

Memorandum of Understanding

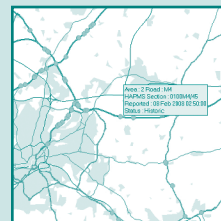
between the

Environment Agency

and the

Highways Agency

Annex 3 - Incident Management



**ENVIRONMENT
AGENCY**



**HIGHWAYS
AGENCY**

An Executive Agency of the
*Department for
Transport*

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The Parties

Highways Agency (HA)

Environment Agency (EA)

(Together the 'Parties')

Introduction

This Annex is one of the supporting technical documents to the 'Memorandum of Understanding' (MoU) between the Environment Agency and Highways Agency. It sets out a framework for effective cooperation between the Parties to minimise the impacts of pollution incidents and environmental events.

Pollution incidents are those involving the release of toxic and/or polluting substances following:

- a road traffic collision and/or fire on the highway
- discharges of pollutants from construction or maintenance activity on the highway network or Highways Agency premises
- deliberate acts such as fly tipping and vandalism

Environmental events are those that threaten the safety of the public and/or integrity/operation of the highway network. Examples include flooding and the fly tipping of hazardous waste.

The Annex has three chapters:

Chapter 1 describes:

- areas of mutual interest
- primary legislation covering incident management
- how the Parties will work together to reduce the likelihood and consequence of incidents.

Chapter 2 covers how incidents on the highway network can affect public health, the environment and the public, and the Parties' roles and responsibilities in incident management.

Chapter 3 sets how the Parties will work together during and after an incident.

Chapter 1: Roles, Responsibilities and Commitments

1.1 Areas of mutual interest

The principal areas of mutual interest for the Parties are:

i) Legislative requirements

- compliance with relevant legislation
- the Parties' statutory duties

ii) Protection of public health and the environment

- protecting water, land and air quality
- protecting the public from the impacts of pollution and environmental incidents
- design, installation and maintenance of highway pollution control facilities

iii) Closer working with partners to improve incident response

iv) Protecting the highway network

- improving flood warning for road users on the network
- minimising congestion and disruption to the travelling public

v) Health and safety of staff when attending incidents on the network

1.2 Key legislation

The Environment Agency's duties in this Annex fall under the following legislation:

- **The Environmental Permitting Regulations (England and Wales) 2010** for the control of pollution
- **The Water Resources Act 1991** - for the recovery of costs
- **The Environmental Damage Regulations 2009** - as a competent body
- **Civil Contingencies Act 2004** - as a Category 1 Responder
- **Land Drainage Act 1991** - for flood management
- **The Flood and Water Management Act 2010** - for flood risk management;

The Secretary of State's powers as a highway authority in relation to this Annex are principally derived from:

- **The Highways Act 1980** - powers to create, build, improve and maintain highways.
- **Civil Contingencies Act 2004** – as a Category 2 Responder
- **Traffic Management Act 2004**

Specific powers under the Highways Act provide for mitigating the adverse effect of highways.

1.3 Key commitments

The Parties will work together and with other responders to develop and implement best policy and best practice to protect people and the environment from the effects of spillages and the impacts of environmental incidents on the public and highway network.

The Parties have identified areas where they can improve working practices and agreed key commitments for how they will do this. These are set out below and cross referenced throughout the document:

Incident response planning

1. The Parties will work together and with partners to implement and test emergency plans for dealing with environmental pollution and/or flooding incidents.

Incident reporting

2. The Highways Agency will build into its procedures and maintain a system for notifying the Environment Agency of incidents which have the potential to pollute the environment that occur on motorway and trunk roads.
3. The Environment Agency will inform the Highways Agency of incidents that have the potential to cause environmental pollution and /or threaten the road network.

Incident response

4. The Parties will work together and with other responders to develop operational procedures and protocols that ensure an effective rapid and co-ordinated response to environmental incidents to minimise the impact they have on people and the environment.
5. The Environment Agency will provide advice and guidance to the Highways Agency in accordance with these procedures and protocols to help it mitigate the impacts of incidents and comply with legislative requirements. Where necessary and safe to do so, its officers will attend the incident scene.

6. The Highways Agency and/or agents will respond to pollution incidents as requested by the Environment Agency and take action to mitigate the impacts of incidents.
7. The Highways Agency will, wherever possible, help the Environment Agency gain access to the incident scene and provide a safe working environment.

