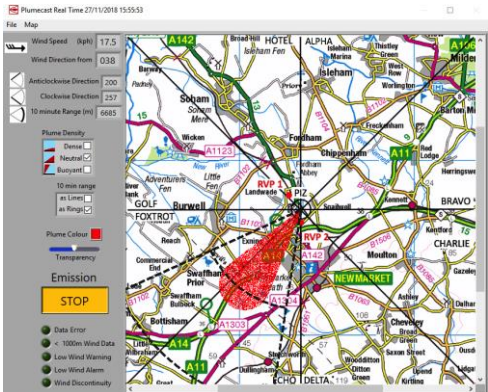


# PLUMECAST®

## IDENTIFYING AREAS AT RISK FROM AIRBORNE PLUMES

### CRITICAL INFORMATION AVAILABLE INSTANTLY



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SEE PLUMECAST AT THE EMERGENCY SERVICES SHOW  
21-22 September 2022. The NEC, Birmingham

Visit Richard Paul Russell Ltd. stand, C94.



Professionals dealing with hazardous airborne plumes need to know the 'at risk' and safe areas quickly. Decisions need to be made literally in a few minutes.

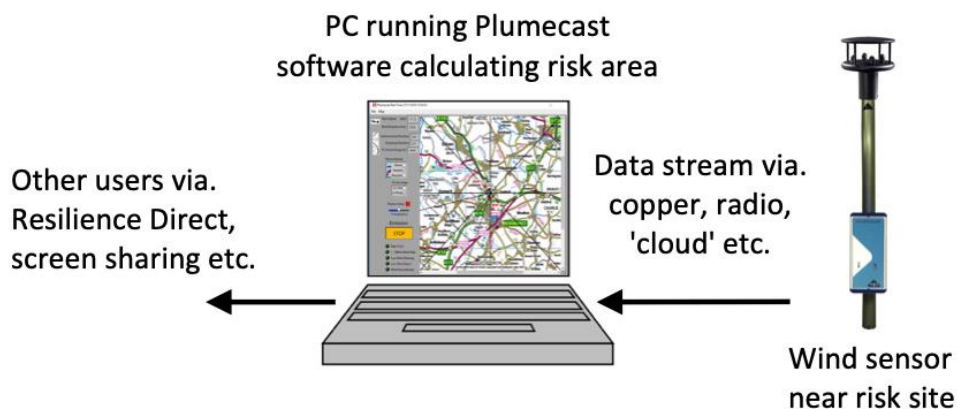
Plumecast is a unique decision support tool providing instant information on areas at risk.

Complementing existing procedures, Plumecast increases resilience in three ways: -

- Increased accuracy - because it uses real data (that can also be passed onto other agencies to enhance their analyses along with the processed data).
- It provides instant information ahead of responses from outside agencies.
- It provides resilience to communications problems or multiple incidents overwhelming centrally based solutions.

### How it works

Plumecast is a combination of a dispersion model running on a PC and wind sensors. Modern sensors measuring turbulence directly, rather than it being estimated, make real time dispersion modelling much more accurate as well as faster.



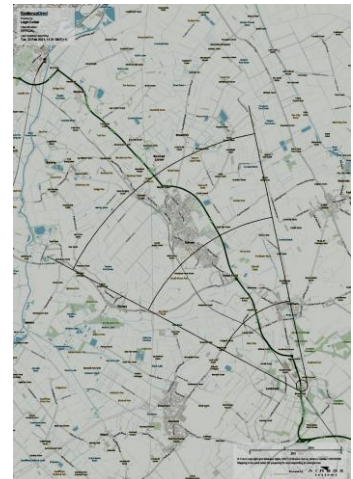
It calculates the area at risk from a release, updated every second whether an incident is occurring or not. In a real emergency it can also display the estimated present location of an airborne plume.

Sensors can be located near any site that creates a serious risk. If there is a release at a different location, the plume source can be relocated on the local map. This allows it to provide area at risk data for any site where the wind data is representative; for example, a transportation accident or terrorist attack involving hazardous materials.

## Display

Two lines are drawn from the pollution source over a map of the local area marking the area over which airborne pollution might pass in the event of a release. It also shows range rings showing how far a plume would travel in 10 minutes. These are updated continuously so that in the event of an accident the information is instantly available. This, and wind speed and direction, is visible on the screen and can be passed to other agencies.

It can be located at any site that creates a risk of airborne plumes. If there is a release at another nearby location, the plume source can be relocated. This allows it to provide area at risk data for any site where the wind data is representative.



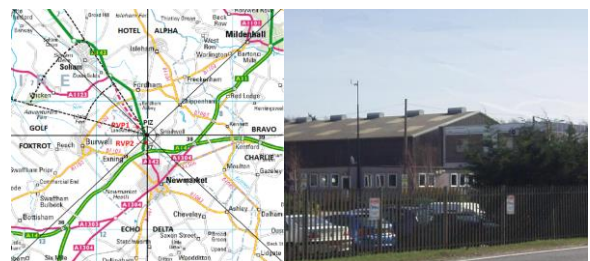
## Distribution of information

Plumecast creates KML format files suitable for GIS systems including Resilience Direct. Files can be shared easily by most IT networks.

Plumecast has been installed successfully at a COMAH Top-Tier site in Cambridgeshire

“H.W. Coates Ltd is pleased with Plumecast which we have incorporated into our off-site emergency plans and procedures.”

Ashley Harriman  
Operations Manager, H.W. Coates, Newmarket



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