**Introduction**

Balfour Beatty uses numerous substances, which if spill or leak have the potential to cause significant environmental pollution by entering drainage systems and surrounding ground, contaminating ground water, water supplies and surrounding land. Additionally, they may cause health & safety risks, particularly around the clean-up of the spilt material.

Materials which may lead to harm include:

* Hydrocarbons e.g. oil, petrol, diesel, hydraulic fluid
* Solvents e.g. white spirit, paraffin
* Pesticides, herbicides, biocides
* Chemicals e.g. antifreeze, wood preservatives, chlorine, brake fluid, cleaning materials
* Battery acid
* Paint
* Sewage effluent

Personnel are required to deal with spills immediately (as long as it is safe to do so).

**Legislation and Regulation**

England and Wales **(EN) (W)**  – under the Environmental Permitting (England and Wales) Regulations 2010 (as amended) and the Water Resources Act 1991 (as amended), it is on offence to discharge polluting substances to controlled waters (surface water and groundwater) without prior approval from the relevant Regulators (Natural Resources Wales, Environment Agency and Sewerage Undertakers).

Scotland **(S)** – under the Water Environment (Controlled Activities) Regulations 2011 (as amended) and the Water Resources (Scotland) Act 2013 it is an offence to discharge polluting substances to controlled waters (surface water and groundwater) without prior approval from the relevant Regulator (Scottish Environment Protection Agency and Scottish Water).

Northern Ireland **(NI)** – under the Water (Northern Ireland) Order 1999 (as amended) it is an offence to cause pollution of a waterway or groundwater. Effluent cannot be discharged without the prior approval from the relevant regulator (Northern Ireland Environment Agency).

**What you need to do**

Prevent Spills

All sites must:

* Carry out an environmental risk assessment using [ENV-SF-0001a](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7128) Environmental Risks and Opportunities Tool before starting work and plan and implement spill control measures before commencing work. This includes assessing the liquids being stored/used on site and ensuring adequate spill kits/materials are in place, taking into account the receptors (e.g. rivers, drains, canals, lake, ground water, soil) on site. Spill kits must also be provided in Balfour Beatty vans and grab wagons as well as hired in vehicles such as grab wagons, excavators, mini diggers etc. A guide to the size of spill kits is provided in [ENV-RM-0007a](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7125) Storage of Oils, Fuels and Liquids. The spill control measures must be recorded within site documentation.
* Carry out works in such a way as to prevent pollution to surface waters, ground water and the ground. More detailed guidance is provided by:
  + Link to external document Working at Construction and demolition sites: PPG 6 Pollution prevention Guidelines (note that Pollution Prevention Guidelines were withdrawn by the Environment Agency in 2015 and no longer apply in England. They continue to provide a source of information on good practice for Scotland, Wales and Northern Ireland).
  + Link to external document Works and maintenance in or near water: GPP 5 Guidance for Pollution Prevention (Scotland, Wales and Northern Ireland only)
  + [www.gov.uk](http://www.gov.uk) provides guidance on environmental regulations in England.
* Brief all site personnel on what to do in the event of a spill.
* Understand the arrangements in place for reporting a spill and brief this out to all personnel.
* Understand how to engage an emergency spill contractor if the spill can’t be dealt with by site personnel.

Spill Kit Training

Site personnel must be made aware of where spill kits are located and how they should be used. Training must be provided, recorded and records kept. There are a number of training videos available for purchase which cover the use of spill kits and pollution prevention and the following videos are freely available:

Spill Response Training – 7 steps to Spill Cleanup (Pig) <https://www.youtube.com/watch?v=cTfWT93pC1A> (note: this is an American video and terminology and regulation differ)

Good Environmental Practice on a Construction Site (NetRegs) <https://www.youtube.com/watch?v=XSYz7hTYS-E>

Pollution Prevention Pays (Environment Agency TV) <https://www.youtube.com/watch?v=LyDjC-KXANI>

How to Manage Water on a Construction Site (Netregs) <https://www.youtube.com/watch?v=cTfWT93pC1A>

Periodic Emergency Tests

Where there is a foreseeable risk of an emergency situation occurring in relation to a spill, periodic tests of emergency arrangements must be conducted in line with the frequencies set out in [HSES-PR-0003](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-5162) Emergency Arrangements. [ENV-SF-0018a](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7002) Spill Environmental Emergency Drill must be used to record the test.

Responding to Spills

In the event of a spill, the following 8 steps should be followed:

1. **ASSES THE RISK** of the spilt substance and the potential safety and environmental risks.
2. **SELECT** **PPE** for the substance before attempting to contain it.
3. **CONFINE** the spill with any materials you have to hand.
4. **STOP** the source
5. **EVALUATE AND CLEAN UP** the area with absorbent pads and granules.
6. **DECONTAMINATE** all personnel, equipment and the spill area. Excavate any contaminated land. Dispose of used spill materials and contaminated ground appropriately.
7. **REPORT** the event to your line manager and using [HSES-SF-0005a](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8575) Site Incident form. SBU legacy reporting requirements must also be followed. All incidents must be recorded on iSMS within 48 hours of the incident date
8. **RESTOCK** used spill kits ASAP.

Emergency Spill Contractor

In the event of a spill that cannot be controlled by the site team, an emergency spill contractor may be required. In the event of an emergency, inform your Balfour Beatty Environment Contact.