Pollution control facilities

8. The Parties will identify locations across the highway network where there is a risk of spillages. The Parties will agree measures to mitigate the impact of a spillage in line with the guidance in the Design Manual for Roads and Bridges Volume 11, Section 3, Part 10: HD45/09: Road drainage and the Water Environment and the principles and commitments set out in Technical Annex 2: The Water Environment. The location, nature and operation of these structures will be shared with other responders.

Drainage maps

9. The Highways Agency will make available to the Environment Agency drainage plans of the network to facilitate incident response and planning.

Pollution equipment

10. The Highways Agency and/or their agents will keep stocks of pollution control equipment and materials at their depots, on their traffic officer and incident support vehicles and at strategic locations on the highway network. The Parties will discuss what equipment the Highways Agency should buy to complement the equipment held by Fire and Rescue Services and agree strategic locations for its storage and procedures for its deployment.

“Clean up” and “waste”

11. The Environment Agency will advise on the most effective remediation actions, suitable UK Spill Accredited clean up contractors and waste disposal routes. The Highways Agency and/or their agents will organise the clean up and restoration of the highway and environment. When doing so, it will ensure waste generated is removed by registered waste carriers and taken to an authorised site for disposal or recovery.

Incident debriefs

12. The Parties will work together and with other responders to identify lessons learnt from incidents to enhance the future co-ordination and effectiveness of their response. Where appropriate, lessons learnt will lead to a review of this Annex.

Training

13. The Parties will draw up and implement each year a joint training programme to support this agreement. This will improve operational incident response, and the planning of and participation in exercises.

Research & development

14. The Parties will continue to explore opportunities for collaborative research to reduce the likelihood and impact of incidents.

Guidance documents

15. The Parties will continue to work together to maintain and update each other's guidance on how to prevent or mitigate the impact of highway spillages; in particular, the Highways Agency Design Manual for Roads and Bridges Volume 11, Section 3, Part 10: HD45/09: Road Drainage and the Water Environment and the Environment Agency's Pollution Prevention Guideline PPG 22 Incident Response – Dealing with Spillages – Appendix C has details of other relevant documents.

Chapter 2: Protecting the Environment and the Travelling Public from the Effects of Pollution and Environmental Incidents on the Highway

2.1 Introduction

Incidents on the highway such as road traffic collisions, fires and lost loads, can threaten public health and the environment if toxic and/or polluting substances are released. Flooding and fly tipping hazardous waste may also threaten the safety and operation of the highway network leading to disruption and congestion.

Congestion on the road network is estimated to cost society £2.9bn each year. Both Parties have a common interest in reducing congestion. This will lead to fewer secondary incidents and improve safety. It will also contribute to the Highways Agency's objective of improving journey time reliability and the Parties' joint objective to protect and improve the environment.

The impact of an incident will be determined by the:

- polluting or toxic nature of the substances involved
- quantity, form and concentration of the substance released
- environmental sensitivity of the location and receptors
- availability of spillage containment facilities and/or pollution control equipment on the highway drainage system
- time of the incident, weather conditions and the volume of traffic on the road
- time and accuracy of any reports or warnings issued
- response of some or all of the
 - Highways Agency and their agents
 - Environment Agency
 - emergency services
 - hauliers and consignors
 - other companies committed to the CHEMSAFE scheme
 - local authorities or other bodies included in the Civil Contingencies Act 2004
 - clean up contractors

The principles and commitments in this chapter describe how the Parties will work together and with these partners to reduce the likelihood and consequences of such incidents.

2.2 Emergency planning

The Civil Contingencies Act 2004, (the Act) defines an emergency as an event or situation which threatens serious damage to human welfare, to the environment or to security.

Under the provisions of the Act, the Environment Agency is classed as a Category 1 Responder with statutory obligations which include:

- assessing local risks to inform emergency planning activities
- putting in place Business Continuity Management arrangements
- having plans to exercise its functions to prevent and respond to emergencies
- sharing information and co-operating with other Category 1 and 2 responders
- undertaking joint training and exercising with other responder organisations.

As a Category 2 responder, the Highways Agency has a duty to co-operate with and to provide information to Category 1 responders relating to their civil protection duties.

The Parties will therefore work closely together to put in place effective emergency plans and to take part in emergency exercises at the regional and local level, particularly for contingency arrangements for flooding and environmental pollution incidents that take place on the road network.

Key Commitments 1 and 4

Key Reference

- *Civil Contingencies Act 2004*
- *PPG 21 Incident Response Planning*

2.3 Incident response

2.3.1 Overview

Most incidents on the highway will initially be attended by the emergency services. The Highways Agency will support them at the site to co-ordinate activities.

