

2018-2019

Surrey Community Risk Register



Surrey's
Local Resilience
Forum

Surrey Local Resilience Forum
Risk Assessment Working Group
2018-2019

The Purpose of the Register

The Surrey Community Risk Register has been created to provide public information about the hazards that exist within the County and the control measures that are in place to mitigate their impact. The Register has been published in response to the Civil Contingencies Act 2004 and further information can be assessed through the GOV.UK website.

Methodology

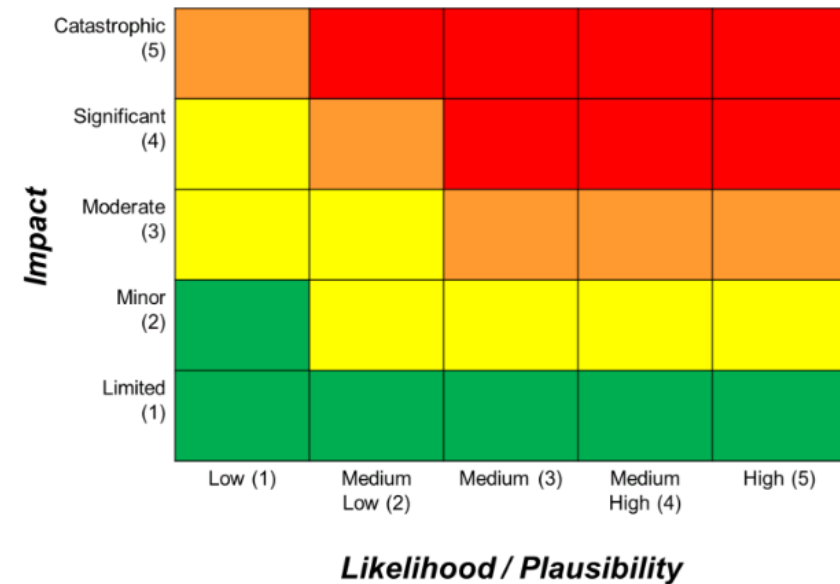
The hazards have been outlined in a generic format as this is the basis of response planning within the County, which follows nationally agreed best practice. The generic hazards are taken from the National Risk Register and have been assessed for the likelihood of the event happening and the potential impact that may have within the County. This assessment is then used to create a risk rating for the hazard. The likelihood and impact values were agreed through the multi-agency Risk Assessment Working Group on behalf of the Surrey Local Resilience Forum as shown in the matrix.

It should be stressed that as part of the hazard assessment process, a number of scenarios have been considered both in respect of the likelihood of them occurring and the economic, environmental, health and social impacts that would result if they happened.

The inclusion of these hazards and scenarios in the register does not mean that the Surrey Local Resilience Forum believes the risk will materialise or that it would be of that scale. They are based upon worst case scenario assumptions and will be used to assist the Surrey Local Resilience Forum in establishing sufficient control measures to mitigate the effect of those hazards. This Community Risk Register will be regularly reviewed and updated as required, with the most current version available from the Surrey County Council website.

This public document displays the risk assessments for non-malicious events rather than for those caused deliberately (such as the threat of terrorism). These threats are being considered but remain a confidential annex to the risk register to prevent their potential use by adversaries.

Should you have any questions about this document, please contact the LRF Business Support Unit via Surrey County Council's Contact Centre on 03456 009 009. This document is available in hard copy, large print, Braille or other languages on request.



Risk	Ref	Category	Risk Description	Overview of Risk	Risk Rating	Mitigation and Preparedness <i>[Specific preparedness and mitigation additional to the Surrey Major Incident Protocol, Emergency Assistance Centre Plan, Vulnerable People Plans, Temporary Mortuary Plan and Cat 1 Standard Operating Procedures]</i>	Lead Agency
H	1	Accident	Gas supply infrastructure (installations)	Liquefied gas release is exposed to a source of ignition causing fire or explosion	Medium	Commercial operators or land/building owners legislative compliance and Business Continuity Plan HSE legislation Site operators – emergency procedures Mass Casualties Plan Site Clearance Plan Category 1 responders standard procedures COMAH legislation	Surrey Fire and Rescue Service
H	4	Accident	Hazardous Liquids Supply Infrastructure	Fire or explosion at a fuel distribution site, or at a site storing flammable and/or toxic liquids	High	HSE Legislation/ On-site Business Continuity Plans and legislative requirements COMAH Offsite Plan Pipelines Plan	Surrey Fire and Rescue Service
H	5	Accident	Fuel Supply Infrastructure (pipelines)	Fire or explosion at an onshore fuel pipeline following ignition of flammable fuel under high pressure	Medium	The Pipelines Safety Regulations (PSR) 1996 defines that certain pipelines carrying dangerous fluids as being Major Accident Hazard Pipelines. MAHPs are subject to additional regulatory requirements including controls on land use planning areas that might be affected by an incident arising from an MAHP. HSE Legislation COMAH Offsite Plan Pipelines Plan Major Accident Hazard Pipeline Plan Category 1 responders standard procedures Site operators – emergency procedures Site Clearance Plan	Surrey Fire and Rescue Service
H	7	Accident	Gas supply infrastructure	Fire or explosion at a gas pipeline following ignition	Low	There are three declared Major Accident Hazard Pipeline (MAHP) operators in Surrey.	Surrey Fire and Rescue Service