Provision is in place for the following emergency response contractors to be used:

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| **SBU** | **Emergency Response Contractor** | **Coverage** | **Contact Details** |
| UKCS / Major Projects / Living Places | Reconomy | UK | **01952 292000** (8am-5pm excluding weekends and bank holidays)  **07817770148 / 07506306538** (out of standard working hours) |
| Power T&D / Gas & Water / Plant and Fleet | Adler & Allan  Briggs Environmental | England & Wales  Scotland | 0800 592 827  0800 374 348 |
| Rail | Braemar Howells | UK | 08700 737766 |

Reporting Spills

Spills must be reported and notified as set out in [HSES-PR-0005](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8639) Incident Reporting and Investigation and as per business unit reporting requirements.

Works carried out on the Network Rail managed infrastructure

Network Rail has a memorandum of understanding with the Environment Agency and the Scottish Environment Protection Agency which details when the regulator should be informed of environmental incidents. This is set out in full within Network Rail’s document Level 2 Contract Requirements Environment (NR/L2/ENV/015). Appendix C of this document provides guidelines for when the Environment Agency and SEPA should be informed of environmental incidents. Annex 2 includes incident notification thresholds for loss of cable oil and transformer oil. [ENV-AD-0018a- RAIL](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-6997) Network Rail Environmental Reporting Threshold Criteria briefly outlines these requirements.

Network Rail Oil Leak Reporting Requirements

Following notification from Network Rail of low pressure alarms, [ENV-TB-5500-CAB](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-10997) Network Rail Oil Leak Reporting Requirements must be followed when carrying out oil feeding/oil pumping activities for Network Rail.

Works carried out on Highways Agency managed infrastructure

The Highways Agency has a memorandum of understanding with the Environment Agency. Annex 3 ‘Incident Management’ sets out a framework to minimise the impacts of pollution incidents and environmental events Link to external document Memorandum of Understanding between the Environment Agency and the Highways Authority Annex 3 Incident Management. Appendix A of this document provides guidelines for when the Environment Agency should be informed of environmental incidents.

**Key Considerations**

Protect the Receptor–e.g. rivers, drains, canals and soil. Identify where the spilled material is going and prevent it causing any further harm. This may include protecting drains with bunds or spill socks or containing the material which has already spilled.

Excavating Contaminated Material - If the spill has happened on porous ground (e.g. soil, verge, grassland) then the contaminated ground will need to be excavated and disposed of (testing of the ground is likely to be required before the material can be disposed of). This should be arranged through your Balfour Beatty environment contact.

Highway Spills –If a large spill is on the public highway or footpath the local council should be contacted to clean the site. There will be a charge made for this service which will be passed back to the project.

Spill entering drains –If the spill has entered the drainage system, refer to the drainage plan for the site or area (if available) to identify the route and outfall point where the spillage will discharge. If available, shut off the appropriate outlet valve (with appropriate permissions). If this is not possible, provide containment facilities at the outfall point. The drain/s may need to be pumped out to remove the contamination and prevent further environmental damage caused by it entering a watercourse or sewage treatment works.

**UK Documentation**

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| **Reference** | **Type** | **Title** |
| [ENV-SF-0001a](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7128) | Standard Form | Environmental Risks and Opportunities Tool |
| [ENV-RM-0007a](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7125) | Reference Material | Storage of Fuels, Oils and Liquids |
| [ENV-RM-0018b](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7008) | Reference Material | Spill Kit Training Presentation |
| [ENV-RM-0018c](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7009) | Reference Material | Spill Control Poster |
| [ENV-RM-0018d](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-6999) | Reference Material | Sellafield Spills best practice example 1 |
| [ENV-RM-0018e](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7000) | Reference Material | Sellafield Spills best practice example 2 |
| [ENV-RM-0018f](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7001) | Reference Material | Sellafield Spills best practice example 3 |
| [ENV-TB-0018a](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7003) | Toolbox Talk | Spill Management and Response |
| [ENV-TB-0018b](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7004) | Toolbox Talk | Spill Control and Spill Kits |
| [ENV-SF-0018a](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-7002) | Standard Form | Spill Environmental Emergency Drill |
| [ENV-TF-0018a](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-6996) | Reference Material | Simple Spill Kit User Guide |
| [ENV-AD-0018a-RAIL](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-6997) | Advice Note | Network Rail Environmental Reporting Threshold Criteria |
| [ENV-RM-0018b](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-9532) | Advice Note | Hydraulic Oil Spillage |
| [HSES-PR-0003](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-5162) | Procedure | Emergency Arrangements |
| [HSES-SF-0005a](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-8575) | Standard Form | Site Incident Form |
| [ENV-TB-5500-CAB](https://home360.balfourbeatty.com/ghoreferencecentre/Group%20BMS/_layouts/DocIdRedir.aspx?ID=2KHUWT73P6SE-1572-10997) | Toolbox Talk | Network Rail Oil Leak Reporting Requirements |

**External Documentation**

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| **Reference** | **Type** | **Title** |
| External Document | SEPA / NRW / NIEA Guidance | Working at Construction and demolition sites: PPG 6 Pollution prevention Guidelines |
| External Document | SEPA / NRW / NIEA Guidance | Works and maintenance in or near water: GPP 5 Guidance for Pollution Prevention |
| External Document | Network Rail Requirements | Level 2 Contract Requirements Environment (NR/L2/ENV/015) |
| External Document | Environment Agency Requirements | Memorandum of Understanding between the Environment Agency and the Highways Authority Annex 3 Incident Management. |
| External Document | IOSH Article | First Response Spills |
| External Document | Reconomy | Emergency Response Poster |