## Annex I: Response from Ministry of Public Health

## Open Burning of Trash

• Does the ministry have a position on the open burning of waste in Lebanon? If so, what is the position, and how was it arrived at?

The Ministry of Public Health has stressed since the onset of the trash crisis that the open burning of trash is strictly prohibited, and it calls on all municipalities to take the necessary and strict measures to prohibit it.

• Is the ministry monitoring or investigating the health impacts of open burning of waste in Lebanon? If so, please provide details of the monitoring and findings.

The dangerous negative health effects of the open burning of trash are scientifically well established. At the beginning of the trash crisis the Ministry created a national committee consisting of environmental experts from the most important universities in Lebanon. The committee released more than one report describing the health effects of open burning. It took air samples in several locations where there was burning, and the results proved very dangerous, leading the committee to announce the danger of this situation, particularly at press conferences held by the Minister of Public Health, with members of the committee in attendance. As for monitoring the most dangerous health effects of burning trash, such as cancer, they do not appear in a short time but take years.

• In 2016, the Ministry of Health reported 85 municipalities to the judiciary for open burning of waste. What is the current status of these cases?

These cases are under the custody of the judiciary. The issue of trash in general is a national responsibility, and the law has made the Ministry of Environment and the Ministry of the Interior and Municipalities directly responsible. What the Ministry of Health is doing is related to raising public awareness, monitoring, and referring cases to the judiciary.

 Has the ministry taken any other action against individuals or municipalities found to be open burning waste? If so, in how many cases? What is the current status of these cases? As was mentioned previously, the Ministry has brought a number of cases against municipalities that have openly burned trash, with the understanding that the Ministry of Public Health has no direct authority over the municipalities, which fall under the Ministry of the Interior.

• Has the ministry taken other steps to reduce or end the open burning of solid waste in Lebanon?

The Ministry has tackled this thorny issue, launching awareness campaigns and holding numerous press conferences on this subject, and has filed complaints with the judiciary, as per its limited authorities in this matter.

• Since 2000, what steps has the ministry taken to warn local residents of the health risks of open burning of solid waste and how to effectively reduce exposure?

Raising public awareness about the dangerous health effects of burning [trash], and discouraging citizens from burning trash, in cooperation with local authorities and civil society to spread awareness about this subject.

 What procedures, if any, are in place for citizens or municipalities to report the open burning of waste to the ministry?

The Ministry has set up a hotline 1214 (24/24) at the disposal of citizens for them to file complaints in this matter or other matters affecting their health.

 What steps has the ministry taken to regulate the disposal of hazardous medical waste in Lebanon?

The Ministry of Health, in cooperation with the Ministry of Environment and the Arcenciel organization, works to convert medical waste into domestic waste, and it is also working to draft an agreement with the Pharmaceutical Imports Union and a foreign company specialized in the export of expired and poisonous drugs for treatment abroad, paid for by manufacturers and importers, and this project will be announced with and implemented soon.

 What percentage of hazardous medical waste in Lebanon is being treated before disposal? All hospitals located in Lebanese territory are required to dispose safely of medical waste and convert it into non-hazardous waste, and the Ministry of Health monitors this closely. The Ministry also monitors the storage of expired and poisonous "cytotoxic" drugs, to be stored in secure spaces until it can be exported as outlined above, due to the incapacity for treatment in Lebanon.

## **Annex II: Response from Civil Defense**

General Directorate of Civil Defense' answers to Human Rights Watch's questions:

- How many reports of burning garbage has the Civil Defense received since July 17, 2015?
  How many in Beirut and Mount Lebanon? How many outside of Beirut and Mount Lebanon?
- The Operations Room of the General Directorate of Civil Defense has received 4,426 reports of garbage burning from 7/17/2015 to 6/30/2017 in various regions of Lebanon. Those reports were categorized as follows:
  - 108 reports in Beirut
  - 3504 reports in Mount Lebanon
  - 156 reports in the South
  - 118 reports in Nabatieh
  - 182 reports in Baalbek Al Hermel
  - 150 reports in the North
  - 18 reports in Akkar
  - In how many of these cases did Civil Defense respond in Beirut and Mount Lebanon?
    Outside Beirut and Mount Lebanon?
- The General Directorate of Civil Defense responded to all reports received. Its affiliated centers deployed throughout Lebanon were ordered to extinguish the fires related to burning garbage, just like any other daily tasks [it performs] in response to the call of duty.
  - In how many of these cases did Civil Defense administer first aid or refer individuals to medical care?
- We have not recorded any injuries due to burning garbage.
  - Did the Civil Defense document an increase in burning in Beirut and Mount Lebanon following the beginning of the garbage crisis on July 17, 2015? If so, how large of an increase?
- The statistics show that the total number of tasks carried out in garbage-burning operations increased after the crisis of 17 July 2015 and has reached almost 600 tasks per month.

Compared to the pre-crisis period, we have noticed an increase of about 330% in the governorate of Mount Lebanon in 2015, and 250% in 2016. But we have noticed a significant decrease [since then] and until this month.

In the governorate of Beirut, although the number of tasks is not high, we have noticed an increase of 50% in 2015 and 75% in 2016. And then we have noticed a significant decrease since the beginning of the year and until the end of June.

The following table summarizes the total number of missions carried out in relation to garbage-burning fires in Beirut and Mount Lebanon. It shows a clear decrease in percentages.

District	From 7/17/2015 to 12/31/2015	From 1/1/2016 to 12/31/2016	From 1/1/2017 to 6/30/2017
Beirut	39 missions	62 missions	7 missions
Mount Lebanon	1839 missions	1411 missions	254 missions