

High Speed Rail (Crewe – Manchester)

Background information and data

Major accidents and disasters

BID MA-002-00000

External sources of hazard

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Department for Transport

High Speed Two (HS2) Limited has been tasked by the Department for Transport (DfT) with managing the delivery of a new national high speed rail network. It is a non-departmental public body wholly owned by the DfT.

High Speed Two (HS2) Limited
Two Snowhill
Snow Hill Queensway
Birmingham B4 6GA

Telephone: 08081 434 434

General email enquiries: HS2enquiries@hs2.org.uk

Website: www.hs2.org.uk

A report prepared for High Speed Two (HS2) Limited:

ARUP+ ERM | FOSTER + PARTNERS | JACOBS
RAMBOLL | TYPESA | COSTAIN

MWJV

Mott MacDonald | WSP

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Background Information and Data

Major accidents and disasters

BID MA-002-00000

External sources of hazard

Contents

1	Introduction	2
1.2	Major hazard sites	2
1.3	Major accident hazard pipelines	4
1.4	Explosives sites	6
1.5	Nuclear sites	6
1.6	Aerodrome safeguarding areas and public safety zones	7

Tables

Table 1:	Major hazard sites identified by the Health and Safety Executive, where the consultation zone interacts with land required for the Proposed Scheme	3
Table 2:	Major accident hazard pipelines identified by the Health and Safety Executive, where the consultation zone interacts with land required for the Proposed Scheme	4
Table 3:	Explosives sites identified by the Health and Safety Executive, where the safeguarding zone interacts with land required for the Proposed Scheme	6
Table 4:	Airports whose aerodrome safeguarding area interacts with land required for the Proposed Scheme	8

1 Introduction

- 1.1.1 This report presents baseline data unique to the major accidents and disasters topic that supports the assessment of major accidents and disasters.
- 1.1.2 Only those datasets that are expected to be unique to the major accidents and disasters topic assessment have been presented in this document. The datasets presented in this report represent sites and assets where safeguarding/consultation zones could interact with land required for the Proposed Scheme.
- 1.1.3 The datasets have been used to inform the assessment of major accidents and disasters reported in the Environmental Statement¹ in Volume 3, Route-wide effects, Section 11 and in Volume 5: Appendix MA-001-00000 Major accidents and disasters risk screening.
- 1.1.4 The Proposed Scheme will pass through the following community areas (CA):
- Hough to Walley's Green (MA01);
 - Wimboldsley to Lostock Gralam (MA02);
 - Pickmere to Agden and Hulseheath (MA03);
 - Broomeedge to Glazebrook (MA04);
 - Rislely to Bamfurlong (MA05);
 - Hulseheath to Manchester Airport (MA06);
 - Davenport Green to Ardwick (MA07); and
 - Manchester Piccadilly Station (MA08).

1.2 Major hazard sites

- 1.2.1 The proximity of major hazard sites presents a potential source of hazard to the Proposed Scheme, and vice versa. These sites have 'consultation zones' which have been modelled by the Health and Safety Executive (HSE), determined by a detailed assessment of the risks created by the Planning (Hazardous Substances) Consent held by the site. The consultation zone acts as a trigger for the HSE as a statutory consultee to be consulted where any encroachment upon this zone may be caused by a project². The simple aim of the consultation zone is to manage population growth close to such sites to mitigate the consequences of a major accident.

¹ High Speed Two Ltd (2022), High Speed Rail (Crewe - Manchester), *Environmental Statement*. Available online at: <https://www.gov.uk/government/collections/hs2-phase-2b-crewe-machester-environmental-statement>.

² Health and Safety Executive, *HSE's land use planning methodology*. Available online at: <https://www.hse.gov.uk/landuseplanning/methodology.htm>.

