

ADMLC Workshop 12 March 2020

Challenges in modelling for emergency planning and response to contaminant releases

Centre for Chemical, Radiation and Environmental Hazards (CRCE) Training Centre, Public Health England,
Harwell Campus, Didcot, Oxford, OX11 0RQ, UK

Agenda v3

- 9:30 Registration and coffee**
- 10:00 ADMLC Chairman's welcome** *Simon Gant (HSE)*
- 10:10 Introduction – modelling perspectives** *Matthew Hort (Met Office)*
The role of atmospheric dispersion modelling in planning, preparedness, response and recovery - a science perspective
- 10:30 Perspectives on emergencies involving atmospheric releases** *Robin Grimes (Chief Scientist MoD)*
Key issues/challenges/requirements of government/SAGE for planning and response
- 10:55 SESSION 1: RESPONSE MODELLING**
Examples of issues, including key uncertainties, in response modelling
- 10:55 The application of atmospheric dispersion modelling for the provision of health protection advice in the event of a radiological incident** *Pete Bedwell (PHE) & Sarah Millington (Met Office)*
- 11:15 The practical use of models during the emergency response to chemical incidents and fires** *James Stewart-Evans (PHE)*
- 11:35 Responding to volcanic eruptions** *Claire Witham (Met Office)*
- 11:55 Discussion: RESPONSE - similarities and differences between different contaminants**
- Is there a consistent approach in response modelling across contaminants?
 - What challenges are shared (e.g. uncertainties, sensitivities, lack of data, time frames)?
 - What differences arise due to contaminant specifics?
- 12:20 LUNCH**

13:05 **SESSION 2: MODELLING in PLANNING and PREPAREDNESS**

- 13:05 Outline of approaches in the National Risk Register and Resilience Direct** *Matthew Hort (MetOffice)*
The role of science in the development of the National Security Risk Assessment (NSRA) - How the Government Office for Science feeds into the development of the NSRA, and uses the product in assessing departmental capability gaps and planning exercises
- 13:25 What is the reasonable worst case?** *Jonathan Rougier (Rougier Consulting)*
- 13:45 REPIR approach to consequence assessment and associated risk framework** *Chris Boyd (ONR)*
- 14:05 How dispersion modelling informs public safety decision making for risks presented by major hazards installations** *Harvey Tucker (HSE)*
- 14:25 Discussion: PLANNING & PREPAREDNESS - similarities and differences**
- What challenges are shared (e.g. uncertainties, sensitivities, lack of data, time frames)
 - What differences arise due to contaminant specifics?
 - Does planning adopt a consistent approach to risk mitigation across contaminants?
- 14:50 TEA**
Topics for discussion in the final session will be shown at the end of the previous session, and will be on notice boards available during the tea break, together with post-its and pens for participants to add their thoughts on the different topics – these will be briefly summarised in the next session
- 15:10 Discussion: Conclusions on key topics**
- What are current weaknesses/similarities?
 - How could things be improved?
 - How to share best practice in emergency planning and response across dispersion hazards
- 15:40 Conclusions - Key points for taking forward** *Robin Grimes (Chief Scientist MoD)*
- 15:55 Close-out** *Simon Gant (HSE)*