

# Detailed guide: ESOS

*Updated:* Added under section: ESOS regulation and penalties 'We publish a summary of the penalties imposed on data.gov.uk'.

## About ESOS

Government established ESOS to implement Article 8 (4 to 6) of the [EU Energy Efficiency Directive \(2012/27/EU\)](#). The [ESOS Regulations 2014](#) give effect to the scheme.

ESOS is a mandatory energy assessment scheme for organisations in the UK that meet the qualification criteria. The Environment Agency is the UK scheme administrator.

Organisations that qualify for ESOS must carry out ESOS assessments every 4 years. These assessments are audits of the energy used by their buildings, industrial processes and transport to identify cost-effective energy saving measures.

Organisations must notify the Environment Agency by a set deadline that they have complied with their ESOS obligations. The deadline for the first compliance period, 5 December 2015, has now passed.

[Read the full ESOS guidance.](#)

## Deadlines for ESOS compliance

If you qualify for ESOS you should have submitted your notification of compliance by 5 December 2015. [Submit your notification as soon as possible if you have not done so already.](#)

If you qualify but have missed the ESOS compliance deadline and are now in the process of completing your ESOS assessment you must [notify the Environment Agency straight away and tell us when you expect to comply.](#)

## Find out if you qualify

ESOS applies to large UK undertakings and their corporate groups. It mainly affects businesses but can also apply to not-for-profit bodies and any other non public sector undertakings that are large enough to meet the qualification criteria.

Your organisation qualifies for the first compliance period if, on 31

December 2014, it met the ESOS definition of a large undertaking.

Corporate groups qualify if at least one UK group member meets the ESOS definition of a large undertaking.

If you are very close to the qualification threshold or have substantially increased or decreased in size in recent years read the [full ESOS guidance](#) which includes additional information on how to assess if you qualify.

Public sector organisations do not usually need to comply with ESOS. For more information on organisations that do not need to comply see section 1.2 of the [full ESOS guidance](#).

## Large undertakings

A large undertaking is:

- any UK company that either:
  - employs 250 or more people, or
  - has an annual turnover in excess of 50 million euro (£38,937,777), and an annual balance sheet total in excess of 43 million euro (£33,486,489)
- an overseas company with a UK registered establishment which has 250 or more UK employees (paying income tax in the UK)

You must take part in ESOS if your undertaking is part of a corporate group which includes another UK undertaking or UK establishment which meets these criteria.

Where a corporate group participates in ESOS, unless otherwise agreed, the highest UK parent will act as a 'responsible undertaking' and be responsible for ensuring the group as a whole complies.

UK registered establishments of an overseas company will also need to take part in ESOS (regardless of their size) if any other part of their global corporate group activities in the UK meet the ESOS qualifying criteria.

An 'establishment' is a branch within the meaning of the Eleventh Company Law Directive (89/666/EEC), or a place of business that is not such a branch where there is some degree of physical presence in the UK.

The financial qualification thresholds are specified in the ESOS regulations in euros. The equivalent pound sterling figures were determined for the first compliance period based on the [Bank of England daily spot exchange rate on 31 December 2014](#) (the qualification date).

To find out if you qualify take your employee numbers, turnover and balance sheet totals from the accounts for the financial year ending either:

- on the qualification date of 31 December 2014
- in the 12 months immediately preceding the qualification date of 31 December 2014

If you are very close to the qualification threshold or have substantially increased or decreased in size in recent years read the [full ESOS guidance](#) which includes additional information on how to assess if you qualify.

A person is employed by an undertaking if they are:

- an employee
- an owner / manager
- a partner

An 'employee' is a person employed under contracts of service. Their contracted hours and status (full time / part time) are irrelevant to their classification as an employee.

The number of employees means the average number of people employed by the undertaking in the year.

To work out your average number of employees, you need to:

1. Find the number of people employed by the company for each month of the financial year (whether for the whole month or part of it).
2. Add together the monthly totals.
3. Divide the total by the number of months in the financial year.

## **Complete an ESOS assessment**

If you qualify for ESOS and your organisation is fully covered by ISO 50001, you do not need to carry out an ESOS assessment. You just need to notify the Environment Agency that you are compliant with ESOS.