For minor incidents (breakdowns, embankment fires and single vehicle fires) it will not always be appropriate for the police to attend. Where incidents occur on Traffic Officer patrolled routes, Traffic Officers will create a safe working environment for the emergency services and other responders such as the Environment Agency.

Where there is a risk of pollution, the Environment Agency will advise the emergency services and the Highways Agency on the best way to manage the environmental response.

The Environment Agency is responsible for taking legal action where incidents have damaged the environment. Where these incidents are on the highway and might also be a scene of crime, the police will have the lead role and access to the site may require their permission/supervision.

Key Commitments 4, 5 and 6

2.3.2 The role of the emergency services

When an incident threatens the environment, the first responders are likely to be the emergency services. Their priority will be to protect people.

In a major incident, responsibility for overall co-ordination of responders will normally fall to the Police. If the major incident involves a fire and/or release of pollutants, the Fire and Rescue Service (FRS) have responsibilities for the emergency action. All agencies with personnel working at the incident remain responsible for the health and safety of their personnel, but the Fire and Rescue Service will ensure that this is informed by an assessment of the specific risks associated with Fire and Rescue Service activity and the Fire and Rescue Service dynamic and analytical risk assessment of the incident. They will also act to protect the environment by:

- notifying the Environment Agency of the incident under agreed reporting criteria
- identifying the nature and concentration of the pollutant and assessing the environmental impact
- putting in place measures to contain and make safe the area around the spillage to prevent or mitigate environmental damage.

The FRS will take these actions in line with the working arrangements set out in the Protocol between the Environment Agency and English and Welsh Local Government Associations dealing with the FRS. http://www.environment-agency.gov.uk/static/documents/Research/protocol8_1567970.pdf

The emergency services will have no direct responsibility for the clean up or removal of waste material.

To undertake containment, the FRS will use highway pollution control systems and/or equipment supplied by the Environment Agency and/or Highways Agency.

Key Commitments 4 and 10

Key Reference:

- *PPG 22: Incident Response – Dealing with Spillages*
- *Protocol between the Environment Agency and English and Welsh Local Government Associations on Fire & Rescue Service issues*
- *Fire and Rescue Service Manual – Environmental Protection*

2.3.3 The Environment Agency's role

The Environment Agency will advise responders on how to manage the environmental response. Its key priorities will be to:

- mitigate the impact of the incident on people, the environment and property
- investigate the cause, collect evidence and consider enforcement action
- seek remediation, clean up or restoration of the environment
- recover any costs associated with the incident response from those responsible.

To meet these objectives, the Environment Agency will need to work closely with:

- the emergency services, in line with the working arrangement set out in its Protocol with the Local Government Association and Welsh Local Government Association on Fire and Rescue Service Issues and procedures it has agreed with the police
- the Highways Agency
- other responders such as hauliers and clean up companies.

When working with the Highways Agency, the Environment Agency will:

- advise them on clean up strategies
- inform them of the environmental sensitivity of an incident location, and the risk of the incident to people, environment and property
- regulate any waste management activities arising during the incident, providing advice on disposal options
- liaise to make sure its actions are undertaken in cooperation, and are co-ordinated, with Highways Agency activities
- advise on risks (impact and likelihood from flooding).

Key Commitments 4, 5 and 11

Key Reference:

- *PPG 22: Incident Response – Dealing with Spillages*
- *Protocol between the Environment Agency and English and Welsh Local Government Associations on Fire & Rescue Service issues*
- *Fire and Rescue Service Manual – Environmental Protection*

2.3.4 The Highway Agency's role

The Highways Agency and/or its agents or contractors will respond to environmental incidents as requested by the Environment Agency.

To do so, they will make sure that a suitably qualified member of staff is on standby 24/7 to co-ordinate the initial response and ensure that the incident is attended by a response team that:

- is suitably equipped and trained to assist with the incident
- responds to the incidents within the maximum response times identified in any contract
- clears and cleans the highway taking into account any potential environmental impact
- proposes temporary measures or permanent repairs to defects arising from the incident and has the authority to implement them
- provides relevant information on local drainage systems, outfalls and soakaways
- assists the emergency services/Environment Agency minimise danger to people and the environment
- in the event of any spillage, takes action, (whether or not directed by the emergency services or by the Environment Agency) to prevent pollutants escaping into the wider environment
- undertakes to identify all waste material arising from an incident and to dispose of it in consultation with the Environment Agency.