Background Information and Data

Major accidents and disasters

BID MA-002-00000

External sources of hazard

- 1.2.2 Due to the potential interaction of the land required for the Proposed Scheme with hazardous facilities, a data request was made by HS2 Ltd to the HSE on 30 June 2021, to understand the hazardous sites present within the following area of influence (AOI):
- centre line of the route of the Proposed Scheme + 500m buffer; and
 - land required for the construction of the Proposed Scheme + 250m buffer.
- 1.2.3 Through engagement with the HSE it was identified that there are several major hazard sites that could present a source of hazard to the Proposed Scheme, and vice versa, due to an identified interaction between the AOI for the Proposed Scheme and the consultation zone for these sites. These sites are registered with hazardous substance consent³ and/or under the Control of Major Accident Hazards (COMAH) regulations⁴.
- 1.2.4 Data on these sites was provided by the HSE to HS2 Ltd for the AOI.
- 1.2.5 Hazardous substances consent applies to land where activities associated with hazardous substances could be undertaken. The HSE only removes the consultation distances for major hazard sites when they are formally notified by the relevant Local Authority of the revocation of the hazardous substances consent. Therefore, the data provided may include sites where activities associated with hazardous substances are not currently undertaken but could be undertaken under hazardous substances consent, in addition to sites where activities associated with hazardous substances are currently undertaken.
- 1.2.6 Those major hazard sites whose consultation zone interacts with the land required for the Proposed Scheme are presented in Table 1.

Table 1: Major hazard sites identified by the Health and Safety Executive, where the consultation zone interacts with land required for the Proposed Scheme

Community area	Site name	Local authority
MA01	Air Products PLC	Cheshire East
MA01	CHK Engineering Ltd	Cheshire East
MA01	Hole House Farm	Cheshire East
MA01	BRITISH SALT LTD	Cheshire East
MA02	Aston Way - Middlewich	Cheshire East
MA02	Henkel Ltd	Cheshire West and Chester
MA02	Holford Brine Field	Cheshire West and Chester
MA02	Stublach Gas Storage Site	Cheshire West and Chester
MA02	King Street Energy (Cheshire) Ltd	Cheshire West and Chester
MA02	National Grid Gas PLC	Cheshire West and Chester
MA02	Holford H165 Gas Storage Cavity	Cheshire West and Chester
MA02	INEOS Chlor Enterprises Ltd.	Cheshire West and Chester

³ *The Planning (Hazardous Substances) Regulations 2015, No. 627.* London, Her Majesty's Stationary Office. Available online at: <https://www.legislation.gov.uk/uksi/2015/627/contents/made>.

⁴ *The Control of Major Accident Hazards (COMAH) Regulations 2015, No. 483.* London, Her Majesty's Stationary Office. Available online at: <https://www.legislation.gov.uk/uksi/2015/483/contents/made>.

Background Information and Data

Major accidents and disasters

BID MA-002-00000

External sources of hazard

Community area	Site name	Local authority
MA02	INEOS Chlor Enterprises Ltd.	Cheshire West and Chester
MA02	KEUPER GAS STORAGE	Cheshire West and Chester
MA02	Wincham	Cheshire West and Chester
MA06	Manchester Airport	Manchester City Council

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1.3 Major accident hazard pipelines

- 1.3.1 Major accident hazard pipelines are regulated by the Pipelines Safety Regulations 1996⁵.
- 1.3.2 Through the same data request and engagement as outlined above, it was also identified that there are several major accident hazard pipelines that could present a source of hazard to the Proposed Scheme, and vice versa, due to an identified interaction between the AOI for the Proposed Scheme and the consultation zone for these assets. As with the major hazard sites, major accident hazard pipelines have consultation zones set by the HSE via the same process as major hazard sites.
- 1.3.3 Major accident hazard pipeline consultation zones interacted by the land required for the Proposed Scheme are presented in Table 2.

