

## ISWA's Questionnaire on Lebanon's Response to COVID-19

Answers Provided By: ISWA's National Member of Lebanon – ISWA Lebanon.

1. Has waste management been classed as an essential service in your country?

Waste Management was before COVID-19 pandemic considered as a critical and essential service, and it is still considered essential and the pandemic has actually put medical waste more into focus.

2. How many workers are affected by the current situation / are you operating with a reduced workforce?

Optimization of the workforce has been done at facilities to minimize the risks of exposure. No infections have been registered officially at facilities so far.

- a. What special measures have you taken to enable operations to continue with a reduced workforce?
  - Enhanced safety measures, enhanced hygiene and cleanliness measures, enforced social distancing, alternation of some operational activities, special PPE encouraged working remotely for administrative personnel.
- b. What extra health and safety precautions have you taken to ensure the safety and wellbeing of your waste workforce? Increased the requirements and specifications related to the safe use of PPE, occupational health and safety, enforced regular cleaning especially of hands whenever PPE gloves are removed and when needed, enforced daily reporting of sick personnel, disinfection of all office and common/shared facilities and equipment between working shifts.
- c. Have you / will you, scale back your waste collection frequency? The status of the virus within the country is being monitored closely, and various potential plans have been set that will be activated based on the level of its spread/outbreak. This would affect various waste management phases including collection. However, whatever happens collection shall continue for both Municipal and Healthcare waste since leaving waste un-collected may result in the spread of other diseases. The frequency of collection is a function of the quantities being produced which is altering (municipal waste due to national lockdown, and Healthcare waste due to increase of COVID-19). Hence, in addition to the optimization of the workforce utilized is also related to the variation in waste quantities being generated. Furthermore, in general the rate of MSW has relatively decreased throughout the nation due decrease in quantities of waste and due to optimization of the collection due to fears from the virus. As for Healthcare waste, although there has been an increase in COVID-19 waste, the regular infectious waste quantities have decreased. Thus, due to relatively limited number of COVID-19 cases, the overall quantities have not altered drastically. Therefore, the frequency of collection of Healthcare waste was optimized and altered based on areas hosting COVID-19 cases as oppose to areas not hosting such cases.



3. How is your system coping with the increase in face masks and other PPE in household waste?

Considerable increase of PPE waste has been noted. Whenever encountered workers are avoiding this stream.

- a. Do face masks continue to go into residual waste, or have you introduced any special measures for the separate collection of face masks?
  So far face masks from household units are still going into residual waste.
  Depending on the level of outbreak of the virus on a national level additional more stringent measures may be taken.
- b. Have you made any special communications to the general public, for example, do you ask them to make fewer trips to the recycling stations, or to avoid trips to the tips/drop-off centers to get rid of bulky waste items?
  Due to national lockdown, general public are asked to stay home accordingly, instructions are given to them on means of handling their waste and means of disposal.
- c. Are people being given special instructions on how to deal with possibly contaminated waste? General guidelines have been given especially to protect collection workers and in general infected people are strongly advised to handle their waste separately from other members of their household.
- 4. Do recycling centres remain open to the general public?
- 5. Have the international travel restrictions caused any interruptions with sending waste for processing overseas, importing/exporting waste? How are you managing the waste you cannot ship overseas?

Municipal waste is always treated and managed nationally, so it has not been affected.

Some of the hazardous waste streams are shipped abroad for treatment. However, the shipment is done on average of once a year. Enough storage capacity is available.

Infectious waste is expected to increase due to COVID-19; however, current infrastructure is sufficient, and plans for short term enhancement of capacities are in process to address anticipated increase with the spread of the virus.

6. Are you incinerating (if capacity exists) more MSW than previously? Incineration is not well established in Lebanon, thus this question is not relevant.