Key Commitments: 5, 6, 7 and 11

Key Reference:

- *PPG 22: Incident Response – Dealing with Spillages*
- *Highways Agency Network Maintenance Manual*
- *Oil clean-up products and their application in England and Wales*
- *Highways Agency Regional Emergency Plan(s)*
- *Highways Agency Area Contingency Plan(s)*

2.3.5 Other responders

The Parties will work with other organisations who might be involved in responding to an incident on the highway. e.g. hauliers/CHEMSAFE responders and UK Spill Accredited clean up companies.

Key Commitments: 4

Key Reference:

- *Fire and Rescue Manual – Environmental Protection*
- *PPG 22: Incident Response – Dealing with Spillages*
- *CIA CHEMSAFE leaflet*
- *UK Spill Accreditation scheme*
- *Oil clean-up products and their application in England and Wales*

2.4 Incident support/prevention

The Parties will be sympathetic to requests for advice, or personnel, from the other Party to support their response to an environmental incident.

2.4.1 Pollution mitigation equipment

The prompt containment of a leakage or spillage will prevent or mitigate pollution. The Environment Agency has supplied the FRS with pollution containment materials and equipment which it can use during a pollution incident on the Highways Agency's network. To complement this and to deal with incidents where they do not attend, the Highways Agency and/or their agents will keep stocks of pollution control equipment and materials at their depots, on their Traffic Officer and incident support vehicles and at strategic locations on the highway network. Appendix B has a list of recommended equipment and materials.

At a local level, the Highways Agency or agents, the Environment Agency and FRS should discuss what equipment the Highways Agency should buy to complement the equipment held by FRS. They should also agree strategic locations for storing equipment and the procedures for its deployment.

Key Commitments: 10

Key Reference:

- *Fire and Rescue Service Manual – Environmental Protection*

2.4.2 Highway drainage maps

The Highways Agency will make available to the Environment Agency up to date drainage plans to facilitate risk assessment and the development of local pollution response plans.

Key Commitments: 9

Key Reference:

- *Highways Agency Drainage Data Management System (HADDMS)*

2.4.3 Pollution containment techniques

The principle of containment whenever practicable and safe is the Environment Agency's preferred approach to managing incidents where polluting liquids or materials have been released or used during the clean up. Guidance on the techniques that can be employed to contain spillages on the highway are described in the Environment Agency's Pollution Prevention Guidelines 22 and the FRS Manual on Environmental protection section 3 (2).

Key Commitments: 4, 8 and 10

Key Reference:

- *PPG 22: Incident Response – Dealing with Spillages*
- *Fire and Rescue Service Manual – Environmental Protection*
- *Oil clean-up products and their application in England and Wales*

2.4.4 Training

Each year, a joint training programme will be drawn up and implemented to support this agreement. This will improve operational incident response and the planning and participation in exercises. These exercises might be in addition to those required under the provisions of the Civil Contingencies Act 2004.

Key Commitments: 1 and 13

2.4.5 Spillage control systems.

Installing spillage containment devices within highway drainage systems can help prevent or mitigate the impact of highway spillages. The Highways Agency, with the help of the Environment Agency, has developed guidance setting out when such systems should be installed and the type of system that should be employed. This guidance is contained in Highways Agency Design Manual for Roads and Bridges Volume 11, Section 3, Part 10: HD 45/09: Road drainage and the Water Environment. Both parties should follow this guidance when considering the installation of such systems on new or existing highways.

Key Commitments: 8 and 14

Key Reference:

- *Highways Agency, Design Manual for Road and Bridges, Volume 11, Section 3, Part 10 HD 45/09 Road Drainage and the Water Environment*
- *Highways Agency, Network Management Manual*

Chapter 3: Working arrangements in the event of an incident

3.1 Introduction

These are the working arrangements that should be followed when reporting and responding to an incident on the highway, or an incident that threatens the highway. The Parties should make sure that the information given is clear and as accurate as possible. If there is any doubt whether an incident should be reported the other Party should be notified.

3.2 Incident Notification Responsibilities

3.2.1 The Highways Agency

The Highways Agency will build into its procedures and maintain a system for notifying the Environment Agency of incidents that occur on motorway and trunk roads which could pollute the environment. Appendix A lists the incidents that meet the criteria. If there is any doubt, the Environment Agency should always be contacted.

These incidents should be reported without delay to the **Environment Agency's Incident Communication Service (ICS)**, which operates 24/7. The ICS can be contacted in an emergency using the Environment Agency's **0800 807060** incident reporting hotline number.