			(high pressure pipelines)	of flammable gas under high pressure		HSE Legislation COMAH Offsite Plan Pipelines Plan Major Accident Hazard Pipeline Plan Pipelines Safety Regulations 1996 (PSR) Category 1 responders standard procedures Site operators – emergency procedures Site Clearance Plan	
H	9	HAZMAT	Toxic Chemical Release	Large toxic chemical release caused by release of chlorine or a number of other chemicals	Medium	HSE legislation Site operators emergency plans Site operators – emergency procedures Site Clearance Plan DEFRA plans Environment Agency plans and protocols	Surrey Fire and Rescue Service
H	11	HAZMAT	Radiation Exposure from Stolen Goods	Incorrect handling of a stolen radioactive source leads to accidental exposure to radioactive material	Low	HSE legislation Radiation (Emergency Preparedness and Public Information) Regulations 2001 (REPIR) Site operators legislative compliance and emergency plans Site operators – emergency procedures Site Clearance Plan	SECamb
H	12	HAZMAT	Biological Pathogen Release	A pathogen is inadvertently released from a containment laboratory in an urban area	Medium	Commercial operators or land/building owners legislative compliance and Business Continuity Plan HSE legislation Site operators – emergency procedures Emergency Assistance Centre Mass Casualties Plan Site Clearance Plan Category 1 responders standard procedures Notifiable Animal Disease Contingency plans	Surrey Police
H	13	HAZMAT	Radiation Release From Foreign Nuclear	Accident at an overseas nuclear waste storage facility with impacts that reach the south coast of the UK	Low	HSE legislation Radiation (Emergency Preparedness and Public Information) Regulations 2001 (REPIR) Site operators legislative compliance and emergency plans Site operators – emergency procedures Site Clearance Plan Category 1 responders standard procedures	NHS ENGLAND

H	14	HAZMAT	Food Supply Contamination	A major contamination incident involving a microbiological pathogen in the food chain	Medium	Food Standards Agency: Guidance documents – National and Local Syndromic Surveillance (PHE) Inspection and Sampling arrangements Category 1 responder plans and procedures PHE Outbreak plan	Public Health England
H	16	Accident	Aviation Crash	A crash between two commercial aircraft	Medium	Significant time may be required for the area affected to recover, especially given the potential for debris, extensive fire damage and contamination issues due to spilt aviation fuel. CAA regulations Flight operators maintenance and operating procedures Commercial operators or land owners legislative compliance Flight operators – emergency procedures Site Clearance Plan CAA – emergency procedures/powers Category 2 responders plans and procedures Category 1 responders standard procedures	Surrey Police
H	17	Natural Hazard	Storms and Gales	Storm force winds affect multiple regions for at least 6 hours during a working day	High	Category 1 & 2 business continuity plans Met Office weather warnings & guidance SLRF – Adverse Weather plan Site Clearance Plan Business Continuity Plans	Met Office
H	18	Natural Hazard	Cold and Snow	Multiple regions of the UK subject to low temperatures and snow	High	Category 1 responder Business Continuity plans SCC Winter Maintenance Plan (Surrey Priority road network strategy) Highways Agency Winter plans The use of voluntary organisations (Surrey4x4 response group; British Red Cross) are activated as part of some agencies business continuity plans SLRF Adverse Weather plan Increased communication to SLRF partners on gritting schedules and locations of salt bins; school closures; updating via social media methods Excess Deaths Plan	Met Office