If you qualify for ESOS, but your organisation is not fully covered by ISO 50001, you need to carry out an ESOS assessment. The assessment helps you work out what your organisation needs to do to comply with the ESOS regulations.

The assessment takes into account energy directly covered by Display Energy Certificates (DECs), Green Deal Assessments (GDAs), or ISO 50001.

For your assessment, you need to:

### **1. Calculate your total energy consumption**

This is the energy used by assets held or activities carried out by your organisation or group. This includes the energy consumed by buildings, industrial processes and transport. To find out how to calculate your total energy consumption read the [full ESOS guidance](#).

## **2. Identify your areas of significant energy consumption**

This is the energy used by assets held, or activities carried out, by your organisation that account for at least 90% of your total energy consumption. You then need to:

1. Find out whether ISO 50001, DEC's or GDAs cover any of your areas of significant energy consumption.
2. Identify whether ESOS compliant energy audits have been, or need to be, carried out for the areas of significant energy consumption not covered by ISO 50001, DEC's or GDAs.

As long as 90% of your total energy consumption is covered, you can use a mix of approaches with some of your energy consumption covered by ISO 50001; some by DEC's or GDAs and some by ESOS energy audits.

## **3. Appoint a lead assessor**

You need to appoint a lead assessor to carry out and oversee or review your energy audits and overall ESOS assessment. Lead assessors can be employees or external contractors as long as they are members of an [approved professional body register](#).

If you want to become a lead assessor you have to be (or become) a member of an [approved professional body register](#). Individuals cannot apply directly to the Environment Agency to be approved.

Professional bodies can submit registers of their members for approval for them to act as ESOS lead assessors.

## **4. Notify the Environment Agency**

You need to [submit your ESOS notification of compliance](#) to the Environment Agency when you have undertaken an ESOS assessment and are compliant with your obligations.

The notification deadline was 5 December 2015 for the first cycle and every 4 years afterwards. If you missed the deadline then submit your notification as soon as possible.

## **5. Keep records**

You need to keep records of how you have complied with ESOS in an evidence pack. There is no set format for this.

## **Submit your ESOS notification of compliance**

When you have completed your ESOS submission you must submit a notification of compliance.

The notification includes details about your organisation and how it has complied. You do not need to provide energy data.

When you access the notification system you will be redirected away from GOV.UK to complete your notification. When you have submitted your notification you will be redirected back to this web page.

Your submission must be as accurate as possible. If the information you submitted is inaccurate, email [esos@environment-agency.gov.uk](mailto:esos@environment-agency.gov.uk), quoting the original submission date, the Companies House registration number (if applicable) and the name of the organisation for which you made the notification.

[When you are fully compliant submit your notification of compliance.](#)

## **If you missed the 5 December 2015 deadline**

If you missed the deadline and still have work to do before you will be compliant, use this [online form](#) to explain why you missed the compliance deadline and when you expect to be able to comply. If you missed the deadline but are compliant already then [submit your notification of compliance](#) straight away.

Qualifying organisations that have not completed and notified a compliance assessment by 5 December 2015 are in breach of the regulations and at risk of [enforcement action and penalties](#). Enforcement action will not normally be taken provided your notification of compliance was received by 29 January 2016. For organisations committing to achieving compliance through ISO 50001 certification, enforcement action will not normally be taken as long as notification is received by 30 June 2016.

If you were not compliant by 29 January 2016 then your case will be reviewed and you may hear from your regulator regarding enforcement action.

## **If you do not qualify for ESOS**

If we have already contacted you about ESOS but you do not qualify please [let us know](#) so we do not contact you again (unless we need further information to verify that you do not qualify).

## **ESOS compliant energy audits**

An ESOS compliant energy audit must meet these criteria:

### **1. It must be based on 12 months' verifiable data**

The data must:

- be for a continuous period
- begin no earlier than 6 December 2010 for the first compliance period

(and no more than 12 months before the start of future compliance periods)

- begin no more than 24 months before the start of the energy audit
- not have been used as the basis for an energy audit in a previous compliance period

## **2. It must analyse the participant's energy consumption and energy efficiency**

This must be done using energy consumption profiling. Energy consumption profiling involves breaking down the different ways in which energy is used by a participant's activities and assets and analysing any variations in energy use to identify inefficiencies.

