

# COVID-19 PANDEMIC, HANDLING WASTE -

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### Introduction

The Solid Waste Sector is considered an essential service.

Increase in the generation of COVID-19 wastes that will require safe handling, collection, transport and final disposal.

Studies have shown that the COVID-19 virus can survive from 2 – 8 hours on aluminum, 4 days on glass, 4 – 5 days on paper, 5 days on plastics, 2 days on wood and 8 hours on clothing.

Waste sector personnel and waste pickers are exposed to significant health risks; this may lead to shortage of personnel to provide services; exacerbated by the lack financial resources.

## IDB Support

# **Operations and Maintenance:**

- Financing for operational expenses (personnel, equipment..).
- Collection systems (trucks, containers..).
- Construction of final disposal or temporary sites.

# Attention to the health sector and vulnerable groups:

• Financing for portable plants, improvements to existing systems such as incinerators, autoclaves, controlled disposal in landfills, etc...

Emergency Plans:

- Financing for personal protective equipment for collection crews, cleaning of containers, trucks and cleaning materials, micro-credits for recyclers.
- Communication plans on safe handling of waste.

# At the Household Level

### Communication plan on safe handling of waste:

- Regular households: good hygiene practices; washing and disinfecting bins.
- Households and organizations with confirmed COVID cases and persons on quarantine:
  - ©Contaminated waste such as disposable wipes, napkins, paper towels, etc. should be placed in a separate bag.
  - When ¾ full, tie this bag and place it in a second bag, identification is critical.
  - On general, all waste treated as COVID-19 waste.

Setting out waste, ensure stray dogs can't access it.

Ongoing customer service and communication to the general public etc.

### Before work starts

Screening: temperature, fever coughing, etc.; > 55 years? Go through safety and hygiene measures with employee;

Issue PPEs: uniform, googles, gloves, face mask and boots.

# Collection and transportation

- Disinfect cabins of vehicles and heavy equipment at each change of shift or personnel.
- Collection crews should avoid contact with persons.
- Avoid direct contact with waste, especially at communal dirt boxes.
- Modify routes, collection frequency, shifts, crew size etc.
- MRFs operations should be suspended for the duration of the emergency.

- At end of each day vehicles and containers are to be washed and sanitized.
- At the end of the workday workers should shower and change before leaving for home.
- Transfer stations should be washed down at the end of the day.
- COVID-19 wastes are treated under the same protocols as infectious medical waste.
- COVID-19 waste need special collection in non-compacting vehicle; disinfect bins before loading.

### **Final Disposal**

- Weighbridge attendants should use gloves for ticketing.
- Establish a special working face with a trench or pit to co-dispose regular waste coming from zones with hospitals or quarantine areas.
- No waste picking should be permitted.
- Explain to the waste pickers about risks posed by COVID-Pandemic.

- Where possible implement social programs to assist the waste pickers.
- COVID-19 waste should be incinerated, autoclaved etc or disposed in an emergency cell separate from other waste.
- Access should be restricted to the cell and cover material 12" applied at the end of the day.



#### Municipal waste management and COVID-19 Summary of observed trends (March 2020)

In some

cases.

72 hours to

wait before

waste

disposal

### GENERAL ADAPTATIONS TO MUNICIPAL WASTE SYSTEM

Civic amenity sites, reuse/repair centres

Closure or service reduction

On-demand services (bulky, garden,...)

Interrupted or reduced



Household waste

Street and containers cleaning

Specific instructions and procedures



#### Staff

PPE and other safety & health measures

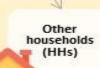
Fringe benefits (e.g. children services)



Relations with

Communication actions, offices closed, available by email/phone





#### SORTING RULES AT HOME

Masks, gloves, tissues and disposable cloths collected with mixed waste (in some cases tissues and handkerchiefs were before collected with bio-waste)



#### Mixed waste

Bin with pedal, 2 or more sealed bags, recyclables and biowaste with mixed waste



#### Recyclables, bio-waste

No source separation, households might be asked to keep at home for a certain amount of time WEEE, batteries, and other hazardous waste



#### Residual waste

Business as usualor 2 or more sealed bags



#### Recyclables, bio-waste

Business as usual, in case of temporary interruption of the service, households are invited to store at home dry recyclables

#### WASTE COLLECTION

Frequency collection modulated according to specific needs (staff shortages, health & safety measures reducing efficiency, mixed waste and biowaste prioritization)



Possibility of ad hoc services, keeping their waste separated from the municipal stream (specific containers)

Frequency of collection may need to be increased



#### Residual waste

Frequency of collection may need to be increased

#### WASTE TREATMENT

Derogation to the mandatory preliminary mixed waste treatment before its disposal may be needed (either by way of incineration or controlled landfill)

Treatment plant must rely as much as possible on automated systems

Review of storage permits may be needed (to safely treat waste without infectious load)



#### Mixed waste

Incineration prioritised; MBTs continue with business as usual when they are highly automated (minimum involvement of operators), or controlled landfill



#### Residual waste

Business as usual, prioritising automated systems or preliminary storage

During this period, the reporting for recycling targets might be modified according to the increase of mixed waste

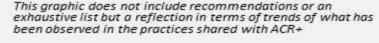
#### Recyclables, bio-waste

Business as usual, even if the frequency of collection may need to be reduced

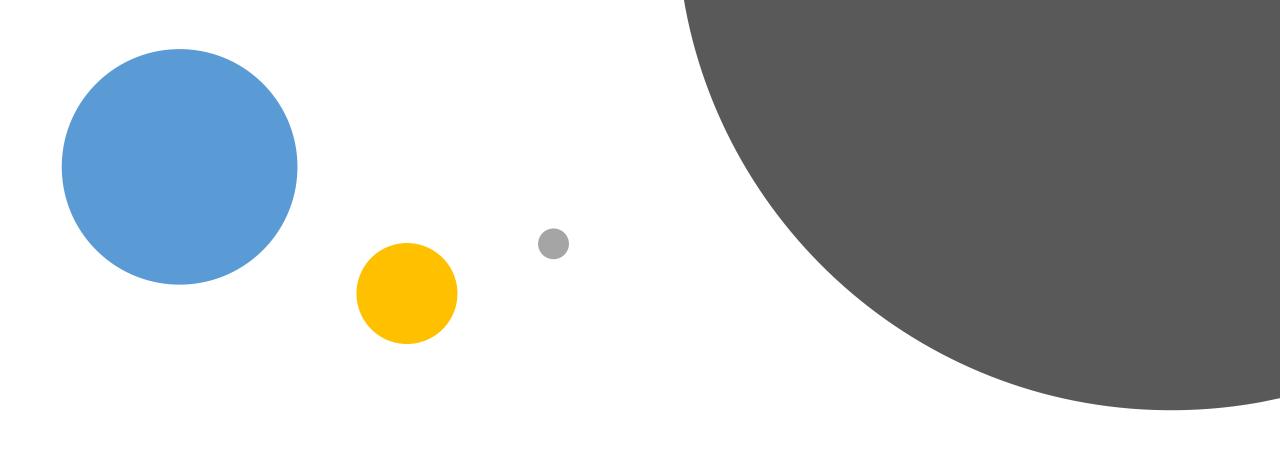


#### Recyclables, bio-waste

Business as usual, prioritizing automated systems or preliminary storage







# THE END

**THANKS** 

Water, sanitation, hygiene, and waste management for the COVID-19 virus, World Health Organization; March 2020

### References

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