8.4 Managing Extreme Weather Events at Chemical Businesses (UK)

OECD GP Activity	UN SF Activity	UN SD Goals / Targets
8. Natech risk in regulations, standards, codes and guidance	1. Understanding disaster risk	3.D Strengthen the capacity of all countries … for early warning, risk reduction and management of national and global health risks

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

Short Facts:	Natural Hazard(s) Considered:
Governance approach: Guidance **Source:** Chemical Industries Association, United Kingdom **Entry into force:** February 2014 **Targeted Stakeholders:** Chemical businesses **Scope of applicability:** Enterprises, sites	• Storms and Floods • Severe prolonged low temperature • Climate change **Climate change:** Indication that businesses ought to be prepared for more regular and more extreme weather events

Description

The 'Managing extreme weather events at chemical businesses' safety alert is part of a series of occasional Safety Alerts by the Chemical Industries Association (CIA) to 'raise awareness of potential major hazard and business risks', serving as guidance to operators of chemical industry sites.

In order to prepare for a flooding event, the guide advises site operators to follow the steps indicated in the guidance document 'Preparing for flooding: A guide for regulated sites' that was issued by the UK Environment Agency in collaboration with different industry associations. Furthermore, the CIA advises businesses to regularly access the Environment Agency website in order to stay informed, in particular during wet weather seasons.

The section on severe prolonged low temperature or 'winterisation' events makes cross-reference to the guide 'Winterisation – Managing process plant through severe and prolonged cold weather', summarizing the main threats posed by severe and prolonged cold weather as freezing of important equipment at the site, a change in the quantity of supplied gas, disruptions of the supply chain due to transport disruption and other business disruptive effects. Though these disruptions are not specifically hazard-related, some of the practical advice given in the Safety Alert may also serve to prevent Natechs, such as the protection of safety critical equipment and the planning for cases where firewater and emergency shower are not available, or planning for a process shut-down.

For the medium and long term, the Safety Alert points towards the projections from the UK Climate change Risk Assessment (CCRA) which suggests: Increases in winter rainfall, decreases in summer rainfall, more days of heavy rainfall, increased storm frequency, rising sea levels, and advises chemical plant operators to take these projections into account in their preparation for natural events.

Link/Contact:

https://www.cia.org.uk/Portals/0/Documents/Publications/Flooding%20Safety%20Alert%20Feb2014%20doc.pdf?ver=2017-01-09-143759-733

Comments by the UN/OECD Natech-Steering Group:

This is a useful example of combination of guidance on chemical-process safety and guidance on adaptation to climate change.

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

buergerservice@uba.de
Internet: www.umweltbundesamt.de
/ umweltbundesamt.de
/ umweltbundesamt

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Authors, Institutions

Maro Luisa Schulte
schulte(at)adelphi.de

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