The ICS also has a dedicated ex-directory number for the use of professional partners such as the Highways Agency: **0845 8503518**

For all flood incidents, all communications to the Environment Agency are to be made using the Floodline contact No: **0845 9881188**

3.2.2 The Environment Agency

The Environment Agency will inform the Highways Agency of incidents or events that have the potential to cause environmental pollution and /or threaten the road network by contacting the HA's **National Incident Liaison Officer (NILO) (0121 335 8338)**.

If the incident has only a local impact, subsequent communication should be directed through the relevant Highways Agency Regional Control Centre. These are:

South East RCC	01883 745 300
South West RCC	01173 165 861
Eastern RCC	01707 608 671
East Midlands RCC	0115 855 2000
West Midlands RCC	0121 421 8808
North East RCC	01924 243 713
North West RCC	01925 298 000

3.3. Pollution incident assessment by the Environment Agency

When informed of an incident by the Highways Agency or its agents, the Environment Agency will offer advice and assistance initially by telephone. Its officers will attend incidents involving potential or actual significant environmental impact within 2 hours during office hours and 4 hours outside office hours. This is subject to a health and safety risk assessment. They may attend other less significant incidents based on an environmental risk assessment. The Environment Agency will communicate its decision on attendance and its estimated time of arrival at the incident. If it does not attend, advice and support will be provided over the telephone.

3.4 Environment Agency access to an incident scene

Environment Agency staff will at all times carry their identification cards and will, if required, wear an Environment Agency high visibility tabard or coat.

Where a number of Environment Agency staff are on site, the Environment Agency Site Controller (responding Environment Officer) will co-ordinate all Environment Agency communications with the Highways Agency. They will also make themselves known to the Incident Commander.

The Highways Agency will assist, where possible, Environment Agency staff in gaining access to the site of an incident. Environment Agency staff will contact the National Incident Liaison Officer to request such assistance if required

3.5 Incident types

3.5.1 Pollution incidents

The Highways Agency will aim to prevent or mitigate pollution wherever reasonably practicable following a spillage, and organise the clean up using suitable equipment and specialist contractors. To assist the Highways Agency, the Environment Agency will advise wherever possible, on suitable UK Spill accredited clean up contractors and/or pollution control equipment, the use of oil spill clean up products and disposal routes for any wastes generated.

The Highways Agency for its part will minimise pollution and take responsibility for organising the clean up operation although in some cases the vehicle operator or owner of the spilt material may take the lead. The Highways Agency's responsibility will extend to removing and disposing of material spilt on trunk roads and motorways including on the verge. It also includes:

- cleaning and reinstating any part of the drainage system affected
- disposing of abandoned drums, contaminated packaging washwaters, used absorbents and other pollution control materials

Any waste generated during these operations should be removed by registered waste carriers and taken to an authorised site for appropriate disposal or recovery.

The only exception to this approach would be where the Highways Agency, its agents or responsible contractors are unable to respond quickly enough to prevent or mitigate an immediate risk to the environment and/or human health. In such cases the Environment Agency will arrange for any containment and clean up required and the removal of any waste produced.

The Environment Agency will, wherever possible, seek to recover its costs in dealing with a pollution incident from the individual or company responsible for the incident. This will include staff time and the costs of any materials it uses, including those supplied to the FRS and contractors it employs.

3.5.2 Fly tipping

If fly-tipping occurs on Highways Agency land and the polluter cannot be found then it is the responsibility of the Highways Agency (and/or its Managing Agent Contractor) as the landowner to safely remove and clean up the material. Significant or repeat incidents should be reported to the relevant Environment Agency office (and captured by Management Processes).




3.5.3 Incidents Involving Flooding

In the case of flooding (a natural event), the Environment Agency will seek to minimise the likelihood and consequence of floods on people, property and infrastructure by the provision of flood warnings and by securing and operating its flood defence assets, including main river watercourses.

