



1 June 2016

## CIRCULAR ON SAFE STORAGE OF COMBUSTIBLE MATERIALS IN CONSTRUCTION

On 3 Mar 2016, a fire broke out at a construction worksite after sparks from hot works carried out at an elevated structure ignited polyfoam boards placed at the ground level. On 27 Nov 2015, polystyrene boards that were used to fill up the void under a concrete slab at the ground caught fire when sparks from welding works at a higher storey dropped onto the boards. A year before, on 3 Mar 2015, reinforcement bars were being removed from a parapet wall using a cutting torch when sparks landed on the planter box fitted with polyfoam which subsequently caused a fire.

- 2. We have seen an increasing trend in fire accidents at construction worksites involving combustible materials. It is not uncommon for such materials to be used as in-fill materials or building materials in construction. From recent observations where such accidents have occurred, hot works were seen to be carried out above or near the areas where combustible materials were stored or placed. Such materials were also not covered or placed away from sources of fire.
- 3. Due to the combustible nature of the materials and the possibility of resulting emission of large quantities of smoke and/or toxic fumes which poses a health hazard to persons in the vicinity, contractors are to take greater care to ensure that fire preventive measures are in place.

## **Requirements under WSH Act**

4. Under Regulation 37(1) of the Workplace Safety and Health (WSH) (General Provisions) Regulations, Occupiers are required to take all reasonable practicable steps to keep sources of heat or ignition separate from: a) flammable materials in the workplace or b) processes that may give rise to flammable gas or vapour. Section 11 of the Workplace Safety and Health Act also requires that measures are taken to ensure that articles or substances kept on the worksite are safe and without risks to health to every person within those premises.

## Safe practices for storage of combustible materials in construction

- 5. Improper use and storage of combustible materials without the necessary fire prevention measures may result in fire. This would then lead to injuries, property damage or even loss of lives. Some prevention measures can include, but are not limited to:
  - Controlling and minimising the amount of combustible materials delivered and stored in the workplace until it is needed for the work processes;
  - ii) When necessary, store combustible materials in an open area outside the building under construction with proper fire-retardant protective sheets or covers over the combustible materials and away from possible ignition sources, if any. Fire-retardant protective sheets or covers shall be properly secured at all times to ensure that combustible materials are not exposed; and
  - iii) Implement safe work procedures to ensure that hot works are not carried out in proximity to combustible materials.
- 6. We wish to remind all Occupiers to ensure their due diligence on the above and that legal action will be taken against any Occupier who fails to perform his/her duties under the Act.
- 7. Should you need further information, please contact MOM at mom oshd@mom.gov.sg or 6317 1111 for information on workplace safety and health.

CHAN YEW KWONG for Commissioner for Workplace Safety and Health Occupational Safety and Health Division Ministry of Manpower

Date of Issue	Classification	Circular No:
1 Jun 2016	Prevention of Fire	OSHD / OSHI/CS/02-2016