



National  
Operational  
Guidance

# Hazard

## Below ground structures



**NFCC**  
National Fire  
Chiefs Council

Developed and maintained by the NFCC

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## Hazard - Below ground structures

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### Knowledge and understanding

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Hazard	Learning outcome
Below ground structures	Understand all associated hazard knowledge



## Control measure - Situational awareness: Below ground structures

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### TRAINING SPECIFICATION

### Knowledge and understanding

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Control measure element	Learning outcome
Incidents in below ground structure	Understand: <ul style="list-style-type: none"><li>• The type of below ground structure</li><li>• Sources of information about below ground structures</li><li>• The hazards associated with the type of below ground structure</li><li>• The potential for rapid escalation of an incident in a below ground structure</li><li>• The initial considerations for dealing with an incident in a below ground structure</li></ul>
Tunnels	Understand: <ul style="list-style-type: none"><li>• How to access any pre-planned:<ul style="list-style-type: none"><li>- Arrangements for attendance</li><li>- Actions to be taken in the event of an incident</li></ul></li></ul>



**Control measure element**

**Learning outcome**

Sewers and associated below ground assets

- Understand:
- That sewage or wastewater undertakers should have emergency procedures in place
  - The potential requirement for specialist assistance

Operational mines

- Understand:
- The legislative requirements for mine operators regarding the escape and rescue of people
  - The potential requirement for specialist assistance
  - The potential limitations for first responders to deal with an incident at an operational mine

Caves and recreational below ground environments

- Understand:
- The potential limitations for first responders to deal with an incident at caves or recreational below ground environments
  - The potential requirement for specialist assistance

Abandoned mines

- Understand:
- The potential limitations for first responders to deal with an incident at an abandoned mine
  - The potential requirement for specialist assistance

Armed forces and civil protection below ground structures

- Understand:
- The role and responsibilities of the Defence Fire and Rescue Service
  - The roles and responsibilities of the fire and rescue service if their assistance is requested at the site

Evacuation and rescue

- Understand:
- The roles and responsibilities of the infrastructure manager for evacuation
  - The roles and responsibilities of the fire and rescue service for evacuation and rescue if required

**Practical application**



**Control measure element**

**Learning outcome**

Establish the type of below ground structure to identify additional hazards

Demonstrate the ability to:

- Determine the type, purpose and layout of the below ground structure
- Identify hazards and control measures that may be associated with the type of below ground structure

Identify the presence and status of any fixed installations that are present within the below ground structure

Demonstrate the ability to:

- Identify the presence of fixed installations
- Identify the status of fixed installations

Liaise with on-site staff when developing the tactical plan for incidents at below ground structures

Demonstrate the ability to:

- Liaise with appropriate on-site staff, including:
  - Sewage or wastewater undertakers
  - Mine operators
  - Defence Fire and Rescue Service
  - Infrastructure managers

Confirm the current status of any managed evacuations for below ground structures and take action if required

Demonstrate the ability to:

- Identify the progress of any managed evacuations instigated by the infrastructure manager
- Assist with managed evacuations if required



## Control measure - Specialist resources: Below ground structures

### TRAINING SPECIFICATION



## Knowledge and understanding

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### Control measure element

### Learning outcome

Specialist resources

Understand:

- The various specialist resources appropriate for a below ground structure incident
- The benefits of using joint on-site training to identify and plan for potential incidents involving below ground structures, where fire and rescue service assistance may be requested

Environmental issues

Understand:

- The impact of complex below ground structure layouts on the incident
- The impact of weather, including flooding, on a below ground structure incident

## Practical application

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### Control measure element

### Learning outcome

Request specialist resources for assistance at below ground structure incidents

Demonstrate the ability to:

- Request appropriate external specialist resources



## Control measure - Specialist advice: Below ground structures

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## TRAINING SPECIFICATION

### Knowledge and understanding



**Control measure element**

**Learning outcome**

Specialist advisers for below ground structures

Understand:

- The typical sources of specialist advice for below ground structures
- The roles and responsibilities of specialists for below ground structures

**Practical application**

**Control measure element**

**Learning outcome**

Request specialist advice or assistance based on the extent and urgency of the below ground structure incident

Demonstrate the ability to:

- Seek advice from the appropriate specialist for the below ground structure incident

Consider the specialist advice received when developing the tactical plan for below ground structure incidents

Demonstrate the ability to:

- Include the specialist advice received when developing the tactical plan for a below ground structure incident



## Control measure - Monitoring systems: Below ground structures

### TRAINING SPECIFICATION

#### Knowledge and understanding



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**Control measure element**

**Learning outcome**

Below ground structure control rooms

Understand:

- The information available from below ground structure control rooms
- How to access the information available from below ground structure control rooms
- The potential locations of below ground structure control rooms

**Practical application**

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**Control measure element**

**Learning outcome**

Consider using the facilities available in the below ground structure control room to manage and monitor the incident

Demonstrate the ability to:

- Use the information obtained from a below ground structure control room to manage and monitor the incident