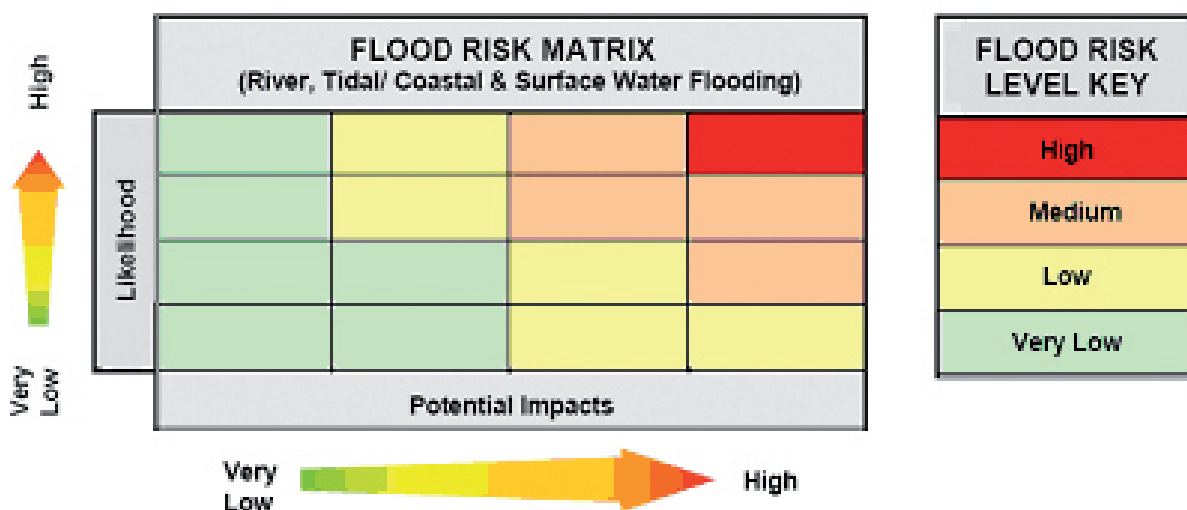
The Highways Agency relies upon the Environment Agency's flood warning service for initiating actions at its property at risk of flood damage. It is unlikely that the motorway network will be flooded from fluvial, tidal or coastal flooding. In the rare event that such flooding occurs, the Environment Agency and Highways Agency are to ensure adequate local communications are in place between emergency workforce teams, the Environment Agency Operation Delivery teams and the Highways Agency term contractors.

The Environment Agency uses the following flood warning codes to warn the public, media and professional partners. Each warning code has a definition, or 'strapline', for use in public facing material. The warning is issued for a defined area (catchment) or multiple areas.

The definitions summarise what the impact of flooding is for each code.

	Key message	Timing
Online flood risk forecast	Be aware. Keep an eye on the weather situation	Forecasts of flooding on our website are updated at least once a day
 FLOOD ALERT	Flooding is possible. Be prepared	Two hours to two days in advance of flooding
 FLOOD WARNING	Flooding is expected. Immediate action required	Half an hour to one day in advance of flooding
 SEVERE FLOOD WARNING	Severe flooding. Danger to life	When flooding poses a significant threat to life and different actions are required
Warning no longer in force	No further flooding is currently expected for your area	Issued when a flood warning is no longer in force

Flood guidance statements assess the risk of all potential flood events for fluvial, tidal, coastal and surface water flood risk. The forecast issued provides a 5 day forecast using county boundaries. Assessment of likelihood and impact give overall flood risk.



When the Flood Forecasting Centre guidance statement shows a medium risk of possible flooding, our local Environment Agency staff set up a teleconference with professional partners local resilience forum partners and Met Office public weather service advisors. This call is an opportunity to inform local decision makers, discuss the situation and whether to activate emergency plans.

The Environment Agency has a power to issue Flood Warnings on main rivers and non-main rivers (also known as ordinary watercourses). This is undertaken through the automated flood warning service (Floodline Warnings Direct). The Highways Agency is listed as a professional partner that will receive all flood warnings issued.

The Flood Warning Area Duty officer issues warnings when river levels or rainfall amounts reach certain levels. In many locations, forecast flood levels are also available through the National Flood Forecasting System (NFFS). The Highways Agency can receive the warnings at any chosen location via fax, email, voice messaging or the Internet.

On receipt of a flood warning, the Highways Agency can contact the Environment Agency National Communications Control Centre (NCCC) or the local Environment Agency Area Incident Room from which the Flood Warning was issued. Each Incident Room operates a dedicated professional partner contact line.

3.5.4 Incidents involving radiation

There is little direct contact between the Highways Agency and the Radioactive Substance Regulation function of the Environment Agency.

If an incident occurs which involves the transport of flasks carrying radioactive material on the motorway/trunk road network, the nuclear operator will notify the United Kingdom Atomic Energy Authority Constabulary - Force Communications Centre (Harwell) in line with the procedures set out in the RADS SAFE Plan. The Environment Agency and Highways Agency would then be notified and respond under the arrangements set up under that plan.

Environment Agency staff will not be involved in the clean up operations but will assess the impact on the environment and provide advice to the multi-agency response on how to dispose of waste materials. Both Parties will be sympathetic to requests for equipment, advice or personnel from the other Party to support their response to an environmental incident.

