

Hazard/threat category	Sub-category
Industrial accidents and environmental pollution	Fire or explosion at fuel distribution site and tank storage of flammable toxic liquids
Hazard and threat description, plus scale	Risk reference number
Up to 3km around site causing up to 150 fatalities and up to 2000 casualties. Depending on the location and size of the release, the fire could burn for several days. Explosions would cause primarily crush/cuts/bruise type injuries as well as burns. Fires would cause predominantly burn-type injuries	H4
Date of revision	Next review
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Version	2
Author	Andy Mancey Royal Berkshire Fire and Rescue Service

### 1. Overview of hazard or threat

Severe fire and explosion involving one or more tanks, spreading burning fuel and debris over a large area.

Damage to surrounding buildings and infrastructure would be very severe making access in and around the site very difficult for responding emergency services.

Water supplies for fire fighting could be damaged or contaminated.

Smoke from the fire could be toxic and will spread over a large area depending on the weather conditions.

### 2. Key historical evidence

There have been several large fires at storage and distribution sites that have had the potential to fall into this category, including the Flixborough fire in 1974. The most recent was the fire at the Buncefield Depot in Hemel Hempsted in December 2005. **An important point to now consider in planning assumptions following Buncefield is that more than one tank can become involved and our planning must allow for this as normal assumption.**

### 3. Likelihood

Hazard	Outcome description	Likelihood
Fire or explosion at fuel	Up to 3km around site	Rare (2)

distribution site and tank storage of flammable toxic liquids	causing up to 150 fatalities and up to 2000 casualties. Depending on the location and size of the release, the fire could burn for several days. Explosions would cause primarily crush/cuts/bruise type injuries_as well as burns. Fires would cause predominantly burn-type injuries	
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#### 4. Impact

##### Summary

Hazard	Outcome description	Impact			
		Health	Social	Env	Econ
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##### Details

Impacts
<b>Primary</b>
Damage to surrounding properties leading to members of the public unable to return to there homes or place of work
Large numbers of casualties requiring treatment for burns.
Recovery of bodies from the site and the surrounding area
Poor air quality due to smoke which may include toxic or noxious substances
Possible serious contamination of land, surface water or ground water
<b>Secondary</b>

Long term effects on business not directly involved in the fire
Possible health implications due to toxic substances in the smoke.
Possible soil/water course contamination which could lead to drinking water contamination as many bore holes used for drinking water extraction in TV
Drifting smoke may effect adjacent transport networks
Possible impact on surface and ground water abstractions including drinking water.

**5. Vulnerability and resilience**

Plans in place under COMAH regs to deal with on and off site incidents.

**6. Mitigation and control measures**

**7. Overall assessment**

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Up to 3km around site causing up to 150 fatalities and up to 2000 casualties. Depending on the location and size of the release, the fire could burn for several days. Explosions would cause primarily crush/cuts/bruise type injuries, as well as burns. Fires would cause predominantly burn-type injuries	<b>4</b>	<b>2</b>	<b>High</b>

**Controls in place**

COMAH regs and on site and off site plan  
Site specific plans  
Oxfordshire County Council Emergency Plan  
RBFRS Major Incident Plan  
Milton Keynes Council Major Incident Guide  
Environment Agency Incident Management Plans  
EA 24/7 Incident Response  
EA MOU with Fire Brigades, Police, Local Authorities, Highways Agency, Health Protection Agency & Health Authorities  
South Central Ambulance Service NHS Trust Major Incident Plans  
Royal Berkshire Hospital NHS Trust Major Incident Plan  
Heatherwood & Wexham Park Hospitals NHS Trust Major Incident Plan  
Berkshire Healthcare Trust Major Incident Plan  
Berkshire Primary Care Organisations Major Incident Plan and Operational Response Manuals  
Buckinghamshire Hospitals NHS Trust Major Incident Plan  
Buckinghamshire Primary Care Organisations Major Incident Plan  
Buckinghamshire Mental Health Trust Major Incident Plan  
Milton Keynes Hospital NHS Trust Major Incident Plan  
Oxford Radcliffe Hospitals NHS Trust Major Incident Plan  
Nuffield Orthopaedic Clinic Major Incident Plan  
Oxfordshire Primary Care Organisations Major Incident Plan  
Oxford Mental Health Trust Major Incident Plan  
South Central Strategic Health Authority Major Incident Plan  
Berkshire Integrated Emergency Planning Structure  
Berkshire Unitary Authorities Emergency Plans X 6  
Buckinghamshire CC Emergency Plan  
Aylesbury Vale District Council Emergency Plan  
Chiltern District Council Emergency Plan  
South Bucks District Council Emergency Plan  
Thames Valley Police Emergency Procedures Manual  
ACPO Emergency Procedures Manual  
Oxfordshire Fire & Rescue Service Major Incident Policy

**Additional risk treatment required**

Local/Regional joint emergency plans  
Local/Regional joint exercises