H	21	Natural Hazard	Fluvial Flooding	A massive river flood event or series of concurrent events across multiple geographic regions following a sustained period of heavy rainfall	Very High	<p>The Environment Agency's Flood Warning Service provides warnings for coastal and fluvial flooding to registered members of the public, professional partners and the media. These flood warnings are issued based on information on catchment and coastal conditions and weather forecasts. The EA have a network of telemetry stations used to obtain information about current conditions.</p> <p>Temporary flood defences Permanent Flood Defences. Property Level protection in the highest risk areas. Temporary Flood Defences e.g. Sandbag walls and flood barriers, and submersible pumps can be deployed during times of flooding SLRF Plans- Each borough/district have their own Multi Agency Flood Plan in addition to a county level plan. Site Clearance Plan Winter Flooding 2013/2014- Multi agency debriefs were held and an Action Plan put in place. Adverse Weather Plan Flood warning service in place for flood warning areas to media, professional partners and the public. Environment Agency Local flood warning plan for county of Surrey. EA Incident management process and procedures. EA 24/7 Incident response and area incident rooms. Mass Evacuation Plan River Thames Major Flood Plan Protocol Major Incident Communications Plan Community Response Groups</p>	Environment Agency
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H	22	Natural Hazard	Surface Water Flooding	Surface water flooding in a large metropolitan area caused by a warm unstable atmosphere	High	<p>Permanent Flood Defences. Property Level protection in the highest risk areas. Temporary Flood Defences e.g. Sandbag walls and flood barriers, and submersible pumps can be deployed during times of flooding SLRF Plans- Each borough/district have their own Multi Agency Flood Plan in addition to a county level plan. Site Clearance Plan Winter Flooding 2013/2014- Multi agency debriefs were held and an Action Plan put in place. Adverse Weather Plan Environment Agency Local flood warning plan for county of Surrey. EA Incident management process and procedures. EA 24/7 Incident response and area incident rooms. Mass Evacuation Plan Major Incident Communications Plan Community Response Groups</p>	Surrey County Council
H	23	Disease	Pandemic Influenza	A worldwide outbreak of influenza occurs when a novel flu virus emerges with sustained human to human transmission	Very High	<p>Plans introduced since 2012 are more flexible and recognise the impact of events such as that experienced in 2009-10. National arrangements have been developed since 2009 with a new National Pandemic Flu Service, a medium-term commitment to maintaining UK anti-viral stocks, and a standing contract for the production of vaccines. Syndromic Surveillance PHE On-going Public awareness campaign e.g. 'Catch it, Bin it, Kill it', 'Hand Hygiene' etc. Mass vaccination and antiviral distribution and delivery frameworks. Vaccination centre plans. SLRF Pandemic Influenza plan Cabinet Office Preparing for Pandemic Flu - Guidance Surrey LHRP Strategic Pandemic Influenza plan Surrey Major Incident Communications plan Surrey Managing Excess Deaths plan STAC activation plan SLRF Fuel Plan Cat 1 and 2 responders specific business continuity plans</p>	Public Health England

						<p>Cat 1 and 2 responders specific pandemic influenza response plans</p> <p>External providers business continuity plans</p> <p>WHO Global Influenza Programme</p> <p>DH UK Influenza Pandemic Preparedness Strategy 2011</p> <p>PHE Pandemic influenza response plan and strategic framework</p> <p>NHS England operating framework for managing the response to pandemic influenza</p>	
H	24	Disease	Emerging Infectious Diseases	An outbreak originating outside of the UK with cases occurring amongst returning travellers and their close contacts	High	<p>Syndromic Surveillance (PHE)</p> <p>DH Communications Strategy and public awareness campaigns</p> <p>Port Health controls and international travel regulations</p> <p>Surrey Major Incident Communications plan</p> <p>Surrey LRF Identifying Vulnerable People in an Emergency plan</p> <p>Supporting Vulnerable People in situ protocol</p> <p>Surrey Managing Excess Deaths plan</p> <p>STAC activation plan</p> <p>Kent Surrey Sussex Public Health England Centre Outbreak/Incident Control Plan</p> <p>Cat 1 and 2 responders specific business continuity plans</p> <p>Cat 1 and 2 responders specific response plans</p> <p>External providers business continuity plans</p> <p>WHO Global Alert and Response (GAR)</p> <p>PHE MERS-CoV guidance</p>	Public Health England

