inevitability of localized additional natural disasters occurring during the pandemic, multiplying waste management challenges. Thus, in addition to addressing immediate concerns, there is also an opportunity, over the longer term, to improve waste management systems and build a better future in light of lessons being learned today. We hope that this publication, with its combined 'desk review' of international guidelines alongside country level 'facts on the ground' survey responses, will provide some guidance and practices for municipalities, particularly in developing countries, as they deal with urgent concerns, and building more resilient cities for tomorrow.



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Foreword by Mr. Kazunobu Onogawa

COVID-19 has had a serious impact on all parts of our society, and waste management is no exception. Waste management in developing countries is usually not operated in accordance with international standards, and so there have been additional difficulties with an increased amount of potentially infected waste which requires additional, careful handling and treatment processes.

International organizations and academic associations have already issued guidelines for infectious waste management. However, many of those guidelines target both developed and developing countries, and only a few guidelines are prepared specifically in response to the current condition of COVID-19 waste management in developing countries. The state of waste management in those countries differs from that in developed countries, and it is difficult to apply developed countries guidelines as they are. Particularly, developing countries lack capacity in terms of financial, technical, social, and institutional aspects.

In addition, many of the available guidelines have been developed when society is under normal conditions, rather than in the midst of a pandemic. Guidelines prepared under such conditions usually focus on the technical parts of waste management without paying sufficient attention to the potentially confused state of society hit by a pandemic. The already limited capacity of waste management in developing countries is further affected by COVID-19 waste which requires additional careful consideration and operation.

Developing countries have to react to COVID-19 under such conditions and need to find an answer for themselves. It is not an easy task to find a universal landing point between desirable goals and affordable ones, and that is why setting individual goals is left to the decisions of respective governments and municipalities.

This report is unique in that it highlights communications with governments and municipalities of developing countries as we collect real information on the ground. While international guidelines are usually targeting final goals, this report aims to compile information on the technologies and institutional arrangements currently employed in developing countries.



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Referring to the 17 guidelines suggested by international organizations and other authorities, we have communicated with 14 developing countries around the world with regards to 29 of their national regulations and compiled their responses and information in this report. Our objective is to share this real information with countries seeking such information for their decision-making process. Observations from leading experts based in developing countries, and who are familiar with the real situation of waste management in those countries are another important contribution to this report.

There is often a large gap between what is discussed and what is implemented in the area of waste management. The question is how to fill this gap, and that is what we intended to share in this report. What we need are practical ideas and examples on how to handle situations under the disastrous conditions caused by the current COVID-19 pandemic.

We hope this report will serve as valuable information for consideration and development of action plans in developing countries and economies in transition, so that they can better handle healthcare waste management generated by COVID-19.

Mr. Kazunobu Onogawa
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Abbreviations

ADB	Asian Development Bank
BAT	Best Available Technique
CBTF	Common biomedical waste treatment facility
CCET	IGES Center Collaborating with UNEP on Environmental Technologies
CIMT	Centre for IMT-GT Subregional Cooperation
COVID-19	Coronavirus disease 2019
CDC	Centers for Disease Control and Prevention (CDC)
IGES	Institute for Global Environmental Strategies
HCWM	Healthcare Waste Management
ISWA	The International Solid Waste Association
OSH	Occupational safety and health
MSWM	Municipal solid waste management

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