3.6 Incident debriefs

Following significant incidents involving a multi-agency response, both Parties are likely to be required to contribute to an incident debrief. For minor incidents, where appropriate, the Environment Agency and the Highways Agency (or agents) will carry out local joint reviews. Both Parties will identify lessons learnt to enhance the future co ordination and effectiveness of response. These lessons might lead to a review of the MoU and/or to inform the emergency planning process.

Appendix A Guidelines for when the Environment Agency should be informed of environmental incidents

This lists the types of incident that should be reported. It is not meant to be exhaustive and may be influenced by factors such as the environmental sensitivity of the site. The Highways Agency's local agency/contractor and relevant Environment Agency Region should discuss and agree when the Environment Agency should be informed of environmental incidents.

These are the criteria that might be included:

- spillages or fires involving substances covered by the Carriage of Dangerous Goods Regulations (unless otherwise stated. See Note 1)
- petrol spillages over 100 litres
- hydrocarbon spillages over 20 litres (inc hydraulic oils and cutting oils)
- spillages of Low Hazard products with polluting potential (See Note 2)
- any spillages in or near watercourses
- major Incidents within combined drainage areas (See Note 3)
- incidents at Environment Agency regulated Highways Agency sites in line with Permit Conditions
- incidents involving hazardous fly tipped waste or the generation of hazardous waste
- incidents involving radioactive materials
- significant releases of silt/sand/cement slurry from Highways Agency sites, construction projects or RTCs (Note 4)
- incidents actually or potentially affecting environmentally sensitive locations (See Note 5)
- incidents involving flooding from main river watercourses or where actions or incidents have occurred that could increase the risk of future flooding (See Note 6)

Some incidents will not fall into any of these categories; if in doubt, always contact the Environment Agency.

Note 1

Most countries have domestic regulations which cover the transport of dangerous goods. The UK's domestic regulations are based on the recommendations of a United Nations Committee of Experts on the Transport of Dangerous Goods (the UN Model Regulations); these are regularly updated to take account of new developments. Incidents involving substances classified as dangerous by the UN should be notified to the Environment Agency unless the incident involves only

small quantities of mineral oils (under 25 litres) or under 100 litres of petrol. Incidents involving most gases are unlikely to be of interest to the Environment Agency unless large quantities of water or foam are used. Ammonia and Chlorine are two exceptions.

Note 2

Substances such as milk and beer are highly polluting if discharged into the water environment. Many other seemingly low hazard substances can also pose a risk. A list of 'Low Hazard Products with Polluting Potential' is included in Table 1.

Table 1

Low hazard products with polluting potential

Substance	Threshold	Example
Detergents	25 litres	washing powder, washing up liquid, shampoos, soaps and car cleaning products
Disinfectants	25 litres	household bleach
Food stuffs	250 litres	most have the potential to cause problems, but of particular concern are sauces, sugars, salt, syrups, milk, cream, yoghurt and vinegar
Beverages	250 litres	soft drinks, beers, lagers, wines and spirits
Fertilisers	25 Kg	All
Paint and dye	25 Kg	All
Other organic liquids/slurries	Varies	blood, offal, farmyard slurries, fire fighting foams, sewage sludges, antifreeze, cutting, lube and cooking oils, glycerine, alcohols, latex, water soluble polymers

The effects of these products vary widely; some, such as detergents, are toxic to aquatic life. Silt and sand can smother and choke aquatic life whilst others, such as foodstuffs, beverages and blood, can deoxygenate the water. Fertilisers and detergent are both toxic and lead to deoxygenation.

Every effort should be made to contain these products.

The threshold quantities above are a guide. If there is a spillage of any of the substances, contact the Environment Agency if more information is required about the possible effects.

Other, seemingly harmless, products such as tyres, plastic, rubbish and straw can also cause problems if involved in fires, as fire-fighting run-off from incidents involving them can be highly polluting.

Note 3

Where a road drainage network is connected to a combined drainage system (i.e. taking both surface and foul water which usually drain to a sewage treatment works) the Environment Agency will not need to be informed unless the incident is:

1. of major proportions (eg a large spillage of pesticide)
2. near to a watercourse
3. near to a system that drains directly into marine waters.

Maps of these areas can be supplied. Responsibility for incidents in these areas lies with the Sewerage Undertaker who should be contacted to discuss the types of incident that should be notified. If there is any doubt about the type of drainage system involved, the Environment Agency should be contacted.