## **3. It must identify energy saving opportunities**

Energy saving opportunities should be reasonably practicable and cost effective to implement. Recommendations should include the estimated costs and benefits of implementation.

You should assess cost effectiveness by comparing the reduction in units of energy or energy spend with the cost of implementing the measure.

Calculating the cost of implementing a measure should be based on an analysis of whether the investment will be economical over its entire life. This would include taking into account the cost of purchase, installation, maintenance and depreciation.

There is no regulatory requirement for participants to implement the energy saving opportunities identified. This is for each organisation to determine themselves.

## **Site visits during an audit**

Organisations are expected to carry out site visits as part of their ESOS audits. It is not necessary to visit every site. Regardless of the number of site visits, organisations need to ensure they have collected and analysed data for all their areas of significant energy consumption.

Organisations with multiple sites or assets that are identical or very similar, can take a proportionate approach and apply the energy saving opportunities identified in their site visits to their wider portfolio. The lead assessor and participant organisation should determine a suitable site visit sampling approach to reflect the energy consumption patterns of their assets and activities. This is not prescribed in legislation or guidance; it is up to your organisation and lead assessor to agree this.

You need to explain in your evidence pack how the approach you took reflects the energy consumption patterns and saving opportunities for your portfolio of assets and activities. In a compliance audit the regulators will look for well reasoned and documented justifications for the approach you took.

# ESOS regulation and penalties

Your environmental regulator is responsible for compliance and enforcement activities. Your registered office or principal place of activity (in the absence of a registered office) determines your regulator:

- England – Environment Agency
- Northern Ireland – Northern Ireland Environment Agency
- Scotland – Scottish Environment Protection Agency
- Wales – Natural Resources Wales
- Offshore – Offshore Petroleum Regulator for Environment and Decommissioning (BEIS)

The regulator may issue civil sanctions including financial penalties if an organisation does not meet the scheme's obligations.

Read the Environment Agency's approach to ESOS regulation and penalties in their [enforcement and sanctions policy \(annex 2, section D\)](#). Other scheme regulators will apply a similar approach. This approach is also summarised in section 9 of the [full ESOS guidance](#).

We publish a summary of the penalties imposed on [data.gov.uk](https://data.gov.uk).

## Approved registers of ESOS lead assessors

All participants need to have their ESOS assessment signed off by an ESOS lead assessor. Contact details for approved lead assessors are listed on the websites of the approved professional bodies.

To become an ESOS lead assessor you need to be a member of an approved professional body register. Find out how to become a member of an approved professional body register on the websites of those already approved. The list below has web links to the approved registers. Contact the approved organisations if you need further information about their application processes and / or approved lead assessors on their registers.

It is your responsibility to select a lead assessor with the necessary skills and experience to help your business comply with ESOS.

### Approved registers of ESOS lead assessors: organisation and name of register

- [Association of Energy Engineers](#) – certified energy auditor international
- [Association of Energy Engineers](#) – certified energy manager international
- [CIBSE \(The Chartered Institution of Building Services Engineers\)](#) – CIBSE low carbon consultant (LCC) register, ESOS lead assessor subset

- [ECMK Limited](#) – ECMK ESOS lead assessor register
- [Elmhurst Energy Systems](#) – Elmhurst approved ESOS lead assessor
- [Energy Institute \(EI\)](#) – chartered energy manager
- [Energy Institute \(EI\)](#) – register of professional energy consultants (RPEC)
- [Institution of Chemical Engineers](#) – register of chartered chemical engineers (MIChemE/FIChemE) ESOS LEA
- [Institution of Environmental Sciences](#) – IES lead energy assessor
- [Quidos](#)
- [Sava Limited](#) – ESOS lead assessor register
- [Stroma Certification Ltd](#) – ESOS lead energy assessor certification
- [Energy Managers Association](#) – EMA energy saving opportunity scheme lead assessor register
- [Institute of Environmental Management and Assessment](#) – register of IEMA members who can act as third-party lead assessors

## ESOS published data

The Environment Agency has published the following data in relation to ESOS:

### Notification of compliance data

[See the data](#) provided by the organisations that submitted a notification of compliance. The Environment Agency publishes this data to meet its statutory responsibility under the Energy Savings Opportunity Scheme Regulations 2014 and also with government open data policies.