H	25	Disease	Animals (Disease)	A major outbreak of an exotic notifiable disease in animals (including birds)	High	Local Authorities Coordinators of Regulatory Services - LACORS Generic Notifiable Animal Disease Contingency Plan Template for Local Authorities Specified Animal Pathogens Order 1998 Control of Substances Hazardous to Health Regulations 2002 (COSHH) Genetically Modified Organisms (Contained Use) Regulations 2000 DEFRA: Exotic Animal Disease Generic Contingency Plan Quarantine and Movement licensing AHVLA national and regional contingency plans Trading Standards – South East Animal Disease Plan Local and County FMD plans Contingency Plans of other supporting Operational Partners e.g. Environment Agency, Police SLRF Pandemic Flu Plan PHE Outbreak plan Category 1 responder plans and procedures	Surrey County Council
H	31	Industrial Action	Fuel Tanker Drivers	Actual or threatened significant disruption to the distribution of fuel by road as a result of industrial action by fuel tanker drivers	High	National Fuel Emergency Plan Category 1 & 2 business continuity plans LRF Fuel Plan	Surrey Police
H	32	Systems Failure	Fuel Supply (insolvency)	Actual or threatened significant disruption to fuel supplies as a result of an insolvency at a terminal or key refinery	Medium	LRF Fuel Plan Cat 1 Business Continuity Plans SLRF Gold Protocol Surrey Major Incident Communications Plan	Surrey Police
H	33	Industrial Action	Prison Officers	A single, unofficial strike by prison officers nationally, lasting more than 24 hours	Low	ACPO Protocol for police support to prisons	Surrey Police

H	35	Industrial Action	Public Mass Transportation	Strike action by key rail staff resulting in the total shutdown of significant amounts of the rail network	Medium	Rail operators business continuity plans	Surrey Police
H	37	Humanitarian	Influx of British Nationals	Influx of destitute/vulnerable British Nationals who are not normally resident in the UK and cannot be accommodated by family/friends	Low	There are a sizeable number living in less stable countries or countries vulnerable to significant natural hazards. In the event that UK Nationals have to evacuate temporarily or permanently, a number of these are likely to travel to the UK. Community Impact Assessments Airport Business Continuity plans	Surrey County Council
H	38	Infrastructure/ System failure	Gas supply infrastructure	A technical failure or accident in an upstream oil/gas facility, gas import pipeline terminal, or Liquefied Natural Gas (LNG) import reception facility leading to disruption in UK gas supplies.	Medium	National Emergency Plan for Fuel Local Oil/Chemical Spill Response Plan	SFRS
H	39	Infrastructure/ System failure	Water supply Infrastructure	Failure of water infrastructure or loss of drinking water caused by the complete and relatively sudden loss of piped water supply or the degradation of the piped supply such that it is unfit for human consumption even after boiling.	Medium	Surrey Major Incident Protocol Identifying Vulnerable People in an Emergency Plan Emergency Assistance Plan Water Company - Contingency arrangements - supply restoration and interim water supply Contingency plans for key sites and vulnerable customers	Thames Water
H	40	Infrastructure/ System Failure	Telecommunications	Loss of fixed and mobile telecommunications (voice and internet access) for up to 72 hours	Low	Telecommunication companies contingency plans SLRF Technical Communications Plan	Surrey Police

H	41	Infrastructure/ System Failure	National Electricity Transmission	A total national blackout due to the loss of the GB national electricity transmission system	Very High	<p>The electricity industry has robust, well-developed and resilient “Black Start” plans to recover the electricity network from a complete failure.</p> <p>The UK electricity network is effectively self-contained, and is not affected by electrical interconnections to Europe or other networks</p> <p>Distribution Network Operators SLRF Technical Communications Plan Category 1 & 2 responders plans and procedures System Emergency Plan Emergency Communication Plan Black Start Stations</p>	Boroughs
H	44	Infrastructure/ System Failure	Reservoir/dam collapse	A reservoir or dam collapse without warning resulting in almost instantaneous flooding	Low	<p>Environment Agency adopts a Reservoir Safety Enforcement role in line with the Reservoirs Act 1975. This ensures that the reservoir owners appoint a Supervising Engineer who commission regular inspections by an Inspecting Engineer.</p> <p>Schedule 4 of the Floods and Water Management Act has made a number of improvements to the Reservoirs Act 1975 such as:</p> <p>Reservoir Act Offences are now strict liability criminal offences.</p> <p>Inspecting engineers must include both the period for making any recommended safety measures and a status update on any previously recommended safety measures in their report. The recommendations are legally enforceable.</p> <p>Supervising engineers must provide a written statement every 12 months to the reservoir owner or operator on steps needed to maintain it.</p> <p>Site Clearance Plan Temporary Mortuary Plan Mass Casualties Plan Site Specific Off site Reservoir Inundation Plan Generic Off Site Reservoir Inundation Plan Site operators – emergency procedures (Onsite Reservoir Plans).</p> <p>Every large raised reservoir (capacity above 25,000 m3) has reservoir outline flood maps publicly available on the</p>	Environment Agency