Note 4

Discharges containing high levels of silt and/or sand can be highly polluting and should be avoided, as should discharges of water contaminated with cement. Typical sources of such pollution can include dewatering operations, dredging, and surface run-off during construction activities.

Note 5

The Highways Agency and its agents should work with their local Environment Agency contacts to draw up a list of sites of particular concern to the Environment Agency, e.g. Groundwater Source Protection Areas, as a fire or spillage at such sites could have serious environmental consequences. This dialogue should also involve the Fire and Rescue Service and other responders so that an incident response plan can be developed to help reduce the impact of any incident. Once identified, details of these sites should be held in Highways Agency operations rooms so that any incident at these sites is immediately flagged up as of potential concern to the Environment Agency.

Note 6

Examples could include blockage to a main river or damage to a flood defence or control structure and any works in the floodplain that may affect the effectiveness of the floodplain.

Appendix B Recommended pollution control equipment to be held by the Highways Agency or Agents

- leak sealing paste
- oil absorbent sheets
- oil booms (absorbent and rigid)
- loose oil absorbents
- disposable clay drain sealing mats
- plastic bags, cable ties and warning tape for waste
- pipe and drain blockers
- overpack drums, various sizes

Other equipment to consider:

- self erecting pools various sizes
- flexi dams/tanks and disposable liners
- land booms
- chemical binders/absorbents
- soda ash

Discussions should take place locally to make sure equipment purchased meets local needs and supports the equipment held by the FRS and Environment Agency.

Appendix C

Related documents and links under the MoU

This is a list of some useful and relevant documents and links relating to incidents on, or those that threaten, the highway.

Environment Agency

- GP3 Groundwater Protection: Policy and Practice
- Groundwater Vulnerability Maps (Environment Agency)
- Groundwater Source Protection Maps (Environment Agency)
- Working Better Together Protocol Series Protocol (no. 8) Fire and Rescue Service Issues

The Environment Agency publishes Pollution Prevention Guideline Notes (PPGs) and Pollution Prevention Technical Information notes to advise various sectors on law and environmental practices. Guidelines particularly relevant to this Annex are:

1. PPG 3: Use and design of oil separators in surface water drainage systems - to help you decide if you need an oil separator
2. PPG 5: Works and maintenance in or near water - if you are planning works near, in or over water.
3. PPG 6: Working at construction and demolition sites - pollution prevention information for the construction and demolition industry.
4. PPG 10: Highway depots - how to reduce pollution risk from highway maintenance depots.
5. PPG18: Firewater and Major Spillages – how to reduce the risk of pollution from a major fire or spillage
6. PPG21: Incident Response Planning – sets out best practice for producing an incident response plan to deal with an environmental incident
7. PPG22: Incident Response – Dealing with Spillages – describes techniques that can be used to prevent or mitigate the impact of a spillage, including those on a highway
8. PPG28: Controlled Burn – explains how to assess the risk of pollution following a fire and whether a controlled burn can be used to reduce that risk.
9. Oil clean-up products and their application in England and Wales – describes the oil clean-up product types available in England and Wales and how they should be used

These are available as downloads www.environment-agency.gov.uk/ppg or by direct ordering from the catalogue.

Highways Agency

The Highways Agency has published guidance on assessing the potential impacts that road projects and maintenance activities may have on the water environment, as well as different types of mitigation. This guidance represents current best practice and should be used by practitioners from both agencies when determining the level of risk and appropriate design solutions for any road project. They are:

1. The Design Manual for Roads and Bridges Volume 11 (Environmental Assessment) Section 3 (Environmental Assessment Techniques) Part 10:
 - HD45/09 - Road Drainage and the Water Environment
2. The Design Manual for Roads and Bridges Volume 4 (Geotechnics and Drainage) Section 2 (Drainage) – Part 1-9 covers various aspects of different drainage treatment systems, their selection, design, construction & maintenance; particularly relevant advice and guidance notes are:
 - HD 33/06 - Surface and Sub-surface Drainage Systems for Highways
 - HA 103/06 - Vegetative Treatment Systems for Highway Runoff
 - HA 106/04 - Drainage of Runoff from Natural Catchments
 - HA 107/04 - Design of Outfall and Culvert Details
 - HA 118/06 - Design of Soakaways
 - HA 119/06 - Grassed Surface Water Channels for Highway Runoff.

Others

- Guidelines for Environmental Risk Assessment and Management, DETR (2000)
- Environmental Protection, Fire and Rescue Manual - Volume 2. TSO ISBN 9780113413164.





