



WORKPLACE SAFETY NOTICE (WSN)

TOPIC MANAGING OCCUPATIONAL SAFETY AND HEALTH AT WORKPLACE DURING FLASH FLOODS			Reference Number 2022/WSN/02
Approved by: Head of Compliance and International Division	Issue date: 26 August 2022	Expiry date: None	Revision No: 0

Purpose: This Workplace Safety Notice (WSN) provides relevant information to workplaces and serves as a reminder to all principals, employers, occupiers, self-employed persons, and persons at work to be aware of the associated risks and take the necessary safety precautions against flash floods which may lead to certain hazards to people, asset and the environment.

OVERVIEW

Where heavy rainfall is expected to cause flash floods within the workplaces in Brunei Darussalam, the Safety, Health and Environment National Authority (SHENA) would like to remind all principals, employers and occupiers of workplaces to comply with the Workplace Safety and Health Order, 2009 and its regulations thereunder specifically the Workplace Safety and Health (Risk Management) Regulations, 2014.

With Global Climate Change expected to create unpredictable weather, more excessive rainfall is expected for Brunei Darussalam. The risk of flash floods and landslides caused by excessive rainfall can lead to a national issue or even a national level disaster. For businesses across the country, these increased risks can create damages to assets and infrastructure and unsafe conditions that might prevent employees from the workplace and expose them to injuries and even fatalities.

In 2009, excessive heavy rain caused severe flash floods. It was the worst recorded flood in 40 years for Brunei Darussalam. Due to this flash floods, two people lost their lives, where in one case, a person's room caved in by the flood water and trapping the person inside. For the other case, a person walking back to home from work found herself trapped in a big drain with fast flowing flood water. The flash flood also interrupted power supply to most homes for almost 3 days, and some roads were inaccessible due to the flood water and landslides.

Although the fatality mentioned above was not workplace fatality, the likelihood of a flash flood occurring in workplaces, especially in construction sites, buildings with underground facilities, flood-prone areas, etc., should always be considered.



HAZARDS FROM EXCESSIVE RAINFALL

The key Occupational Safety and Health (**OSH**) hazards associated with tropical storms and excessive rainfalls that resulted in flash floods include and are not limited to the following:

- Structural instability with risks from landslides, downed lines, live electrical equipment and other utilities, for example, gas and water.
- Excessive rainfall that escalates into flooding may flood exposed electrical equipment and cause a short circuit, tripping of the power system and even electrocution.
- High-water velocities can transport large objects such as automobiles, carry sharp debris and trap humans.
- Flood water can be contaminated which can spread water-borne diseases, faecal and other hazardous materials.
- Health hazards such as manual handling of materials and weights, dangerous chemicals, debris from moving objects, hazardous substances, etc.
- Submerged openings have the potential to trap persons.

- Slip, trip and fall hazards due to slippery surfaces.
- Intrusion of wild and dangerous animals looking for shelter.
- Water pockets can weaken the road safety integrity and infrastructure.

RISK MITIGATION

1. Implementation of an OSH management system that is compatible with or integrated into overall emergency management, including stages of preparedness, response and recovery/evacuation.
2. Selection of the right persons with qualifications and skills for the response mechanism during the emergency.
3. Provision of training on OSH management for response workers deployed in an emergency response to natural disasters to equip them with knowledge, attitudes and skills to ensure appropriate behaviour for protecting their personal health and safety – both so they can remain healthy and safe when carrying out their response activities.
4. In the absence of an OSH management, an organization is expected to conduct a risk management process through identification, assessment, putting the right controls or measures including the risk evaluation and its mitigating actions and recovery measures by asking ourselves the “what if” situations such as:
 - What if something still goes wrong?
 - What if the condition or the circumstance changes?
 - What if the controls and measures are inadequate and not fit for purpose?
5. Establishment and implementation of corrective and preventive maintenance system that incorporates support from the occupier of the workplace and the key Authorities such as the Public Works Department for maintenance of drains, manholes, etc.
6. Installation of flood warning systems and flood defence systems such as dams, embankments, weirs, etc.

CONCLUSION

All principals, employers, occupiers, self-employed persons and persons at work are hereby reminded that relevant legislations under the Workplace Safety and Health Order, 2009 are in place to ensure risks to persons (employees and public), assets and the environment, are mitigated so far as is reasonably practicable. The Order also describes the general safety and health expectations in all workplaces.

SHENA will continue to raise awareness on the matter through its Outreach Programmes and provide guidance to the industry while also paying due attention to these activities during its regulatory inspections and monitoring visits.

Should there be any questions concerning this Workplace Safety Notice (WSN), please contact SHENA at all.cid@shena.gov.bn or contact SHENA Office general line at +673 238 2000 during office hours. SHENA would like to thank all stakeholders for their cooperation in ensuring Brunei Darussalam is a safe place to work and live.