Table 2: Major accident hazard pipelines identified by the Health and Safety Executive, where the consultation zone interacts with land required for the Proposed Scheme

Pipeline operator	Pipeline reference
E.ON UK	4094789
National Grid Gas PLC	4257647
Northern Gas Networks	4403741
E.ON UK	4423918
SABIC pka ICI Chemicals & Polymers Ltd	6713
SABIC pka ICI Chemicals & Polymers Ltd	6714
Cadent Gas Ltd	6729
Cadent Gas Ltd	6731
Cadent Gas Ltd	6732
Cadent Gas Ltd	6737
Cadent Gas Ltd	6740
Cadent Gas Ltd	6741
Cadent Gas Ltd	6742
National Grid Gas PLC	6746
National Grid Gas PLC	6747
Cadent Gas Ltd	6751

⁵ *The Pipelines Safety Regulations 1996, No. 825*. London, Her Majesty's Stationary Office. Available online at: <https://www.legislation.gov.uk/ukSI/1996/825/contents/made>.

Background Information and Data

Major accidents and disasters

BID MA-002-00000

External sources of hazard

Pipeline operator	Pipeline reference
National Grid Gas PLC	6754
National Grid Gas PLC	6755
Cadent Gas Ltd	6756
Cadent Gas Ltd	6755
Cadent Gas Ltd	6765
Essar Oil (UK) Ltd	6799
Cadent Gas Ltd	6815
Cadent Gas Ltd	6875
National Grid Gas PLC	6913
Cadent Gas Ltd	7056
Cadent Gas Ltd	7058
Cadent Gas Ltd	7059
National Grid Gas PLC	7181
Cadent Gas Ltd	7182
Cadent Gas Ltd	7191
Cadent Gas Ltd	7620
Cadent Gas Ltd	7621
Cadent Gas Ltd	7623
Cadent Gas Ltd	7624
Cadent Gas Ltd	7625
National Grid Gas PLC	7631
National Grid Gas PLC	7632
National Grid Gas PLC	7633
Northern Gas Networks	7660
Northern Gas Networks	7662
Northern Gas Networks	7664
Northern Gas Networks	7665
Northern Gas Networks	7666
Northern Gas Networks	7667
Northern Gas Networks	7670
Northern Gas Networks	7671
National Grid Gas PLC	7737
National Grid Gas PLC	8344
National Grid Gas PLC	8402
National Grid Gas PLC	8404
Cadent Gas Ltd	7623
National Grid Gas PLC	7633
Cadent Gas Ltd	7191

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Background Information and Data

Major accidents and disasters

BID MA-002-00000

External sources of hazard

1.4 Explosives sites

- 1.4.1 Explosives sites are legally required, under the Explosives Regulations 2014⁶, to submit a safeguarding plan⁷.
- 1.4.2 Via the same data request to the HSE as for major hazard sites and major accident hazard pipelines, explosives sites which could present a source of hazard to the Proposed Scheme, and vice versa, due to an identified interaction between the AOI for the Proposed Scheme and the safeguarding plan for these sites, were identified.
- 1.4.3 Explosive site safeguarding plans which interact with the land required for the Proposed Scheme are presented in Table 3.

Table 3: Explosives sites identified by the Health and Safety Executive, where the safeguarding zone interacts with land required for the Proposed Scheme

Community area	Site name	Local authority
MA05	Culcheth	Warrington

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1.5 Nuclear sites

- 1.5.1 The proximity of nuclear sites presents a potential source of hazard to the Proposed Scheme, and vice versa. These sites have 'consultation zones' which have been set by the Office for Nuclear Regulation (ONR).
- 1.5.2 ONR sets two consultation zones:
- the inner zone, the Radiation (Emergency Preparedness and Public Information) Regulations 2019⁸ (REPPiR) off-site emergency planning area, which identifies the area around a nuclear site where the local authority has to have a plan for protecting the public in the event of an off-site emergency. A list of these sites is publicly available via the ONR website⁹; and
 - the outer consultation zone, which extends from the outer perimeter of the REPPiR off-site emergency planning area. On the 26 February 2019, the ONR provided HS2 Ltd with the following list of sites with outer consultation zones:

⁶ *The Explosives Regulations 2014, No. 1638*. London, Her Majesty's Stationary Office. Available online at: <https://www.legislation.gov.uk/ukxi/2014/1638/contents/made>.

