



National
Operational
Guidance

Control measure

Lighting: Search and rescue



NFCC
National Fire
Chiefs Council

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Control measure knowledge

Search and rescue incidents may need to be carried out in reduced visibility. For further information refer to Operations – [Reduced visibility](#).

Adequate scene lighting should be used to define safe routes and the scene of operations. This will help emergency responders to search for and rescue people in reduced visibility.

The duration of activity should be considered when selecting lighting. If appropriate, the use of battery-powered lighting that is silent and does not create exhaust gases should be considered.

Alternatives, such as generator-powered or vehicle-mounted lighting, may restrict movement and present additional hazards. The potential hazards of exhaust gases are of particular concern in restricted or enclosed areas, such as stairwells or confined spaces.

National Resilience may be able to provide equipment for incidents that require large scale lighting; requirements should be discussed with a National Resilience tactical adviser.

When determining the appropriate level and type of lighting:

- Consider how appropriate personal or scene lighting should be used
- Whether search activity will be static or likely to move
- Ensure adequate lighting resources are requested for the anticipated duration of the incident
- Ensure generators or vehicles are located at an appropriate distance from the scene of operations, to reduce the hazard of exhaust fumes or impact of noise
- Ensure lighting will last an appropriate duration, considering fuel for generators and life of batteries
- Lighting should be suitable for the environment, considering its power, weight and mobility; it should also be to an appropriate level of ATEX compliance for the atmosphere
- Whether individual torches may be necessary for personnel working beyond centralised lighting

Following a consistent approach when using lighting to indicate hazards and safe routes, will help emergency responders to navigate. This can be achieved by using colour-coded lights, for example:

- Red – Danger or hazard area
- Green – Safe entry or route



- Orange – Area of interest
- White – General illumination
- Blue – Specialist interest, such as structural monitoring equipment

A combination of colour-coded lights may be required.

These colour-coded lights vary to those used for water rescue or flood response, the details of which are provided in the [Department for Environment, Food & Rural Affairs \(Defra\) Flood rescue concept of operations \(FRCO\)](#) (page 38).

For further information refer to Operations – Safe system of work: [Reduced visibility](#).

Strategic actions

Fire and rescue services should:

- Have arrangements with agencies to request a range of lighting equipment suitable for use in search and rescue operations
- Consider providing lighting to consistently indicate the location of physical elements at an incident

Tactical actions

Incident commanders should:

- Request adequate lighting equipment that is appropriate to the location and hazards of search and rescue operations
- Consider using battery powered lighting for search and rescue operations
- Locate generators or vehicles at an appropriate distance from the scene of search and rescue operations
- Anticipate the duration of search and rescue activity to ensure lighting does not fail due to battery life or generator fuel requirements



- Consider requesting National Resilience lighting equipment for large scale search and rescue activity
- Consider the requirement for ATEX-compliant lighting at search and rescue operations
- Consider the use of colour-coded lighting to indicate the location of hazards or routes at search and rescue operations, and ensure all emergency responders are briefed on their meaning