German Environment Agency

10. September 2019 Results of the UN/OECD Project on Natech Risk Management

8.5 Preparing for Flooding – A Guide for Sites (UK)

OECD GP Activity	UN SF Activity	UN SD Goals / Targets
8. Natech risk in regulations, standards, codes and guidance	2. Strengthening disaster risk governance to manage disaster risk	13.1 Strengthen resilience and adaptive capacity to climate- related hazards and natural disasters in all countries

I Classification according to OECD Guiding Principles, UN Sendai Framework Priorities/Activities, and UN SDGs and Targets

Table 1: Flood warning bulletins issued by the UK environment agency

Online flood risk forecast	FLOOD ALERT	FLOOD WARNING	SEVERE FLOOD WARNING	Warning no longer in force
What it means Be aware. Keep an eye on the weather situation	What it means Flooding is possible. Be prepared	What it means Flooding is expected. Immediate action required	What it means Severe flooding. Danger to life	What it means No further flooding is currently expected in your area.
When it's used Forecast of flooding on our website are updated at least once a day.	When it's used Two hours to two days in advance of flooding.	When it's used Half an hour to one day in advance of flooding.	When it's used When flooding poses a significant threat to life.	When it's used When river or sea conditions begin to return to normal.

Source: adapted from © Crown copyright

Short Facts:	Natural Hazard(s) Considered:
Governance approach: Guideline Source: Environment Agency, United Kingdom Entry into force: June 2015 Targeted Stakeholders: operators of sites regulated under EPR and COMAH Scope of applicability: National, enterprises, sites	• Flooding Climate change: Information may be obtained about how climate change could influence flood risks. The consideration of climate change is not an explicit step in the preparation of safety reports

Description

The 'Preparing for flooding' guide specifies how establishments are to comply with the obligations under Article 8 of the 'Control of Major Accident Hazards Regulations' (COMAH, 2015) which requires upper-tier establishments to prepare safety reports for their sites and to take in environmental hazard sources (such as floods and lightning) during all stages of constructing and operating a site. The guide was developed as part of a program of work under the Chemicals and Downstream Oil Industries Forum (CDOIF), namely in collaboration with the Tank Storage Association, the Chemicals Business Association, the Petroleum Industry Association, and the Chemical Industries Association.

In order to prepare for a flooding event, the guide advises operators to take the following steps:

- 1. Find out if the site is situated in a flood-risk area and constantly follow flood warning information that is provided by the Environment Agency. For this step, flood risk maps and a flood warning service are provided by the government.
- 2. Obtain site topography and more detailed flood modelling, including (topographical) site levels which are then cross-referenced to the predicted flood levels. One of the local Environment Agency offices may be consulted to provide help with this step, though a charge may have to be paid for this service.
- 3. Draw up a flood plan as part of the site accident or emergency plan, including the identification of appropriate action and the associated information needed when flooding is predicted. The action plan needs to elaborate on the protection of staff, the safeguarding of hazardous processes and the securing of polluting material and stock. Furthermore, the plans ought to be executable during the often short time frame that exists between a flood warning and the actual event. Flood plans should be exercised, and also include post flooding activities such as the removal of flood water or inventory checks.
- 4. Take measures to improve a site's flood resilience. Such measures could aim at altering the flow of waters such as drainage systems or flood defences, at optimizing the places where hazardous substances are stored, at protecting the location of safety critical operations or utilities, or at the interaction with off-site emergency response..

Link/Contact:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/439863/LIT _7176.pdf

Comments by the UN/OECD Natech-Steering Group:

This guidance should be implemented in combination with the flood warning system described at '1.13 Public Flood Information Service (UK)' of this record.

Imprint

Publisher Umweltbundesamt Wörlitzer Platz 1 06844 Dessau-Roßlau Tel: +49 340-2103-0 Fax: +49 340-2103-2285

Completion: September/2019

buergerservice@uba.de Internet: www.umweltbundesamt.de ✔ / umweltbundesamt.de ✔ / umweltbundesamt Authors, Institutions Maro Luisa Schulte schulte(at)adelphi.de

adelphi research gGmbH Alt-Moabit 91, D-10559 Berlin