⁷ Health and Safety Executive, *Safeguarding plans*. Available online at: <http://www.hse.gov.uk/explosives/licensing/safeguarding-plans.htm>.

⁸ *The Radiation (Emergency Preparedness and Public Information) Regulations 2019, No. 703*. Available online at: <https://www.legislation.gov.uk/ukxi/2019/703/contents/made>.

⁹ Office for Nuclear Regulation, *Sites/Facilities that we regulate*. Available online at: <https://www.onr.org.uk/regulated-sites.htm>.

Background Information and Data

Major accidents and disasters

BID MA-002-00000

External sources of hazard

- Aldermaston;
- Burghfield;
- Dungeness 'B';
- Hinkley Point 'B';
- Oldbury;
- Sizewell 'B';
- Winfrith; and
- Wylfa.

1.5.3 No interactions between the land required for the Proposed Scheme and any consultation zones for nuclear sites set by the ONR were identified.

1.6 Aerodrome safeguarding areas and public safety zones

1.6.1 Guidance on aerodrome safeguarding is set out in the Department for Transport (DfT) Circular 1/2003¹⁰, which details the process and consultation requirements of local planning authorities and airports. Major civil aerodromes¹¹, because of their importance to the UK air traffic system, are protected through a process known as aerodrome safeguarding which functions through the planning system. Local planning authorities are required to consult the safeguarded aerodrome on those developments that could potentially affect the safety of aircraft and air traffic control operations. The presence of aerodrome safeguarding areas presents a potential source of hazard to the Proposed Scheme, and vice versa.

Operators of licensed aerodromes which are not officially safeguarded and operators of unlicensed aerodromes and sites for other aviation activities may, as recommended by the Civil Aviation Authority to aerodrome licensees, lodge a non-official safeguarding map with the local planning authority or authorities¹⁰. A non-official safeguarding map has been lodged by City Airport (Barton Aerodrome) with Salford City Council.

¹⁰ Department for Transport (2002), *The Town and Country Planning (safeguarded aerodromes, technical sites and military explosives storage areas) Direction 2002*. Available online at:

<https://www.gov.uk/government/publications/safeguarding-aerodromes-technical-sites-and-military-explosives-storage-areas/the-town-and-country-planning-safeguarded-aerodromes-technical-sites-and-military-explosives-storage-areas-direction-2002>.

¹¹ An aerodrome means any area of land or water designed, equipped, set apart, commonly used or in prospective use for affording facilities for the landing and departure of aircraft and includes any area of space, whether on the ground, on the roof of a building or elsewhere, which is designed, equipped or set apart for affording facilities for the landing or departure of aircraft capable of descending or climbing vertically, particulars of which have been furnished by the First Secretary of State, the National Assembly for Wales, the Civil Aviation Authority or the Secretary of State for Defence to the local planning authority or authorities for the area in which it is situated [taken from Circular 1/2003].

Background Information and Data

Major accidents and disasters

BID MA-002-00000

External sources of hazard

- 1.6.2 Government advice in relation to public safety zones is set out in the DfT Circular 01/2010¹². Public safety zones are designated areas of land at the end of the runways at the UK's major airports within which development is restricted. This is to control any increases in the number of people living, working, or congregating in these areas.
- 1.6.3 Due to the proximity of the Proposed Scheme to Manchester Airport (MAN) there is the potential for interaction of land required for the Proposed Scheme with the aerodrome safeguarding area. This is presented in Table 4.

Table 4: Airports whose aerodrome safeguarding area interacts with land required for the Proposed Scheme

Community area	Site name	Local authority	Regulated activity
MA06	Manchester Airport (MAN)	Manchester City Council	Presence of aerodrome safeguarding area

¹² Department for Transport (2010), *Control of Development in Airport Public Safety Zones*. Available online at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/36536/circular.pdf.

High Speed Two (HS2) Limited

Two Snowhill

Snow Hill Queensway

Birmingham B4 6GA

Freephone: 08081 434 434

Minicom: 08081 456 472

Email: HS2enquiries@hs2.org.uk