The data in the spreadsheet:

- shows the answers to the questions in Appendix B of the [full ESOS guidance](#)
- does not include personal data – this is protected under the Data Protection Act



- contains no amendments – unless asked to do so or to remove personal data
- has not been verified for compliance – it is a record of notifications

Note:

- some organisations within a group may be covered by a notification of a UK parent and may not be readily identifiable
- the Environment Agency will be checking for compliance over the next 4 years

## More information about ESOS

More details on the ESOS scheme, your obligations and how to comply are set out in the [full ESOS guidance](#).

For more information email [esos@environment-agency.gov.uk](mailto:esos@environment-agency.gov.uk). If you want an ESOS adviser to call you back please provide your phone number and details about your query.

For offshore related queries email [bst@beis.gov.uk](mailto:bst@beis.gov.uk).

The Environment Agency will respond within 10 working days. Send your queries well in advance of each compliance deadline to ensure you have enough time to fulfill your obligations prior to submitting your notification of compliance.

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## [Detailed guide: Waste batteries: producer responsibility](#)

*Updated:* The Department for Business, Energy and Industrial Strategy (BEIS) is now known as the Office for Product Safety and Standards.

Battery producers are responsible for minimising harmful effects of waste batteries on the environment, by:

- improving the design of new batteries – you must follow [‘placing on the market’](#) rules
- paying for waste battery collection, treatment, recycling and disposal – you must follow the rules on this page

It’s illegal to send waste industrial or vehicle and other automotive batteries for incineration or to landfill.

You’re a battery producer if you have a UK business presence and you’re the

first person in your selling chain (including importers) to make batteries available for supply or sale on the UK market.

Battery producers must:

- register with the appropriate [environmental regulator](#)
- accurately record the tonnage and chemistry of batteries placed on the market

How you register depends on the type of battery you sell and the amount of batteries you put on the market.

The types of battery include:

- portable
- vehicle and other automotive
- industrial

To check which type of batteries you place on the market see [Waste batteries and accumulators: technical guidance](#).

## Approved or appropriate person

You must be an approved or appropriate person to sign applications for approval and registration and to submit data and statements of declaration of compliance.

See the [Waste batteries and accumulators: technical guidance](#) on what constitutes an approved or appropriate person.

Use the [delegation of approved/appropriate person form](#) if you want to delegate to another person. Sign the form and send it to your [environmental regulator](#).

## Portable battery producer: register

### Place more than 1 tonne a year on the market

You must pay for the collection, treatment and recycling of waste portable batteries. You do this by joining a [battery compliance scheme \(BCS\)](#) by 15 October before the start of the compliance year (calendar year). You pay the BCS an annual fee and it takes on your duties.

The BCS will:

- register you annually with the correct environmental regulator
- pay the environmental regulator £600 annually for each member
- send information to your environmental regulator about the batteries you placed on the market in the previous 2 years and the current year
- get evidence notes for the collection, treatment and recycling of waste portable batteries
- send information to your environmental regulator about the waste

batteries they collect and deliver for treatment and recycling

Tell your BCS within 14 days if you:

- need to make changes to your registration details
- are no longer a large portable battery producer

## **Place 1 tonne or less on the market**

You must register with the [environmental regulator](#) of the UK country where your registered office is on the [National Packaging Waste Database \(NPWD\)](#).

Each year you must submit the tonnage and chemistry on the NPWD to confirm how many batteries you placed on the market in the previous year. This must be done by 31 January in the following year.

The annual charge is £30.

Tell your regulator if you're no longer a small portable battery producer within one month of the change.

## **Waste electrical and electronic equipment (WEEE): batteries in products**

If you place products containing batteries on the UK market, you will need to report separately the weight of:

- electrical and electronic equipment (EEE) you place on the market without batteries, as part of your [WEEE Regulations](#) duties
- batteries in the EEE, as part of your [Waste Battery Regulations](#) duties

Even if your EEE does not fall under the WEEE Regulations you will still be a battery producer.

## **Vehicle and automotive battery producer: register**

You must register within 28 days of first placing your batteries on the UK market with the Office for Product Safety and Standards.

See the [definition](#) of a vehicle and automotive battery.

Register direct with the Office for Product Safety and Standards on the [NPWD](#).

You must provide the total tonnage, chemistry and brand name of automotive batteries you placed on the market by 31 March in the following year.