						Environment Agency's website. High Risk Reservoirs in Surrey also have detailed Reservoir Flood Maps including flood depths, velocity and travel time.	
H	45	Infrastructure/ System Failure	Regional Electricity Transmission	A significant failure of the electricity network across one or more regions of the U.K. for 24-72 hours	High	System Emergency Plan Emergency Communication Plan Category 1 & 2 responders business continuity plans SMIP Telecommunications Plan	Surrey County Council
H	46	HAZMAT	Biological Substance Release	Inadvertent release of a biological agent caused by an unrelated work activity.	Medium	Commercial operators or land/building owners legislative compliance and Business Continuity Plan HSE legislation Site operators – emergency procedures Mass Casualties Plan Site Clearance Plan Category 1 responders standard procedures	Police
H	48	Natural Hazard	Heat Wave	Daily maximum temperatures in excess of 20 degrees and minimum temperatures in excess of 15 degrees over a large region of the U.K. for at least 2 weeks.	High	Heatwave plans: implementation of Level 2 Alert and Readiness actions by health organisations from the start of the heatwave period before a Level 2 declaration is issued. Public information/warning and informing by NHS England, Public Health England and Surrey County Council Public Health. Met Office Heat-Health Watch alerting system NHS England/Public Health England Heatwave Plan for England Adverse Weather Plan Excess Deaths Plan Mass Casualties Plan	NHS England
H	50	Natural Hazard	Drought	After 3 consecutive dry winters there are periodic water supply interruptions affecting businesses up to 12 months.	Medium	Legislative restrictions on water usage. Surrey LRF Drought Plan Environment Agency Drought Plan Water Company drought plans Category 1 responder's plans and procedures	Environment Agency

H	54	Natural Hazard	Volcanic Eruption	Volcanic ash incursions for up to 25 days resulting in sporadic and temporary closures of significant parts of UK air space.	Low	Met Office Monitoring Health Service mutual aid arrangements Airport Business Continuity Plans SLRF Adverse Weather Plan	Met Office
H	56	Natural Hazard	Space Weather	Disruption to the electricity grid, resulting in two rural/coastal sub-station disconnections each effecting approx. 100,000 people with loss of power/rota disconnections for 1 month.	Very High	Business Continuity Plans Met Office Monitoring SLRF Telecommunications plan	Surrey County Council
H	57	Humanitarian	Public Disorder	Large scale public disorder at site(s) in a single city, or multiple cities, occurring concurrently over several days.		This risk could not be realised in this area and in any event the impact would be very low	
H	58	Natural Hazard	Wildfire	A severe wildfire spreading over an area of 1500 hectares at an urban-rural interface and lasting 7-10 days	Medium	Work with landowners to reduce the scale of incidents that may occur. Increase public awareness to reduce the numbers of heath land fires Land owners emergency procedures South East England Wildfire Group (Surrey Fire chair) SFRS Wildfire Officers SFRS specific off road vehicles and wildfire training Site operators – emergency procedures Site Clearance Plan	Surrey Fire and Rescue Service
H	59	Infrastructure/ System Failure	Finance Banking	A technological failure affecting one of the largest major UK retail banking groups, which renders a significant portion of its retail IT inoperable.	Medium	Business Continuity Plans of Cat 1, Cat 2 and private companies including Banks SLRF Telecommunications Plan	Surrey County Council

