

Evidence

Sharing resources with the Fire and Rescue Service during major air quality incidents

Project summary SC160022

This project explored how the Environment Agency and the Fire and Rescue Services (FRS) might collaborate and coordinate use of their resources to produce better air quality information during major incidents. Major incidents such as large fires or accidental chemical releases can lead to toxic material entering the atmosphere.

As a result, the Environment Agency and the FRS now have a clearer understanding of each other's roles and capabilities, which will enable even closer collaboration in future.

Background

Public Health England is responsible for assessing any human health risk that might arise as a consequence of a major incident, and for deciding what actions may be needed to protect human health. To support PHE, a multi-agency group of experts, the Air Quality Cell (AQC) – with members from the Environment Agency, the Met Office and Public Health England's Centre for Radiological, Chemical and Environmental Hazards (CRCE) – may be convened to gather information and give advice. To do this confidently, the AQC needs air quality information. The Met Office models how pollutants will move in the atmosphere, while the Environment Agency is responsible for co-ordinating air quality monitoring during incidents.

The FRS needs to assess the risks close to an incident so as to decide on protective measures for its staff and the extent of any area that needs to be cordoned off for public safety; making air quality measurements may be part of this assessment.

The Environment Agency operates a number of mobile air quality monitoring units. The FRS has some air quality measurement capability through its Hazardous Materials and Environmental Protection Officers (HMEPOs) and can call on detection, identification and monitoring (DIM) vehicles, which also carry air quality measurement tools.

Method

A questionnaire, backed up by telephone conversations, face-to-face meetings and a workshop, was used to gather information on:

- the air quality monitoring resources currently available to the various regional FRS and DIM vehicles
- the circumstances under which these resources are used
- how air quality data are reported and shared

The objectives of the Environment Agency and the FRS in carrying out air quality monitoring were compared, and possible opportunities for greater collaboration were identified along with any barriers to this.

Key findings

The priorities of the FRS are to save life, carry out rescues and control the incident, while protecting their personnel from harm. The AQC's priority is to protect personnel, assess emissions from an incident, and provide public health advice to incident managers. The AQC and FRS also have a common objective around analysing incidents after the event. There was agreement from both groups that greater collaboration could help meet all of these objectives more efficiently; monitoring data gathered by either could be of use to the other, and the FRS's and Environment Agency's focus for monitoring – inside and outside of the cordon respectively – is complementary.

There is institutional support and precedent for collaboration. A 'working together' agreement already exists between the Environment Agency and FRS representatives covering flood response and pollution control, and this could be extended to cover air quality monitoring.

DIM officers are probably best placed to provide air quality information of use to the AQC. However, they are not deployed to every incident but respond according to fixed operational criteria. The same applies to the Environment Agency's air quality monitoring units.

For either to attend incidents to which they would not normally be called out would require changes in operational criteria and consideration of the financial implications.

Where call-out does coincide, effective collaboration will require clear lines of communication to be established. A limiting factor at present is the Environment Agency and the FRS do not use a common platform for sharing data.

One option suggested by a number of participants is to locate Environment Agency equipment with FRS or DIM teams. To do so is plausible, but issues of cost, maintenance, time allocation, logistics and training would need to be resolved,

This summary relates to information from project SC160022, reported in detail in the following output(s):

Report: SC160022/R

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May 2018

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Research Contractor: Bureau Veritas

This project was funded by the Environment Agency's Research, Analysis and Evaluation group, which provides scientific knowledge, tools and techniques to enable us to protect and manage the environment as effectively as possible.

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