If you're also a large producer of portable batteries, you can register through your BCS.

Each producer has a duty to collect waste vehicle and other automotive waste batteries, free and within a reasonable timescale, when asked from the final holder, for example from:

- garages
- scrapyards
- end-of-life vehicle treatment sites
- local council waste collection sites

You must tell final holders how they can request the collection of waste vehicle batteries, for example through information on your website.

The waste batteries must go to an [approved battery treatment operator \(ABTO\)](#) or an [approved battery exporter \(ABE\)](#) for treatment and recycling.

## **Industrial battery producer: register**

You must register with the Office for Product Safety and Standards within 28 days of first placing your batteries on the UK market.

Register direct with the Office for Product Safety and Standards on the [NPWD](#).

You must provide the total tonnage, chemistry and brand name of industrial batteries placed on the market by 31 March in the following year.

If you're also a large producer of portable batteries, you can register through your BCS.

You have a duty to:

- take back waste industrial batteries free of charge from any end-user, if you supply them with new batteries, if they're the same chemistry as batteries you place on the market or if they cannot be returned to another producer
- tell end users how they can return waste industrial batteries, for example through information on your website

The waste batteries must go to an [ABTO](#) or an [ABE](#) for treatment and recycling.

## **Waste battery producers: extra information**

### **Battery producer registration number (BPRN)**

If you supply distributors or business end-users, put your BPRN on any paperwork like invoices, contracts or delivery notes.

### **Brand names**

You're required to report the brand of any batteries you place on the market, as part of your registration, if this is available.

### **Records: extra information**

You should record the weight of portable batteries placed on the UK market but afterwards exported. The government is trying to assess the extent of this practice.

## Technical information

See [Waste batteries and accumulators: technical guidance](#) for exclusions, definitions and battery classification.

## Penalties

Failure to follow the regulations and carry out your duties may result in prosecution and a fine.

## BCS: apply for approval

If you want to run a BCS you need approval from the environmental regulator of the UK country where you have a registered office or where you carry out the day to day running of your business. [Contact your regulator](#) for details on how to apply.

The charge to assess your application is £17,000. The annual subsistence charge for operating a BCS is £90,000 plus £600 for each member.

See [Waste batteries and accumulators: technical guidance](#) for exclusions, definitions and battery types.

## Environmental regulators

### Environment Agency (England)

Telephone: 03708 506 506\*

Email: [batteries@environment-agency.gov.uk](mailto:batteries@environment-agency.gov.uk)

### Northern Ireland Environment Agency

Telephone: 028 9056 9382\*

Email: [batteries@doeni.gov.uk](mailto:batteries@doeni.gov.uk)

### Scottish Environment Protection Agency

Telephone: 01786 457700\*

Email: [producer.responsibility@sepa.org.uk](mailto:producer.responsibility@sepa.org.uk)

### Natural Resources Wales

Telephone: 0300 065 3000\*

Email: [enquiries@naturalresourceswales.gov.uk](mailto:enquiries@naturalresourceswales.gov.uk)

### Office for Product Safety and Standards

Use the [online enquiry form](#) or write to:

Office for Product Safety and Standards

P0 Box 17200

Birmingham

B2 2YT

\*[Call charge information](#)

## **‘Placing on the market’ responsibilities**

For your responsibilities for improving the design and manufacture of new batteries, follow the [Batteries and accumulators: placing on the market regulations guidance](#).

### **More information**

See the legislation and regulations for your responsibilities for waste batteries:

- [Batteries and Accumulators and Waste Batteries and Accumulators Directive 2006/66/EC](#)
- [Waste Batteries and Accumulators Regulations 2009](#)
- European Commission Blue Guide: [new legislative framework for marketing of products](#)

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## **[Policy paper: Salmons Brook flood risk management scheme](#)**

*Updated:* Updated October 2018.

This document explains the flood defence built by the Environment Agency to reduce the risk of flooding from Salmons Brook in north London.

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# [Detailed guide: DUS protocols for testing plant varieties](#)

*Updated:* Notice announcing the implementation updated

## **EU Directive**

The EU Commission Directive 2018/100/EU was administratively implemented in the United Kingdom on 31 August 2018. This specifies the minimum characteristics to be measured and the minimum conditions for examining certain varieties of agricultural and vegetable species for distinctiveness, uniformity and stability (DUS).