H	60	HAZMAT	High Consequence Dangerous Goods	A road or rail tanker containing dangerous goods is involved in an accident leading to a fire/explosion.	High	Rail operator safety/maintenance procedures Network Rail Plans Health & Safety Executive Office of Rail Regulation – plans and procedures The European Agreement concerning the International Carriage of Dangerous Goods by Road International Carriage of Dangerous Goods by Rail Hindhead Tunnel emergency plan Highways Agency Operational Plans and Procedures. SLRF Provision of Welfare on the Highway Site Clearance Plan	Surrey Fire and Rescue Service
H	62	Natural Hazard	Poor Air Quality	Poor air quality event with high pollution concentrations	High	Business Continuity Plans of Cat 1 Excess Deaths Plan	Surrey County Council
H	63	Natural Hazard	Earthquake	Earthquake activity that results in ground shaking with an intensity of 7 or above on the European Macroseismic Scale (EMS) that causes damage to buildings and infrastructure.	Low	British Geological Survey Information Site Clearance Plan Category 1 responders standard procedures Major Incident Communications Plan	District and Borough Councils

Glossary

CBRN – Chemical, Biological, Radiological, Nuclear
COMAH – Control of Major Accident Hazard
DEFRA – Department for Environment, Food & Rural Affairs
EA – Environment Agency
EAC – Emergency Assistance Centre
HSE – Health and Safety Executive
NHS – National Health Service
PHE – Public Health England

SLRF – Surrey Local Resilience Forum. A multi-agency group consisting of Category 1 responders (Police, Fire, Ambulance, County and District Councils, NHS England, Public Health England) and Category 2 responses (utility companies, transport companies).

SLRF plans - Generic plans created to mitigate the effects of an emergency within Surrey. These include plans for dealing with adverse weather, pipelines, transportation gridlock, fuel shortage, communicating with the public, major and CBRN incidents, etc. The plans may be created on a County or District basis.

SMIP – Surrey Major Incident Protocol

STAC – Scientific and Technical Advisory Cell

Definition of Risk

Very High - These are classed as primary or critical risks requiring immediate attention. They may have a high or low likelihood of occurrence, but their potential consequences are such that they must be treated as a high priority. This may mean that strategies should be developed to reduce or eliminate the risks, but also that mitigation in the form of (multi-agency) planning, exercising and training for these hazards should be put in place and the risk monitored on a regular frequency. Consideration should be given to planning being specific to the risk rather than generic.

High - These risks are classed as significant. They may have a high or low likelihood of occurrence, but their potential consequences are sufficiently serious to warrant appropriate consideration after those risks classed as 'very high'. Consideration should be given to the development of strategies to reduce or eliminate the risks, but also mitigation in the form of at least (multi agency) generic planning, exercising and training should be put in place and the risk monitored on a regular frequency.

Medium - These risks are less significant, but may cause upset and inconvenience in the short term. These risks should be monitored to ensure that they are being appropriately managed and consideration given to their being managed under generic emergency planning arrangements.

Low - These risks are both unlikely to occur and not significant in their impact. They should be managed using normal or generic planning arrangements and require minimal monitoring and control unless subsequent risk assessments show a substantial change, prompting a move to another risk category.

Exclusions Table

The table below is the Surrey Community Risk Register Exclusions Table. The risks listed in this table have been identified as not pertinent to the County of Surrey. The risks that have been excluded and the collective reasoning behind their exclusion are included in the table.

National Risk Reference	Category	Risk Description	Overview of Risk	Summary of reasons for Exclusion
H6	Accident	Offshore Gas/Oil Platform	Ignition of hydrocarbon release causing fire and explosion on an offshore oil/gas installation with a staffing level of ~120.	No risk of this type in the SLRF area

H2	Accident	Chemical Supply Infrastructure (pipelines)	Fire or explosion at an onshore ethylene gas pipeline following the ignition of flammable gas under high pressure.	No risk of this type in the SLRF area
H3	Accident	Fuel Supply Infrastructure (installations)	Accident at an oil refinery leading to a fire or explosion.	No risk of this type in the SLRF area
H15	HAZMAT	Maritime Pollution	A large fully laden oil super tanker sinks in the approach to a port leading to the spillage of 100,000 tonnes of crude oil into the sea polluting up to 200km of coastline.	No risk of this type in the SLRF area
H19	Natural Hazard	Coastal Flooding	Combination of natural high tides and major sea surge and significant onshore waves caused by a severe low pressure system leads to severe coastal flooding, predominantly on the East coast from Aberdeen to Dover.	No risk of this type in the SLRF area
H61	HAZMAT	Civil Nuclear	Accident at UK civil nuclear installation resulting in an offsite radiological release.	No risk of this type in the SLRF area

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