

Preventing harmful effects of air pollution: Recent garbage fire incident

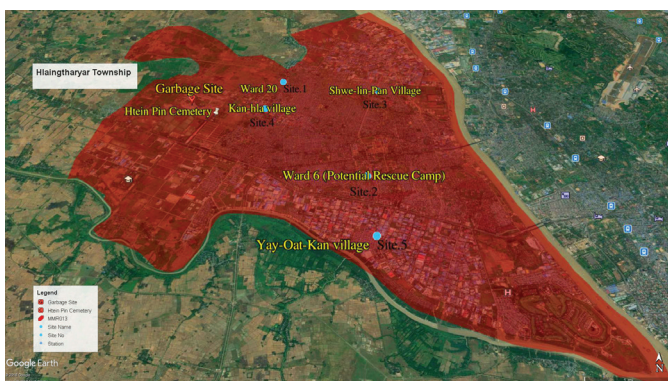
Situation update

A garbage fire broke out on 21 April 2018 in the Htein Bin landfill area, Hlaingthayar Township, Yangon Region. The garbage fire came under complete control on 2 May 2018, twelve days after its start. This was possible as a result of hard work and strategic approach by firefighters, by local and central authorities from different sectors as well as volunteers. Though the fire has been successfully extinguished, surveillance of the affected area continues in case of any new event. Further, a total of 40 patients were reported hospitalized and all of them were cured and discharged from hospital as of 12 May 2018.

While the situation is fully controlled, it may be helpful to provide some key facts and messages.

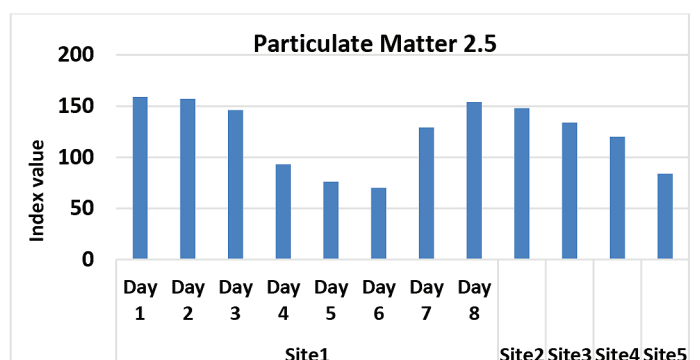
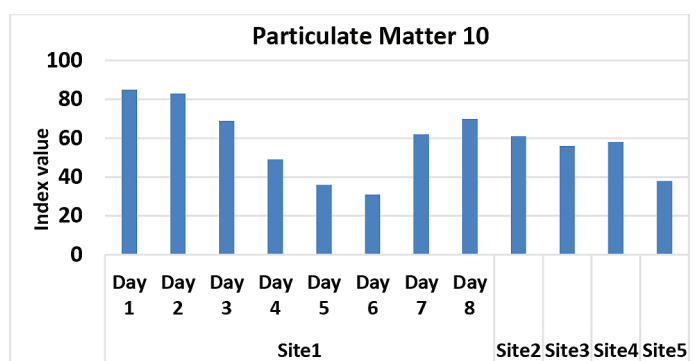
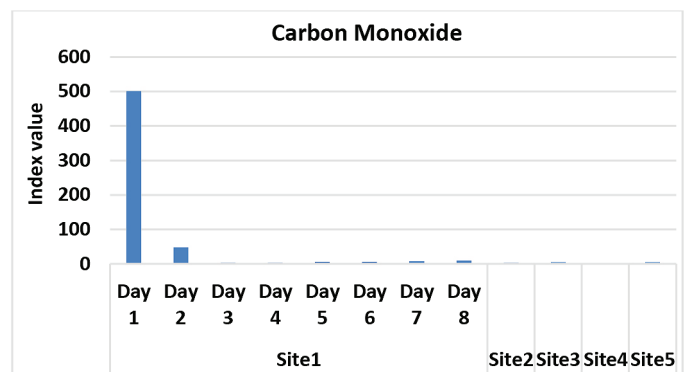
Air quality monitoring

- It is not unusual that landfill garbage sites emit gas containing different pollutants.
- Local and central health authorities together monitored key pollutants in 5 different sites near the affected area.
- The map below is an aerial view of garbage site with the air quality monitoring points. These are denoted as sites 1 to 5.



- The monitoring points measured different pollutants shown in the adjacent graphs which were also used to calculate the 'Air Quality Index'.

Note for graphs: Day 1 = 24-25 April 2018 through to 4-5 May 2018 (with a break between 27-28 April 2018). In site 1 monitoring was done for 8 days while in sites 2-5, it was only for one day.



Source: Ministry of Health and Sports 2018

- Monitoring results are displayed in the graphs 1 to 3. An index value between 0-50 is considered 'good'. Likewise index value 51-100 is moderate, 101-150 is unhealthy for sensitive groups, 151-200 is unhealthy, 201-300 is very unhealthy and 301-500 is hazardous.
- Air quality index (AQI) of carbon monoxide and particulate matter-10 were considered 'good' (index value 0-50) whereas AQI of particulate matter 2.5 were from moderate to unhealthy for sensitive groups (index value 51-150).

To keep us healthy the key messages are:

- Different air pollutants (e.g; carbon monoxide, fine particulate matter, sulphur di-oxide) can adversely affect health.
- Health impact is dependent on the type and level of pollutants as well as duration of exposure and individual sensitivity.
- Short-term exposure of particulate matter can cause acute health reactions, like irritation to the eyes, nose and throat, coughing, wheezing and respiratory infections.
- Prolonged, continued exposure (either low or high level) of air pollution can increase risk of respiratory infections, exacerbation of asthma, bronchitis, reduced lung function, ischaemic heart disease, stroke, lung cancer and premature death.

Note: Finally and always important – consult health professional, or visit health facility, if you feel unwell or experience any adverse effects from air pollution.

For more information please visit WHO website:

[http://www.who.int/news-room/fact-sheets/detail/ambient-\(outdoor\)-air-quality-and-health](http://www.who.int/news-room/fact-sheets/detail/ambient-(outdoor)-air-quality-and-health)

What you can do

- Take all available measures to minimize exposure to air pollution.
- Avoid adding to air pollution yourself.
- When exposed, remain indoor as much as possible, particularly those at risk, children and elderly people.
- External doors and windows should remain closed to reduce penetration of pollutants from outside.
- Avoid prolonged or heavy exertion outside.
- Stay hydrated.
- Prevent sources of indoor air pollution.
- Keep the inside clean – workplace or home.
- Stop *unnecessary* travel by car or other motorized vehicles.
- Masks may help in special circumstances if you have to be outside for long period of time.
- Masks need to be of special type and require fitting.
- Regular monitoring of air quality is recommended

