

DRAFT**INDIVIDUAL RISK ASSESSMENT**

Hazard/threat category	Sub-category
Industrial accidents and environmental pollution	Localised fire or explosion at a fuel distribution site or tank storage of flammable or toxic liquids
Hazard and threat description, plus scale	Risk reference number
Up to 1km around site, causing up to 15 fatalities and 200 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	HL28
Author	Royal Berkshire Fire and Rescue Service
Version	2
Date of revision	Next review
May 07	May 08

1. Overview of hazard or threat

Fire and explosion involving one or more tanks.

Damage to surrounding buildings and infrastructure could 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. The most recent was the fire at the Buncefield Depot in Hemel Hempsted in December 2005. However the fatalities were zero and the casualty figures were very low.

3. Likelihood

Hazard	Outcome description	Likelihood
Fire or explosion at fuel distribution site and tank storage of flammable toxic liquids	Up to 1km around the site, causing up to 15 fatalities and 200 casualties. Depending on the location and size	Rare (2)

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	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. ImpactSummary

Hazard	Outcome description	Impact			
		Health	Social	Env	Econ
Fire or explosion at fuel distribution site and tank storage of flammable toxic liquids	Up to 1km 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	3	3	4	4

Details

Impacts
Primary
Damage to surrounding properties leading to members of the public unable to return to their 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
Secondary
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

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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

Category	Sub-category		
Industrial accidents and environmental pollution	Fire or explosion at fuel distribution site and tank storage of flammable toxic liquids		
Outcome description	Impact	Likelihood	Risk
Up to 1km around site causing up to 15 fatalities and up to 200 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	4	2	High

DRAFT**Controls in place**

COMAH regs and on site and off site plan
 Site specific plans
 BFRS OC 11/37, Bund Walls; OC 14/1/2, Foam & foam making equipment;
 OC 11/30, Major Incidents; OC 11/11, Oil Pipelines
 Oxfordshire CC 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
 Oxfordshire, Royal Berkshire & Two Shires Ambulance NHS Trust Major
 Incident Plans
 Berkshire Hospitals (Royal Berkshire, Heatherwood & Wexham) NHS Major
 Incident Plans
 Berkshire Healthcare Trust Major Incident Plan
 Berkshire Primary Care Organisations Major Incident plan
 Buckinghamshire Hospitals NHS Trust Major incident plans
 Buckinghamshire Primary Care Organisations Major Incident Plan
 Oxford Radcliffe Hospitals NHS Trust Major Incident Plan
 Nuffield Orthopaedic Major Incident Plan
 Oxfordshire Primary Care Organisations Major Incident Plan
 Thames Valley 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 Major Incident Plan
 ACPO Manual of Guidance – Major Incidents
 Oxfordshire Fire & Rescue Service Major Incident Policy

Additional risk treatment required

Local/Regional joint emergency plans
Local/Regional joint exercises