



Work Safety Alert Rupture of an Inflatable Pipe Plug

1. **Date of Accident :** October 2012
2. **Place of Accident :** A construction site in Wan Chai
3. **Summary :**

It is reported that an inflated pipe plug inside a sewage outfall pipe suddenly ruptured during the concreting process, resulting in an in-rush of water and causing the death of one worker and injuries to two.

4. **Work Safety Alert for Contractors/Employers :**

Contractors/employers undertaking submarine sewage pipe works should:

- avoid workers entering the pipe as far as practicable;
- where worker entry into the pipe is necessary, mechanical plugs or partially water-filled plugs should be used instead of inflatable plugs;
- appoint a competent person to conduct risk assessments with regard to the in-rush of water and formulate safe working procedures;
- where an inflatable pipe plug is employed for temporary blocking of the pipe, the following measures should be adopted:
 - use a suitable pipe plug which is designed for the purpose, of good construction, made of sound material and free from patent defect;
 - remove any sharp or projecting edges and objects inside the pipe before installation of the pipe plug;
 - never inflate the pipe plug to a pressure that exceeds its maximum working pressure; and



- report any damage of the pipe plug to the supervisor immediately for repair or replacement.
- formulate and implement adequate contingency measures to ensure that workers working inside the pipe can be rescued as soon as possible in case of sudden in-rush of water; and
- exercise adequate monitoring and supervision to ensure that the above safety measures are strictly followed.

5. Reference :

- [Five Steps to Risk Assessment](#)¹
- [Safe Systems of Work](#)¹
- [A Brief Guide to the Factories and Industrial Undertakings \(Confined Spaces\) Regulation](#)¹
- [Code of Practice – Safety and Health at Work in Confined Spaces](#)¹

DISCLAIMER

This Work Safety Alert (“the Alert”) is issued at the earliest possible opportunity after a serious accident with a view to drawing the attention of interested parties to the general safety precautionary measures necessary to protect people engaging in similar work activities. The material contained in the Alert constitutes general guidance only. It does not reduce, limit, or replace, any legal obligations upon any person to comply with any statutory duties under relevant legislation. Users such as Managers and Supervisors should make their own evaluation of the information contained in the Alert to determine if it can be applied to their own situations and practices. The Labour Department does NOT accept any responsibilities for any loss or damage resulting from the use of or failure to use of the information on the Alert.

¹ Click to view the document