See the [notice announcing the implementation](#) (PDF, 229KB, 5 pages)

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## **DUS tests**

As part of the application process to add a plant variety to the National List or for approval of plant breeders' rights, the plant variety must be tested to ensure it is distinct, sufficiently uniform and stable (DUS).

DUS tests are carried out at approved centres over a 2-year period. They are done in line with protocols and procedures approved by the Plant Variety and Seeds Committee, which represents the national authorities on seeds issues.

The Community Plant Variety Rights Office develops the technical protocols which set the characteristics to be used in the DUS tests.

## **DUS criteria**

### **Distinct**

A distinct plant variety has one or more important characteristics that are different from other varieties included in the National List, a list of another EU state, or the EU Common Catalogue.

### **Uniform**

A uniform plant variety has individual plants which have similar or genetically identical important characteristics, with very few aberrations.

## Stable

A stable plant variety has important characteristics which remain true to their original description after successive propagations or multiplications.

## DUS protocols

- [Barley](#)  
(PDF, 238KB, 23 pages)
- [Broad bean](#)  
(PDF, 240KB, 22 pages)
- [Beetroot](#)  
(PDF, 275KB, 22 pages)
- [Broccoli](#)  
(PDF, 233KB, 21 pages)
- [Brussels sprout](#)  
(PDF, 252KB, 22 pages)
- [Cabbage](#)  
(PDF, 270KB, 24 pages)
- [Carrot](#)  
(PDF, 253KB, 23 pages)
- [Celery](#)  
(PDF, 230KB, 19 pages)
- [Festulolium](#)  
(PDF, 170KB, 19 pages)
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[Field beans](#)

(PDF, 213KB, 18 pages)

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[Field pea and pea](#)

(PDF, 335KB, 24 pages)

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[Fodder kale](#)

(PDF, 223KB, 21 pages)

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[Curly kale](#)

(PDF, 219KB, 21 pages)

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[Leek](#)

(PDF, 280KB, 21 pages)

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[Oats](#)

(PDF, 411KB, 18 pages)

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[Onion and echalion](#)

(PDF, 273KB, 27 pages)

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[Parsnip](#)

(PDF, 251KB, 23 pages)

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[Potato](#)

(PDF, 470KB, 26 pages)

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[Radish and black radish](#)

(PDF, 235KB, 22 pages)

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[Oilseed rape and fodder rape](#)

(PDF, 401KB, 18 pages)

- [Rose](#)  
(PDF, 255KB, 32 pages)

- [Runner bean](#)  
(PDF, 227KB, 21 pages)

- [Ryegrass – hybrid](#)  
(PDF, 244KB, 22 pages)

- [Ryegrass – Italian](#)  
(PDF, 246KB, 22 pages)

- [Ryegrass – perennial](#)  
(PDF, 111KB, 22 pages)

- [Shallot](#)  
(PDF, 116KB, 25 pages)

- [Sugar beet](#)  
(PDF, 233KB, 17 pages)

- [Swede](#)  
(PDF, 236KB, 21 pages)

- [Turnip](#)  
(PDF, 252KB, 23 pages)

- [Turnip rape](#)  
(PDF, 246KB, 23 pages)

- [Watercress](#)  
(PDF, 240KB, 23 pages)

- [Wheat](#)  
(PDF, 237KB, 25 pages)
  - [White clover](#)  
(PDF, 228KB, 22 pages)
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## **Statutory guidance: Marine Pollution Contingency Plan**

*Updated:* Plan updated

The plan is under constant review to ensure the best possible response and includes details on:

- how to get approval to use an oil spill treatment product in English and Welsh waters
- environment groups
- MMO's out of hours arrangements
- resources
- legal information
- other contingency plans
- other marine emergencies
- forms and templates for use during and after an incident
- approved products
- list and details of standing approvals to use treatment products

### **Further information**

[Report a marine pollution incident](#)

[Clean an oil spill at sea and get oil spill treatments approved](#)

[Approved oil spill treatment products](#)

[How to use oil spill treatment products and equipment](#)

### **Contact information**

**Marine Conservation and Enforcement Team**

0191 376 2511

[dispersants@marinemanagement.org.uk](mailto:dispersants@marinemanagement.org.uk)