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Technical Assistance for Capacity Building on European Pollutant Release and Transfer Register (E-PRTR) in Turkey

Workshop Event

EPRTR in the United Kingdom



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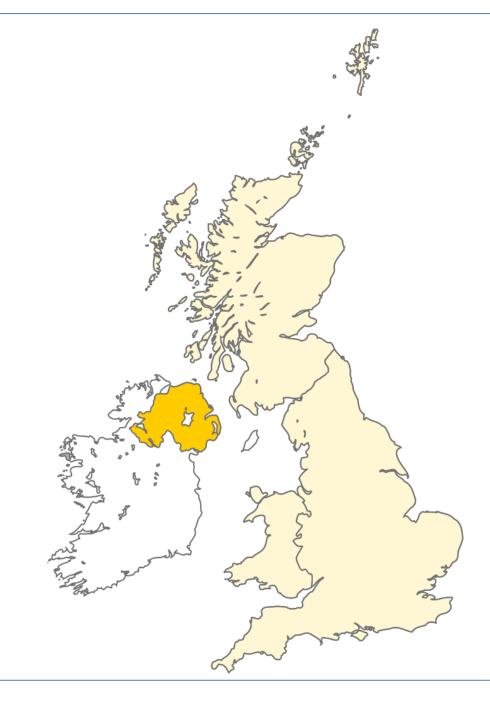


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United Kingdom is a Member State of the European Union – for now.

It consists of 4 home nations each with its own Environmental Agency and its own Environmental Legislation.

England; Northern Ireland; Scotland and Wales











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The Data is collated and reported to EEA by the UK Governments, Department of Environment, Food and Rural Affairs.

Each Home Nation has its own National Inventory:

Environment Agency
Scottish Environment Protection Agency
Northern Ireland Environment Agency
Natural Resources Wales









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Pollutant release data for diffuse sources

The emission of pollutants from the sectors covered by PRTR are typically referred to as 'point source' data, because emissions can be tied to a specific facility or site of operation.

Diffuse emissions occur when the source of emission is more difficult to place at a specific geographic location, or where the nature of the activity that generates the emission is scattered amongst multiple small scale sites which are difficult to quantify. A good example of what can be considered diffuse emissions within the UK PRTR will include the following broad emission groups:

- emissions from road transport vehicles
- emissions from accidental building and vehicle fires
- emissions from combustion in domestic grates
- emissions from bonfires

The National Atmospheric Emissions Inventory (NAEI) website contains data for diffuse sources.









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Scotland – Scottish Environment Protection Agency

The European Regulation on Pollutant Release and Transfer Register entered into force on the 24 February 2006 (E-PRTR Regulation). The Regulation requires operators of industries regulated by SEPA and falling under the activities listed in Annex I of the Regulation to report their releases and transfers to the European Commission on an annual basis starting in 2007. The E-PRTR succeeds the European Pollutant Emission Register (EPER) under which data were reported for the years 2001 and 2004.

The Scottish Pollutant Release Inventory (SPRI) is a database of annual mass releases of specified pollutants to air, water and land from SEPA regulated industrial sites. It also provides information about off-site transfers of waste from these sites. The SPRI will provide emission values and waste transfers when they are over the reporting thresholds and indicate if a site releases a pollutant below the threshold. SPRI emissions data from 2002 to the present year (except 2003) are available and reported annually. From 2007, SPRI data has been used to fulfil the reporting requirements of the European Pollutant Release and Transfer Register (E-PRTR).









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Scotland – Scottish Environment Protection Agency (cont'd)

The difference between SPRI and E-PRTR is E-PRTR is a subset of SPRI sites. This is because of several factors: there are more pollutants to be reported by operators in SPRI, the pollutant thresholds for E-PRTR are much higher than SPRI and SPRI has lower activity thresholds for some activities.

The E-PRTR thresholds are designed to capture 90% of all European industrial releases whereas the SPRI thresholds are set to capture 95% of all Scottish industrial releases. This makes SPRI relevant to Scotland and helps put Scottish releases into context with industrial releases from the rest of the UK.









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Scotland - SPRI

- Started in 2002
- Based on IPPC but has wider remit with 67 activities covering 10 sectors;
- Reporting obligation on operator;
- EA and SEPA have common list of 215 pollutants, thresholds and activities relevant to the UK;
- Mass emissions of 215 pollutants to air, water and land;
- Off-site transfers and transboundary shipments of waste by weight;
- Methodologies must be reported;
- Data made publicly available;
- 40% of SEPA sites will report to E-PRTR



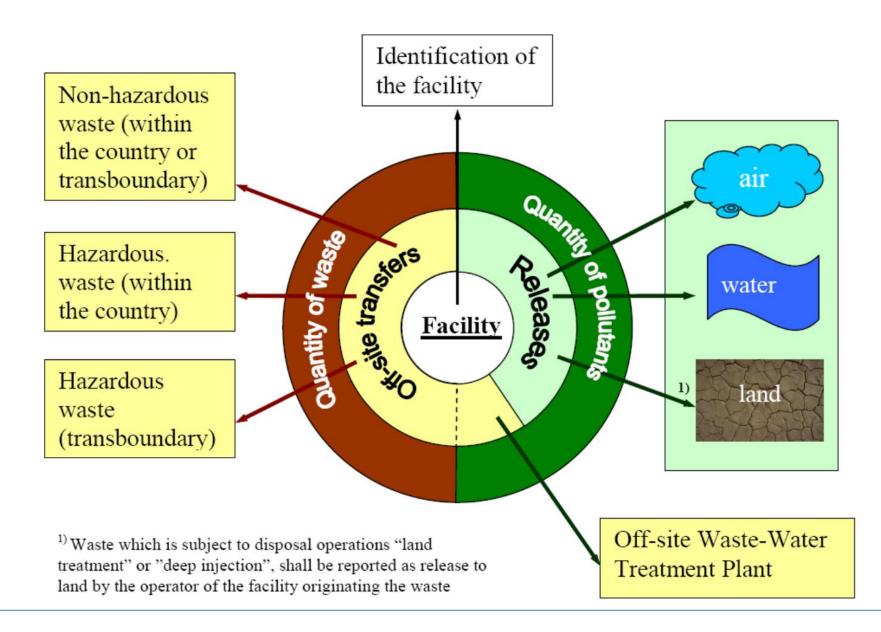






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Scotland – Reporting Requirements











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Operator Guidance

Industrial sites listed in the Scottish Pollutant Release Inventory (SPRI) are required to report the total amounts of a substance that they emit to air or water during the period of a year.

This amount is known as the 'annual mass emission'.

Online guidance on the following:

Who has to report?

How do I report?

What do I have to report?

What happens next?









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Who Has to Report?

Companies or organisations are served a legal notice known as a <u>Regulation 63(2) Notice</u> under the Pollution Prevention and Control (Scotland) (PPC) Regulations during the year that they are required to report. If you have received such a notice, it is a legal requirement for you to complete a SPRI return. If you were required to report in a previous year, it is likely that you will have to continue reporting annually. Even if you are not operating during the reporting year, if the process meets <u>reporting criteria</u> for the SPRI and you have received a formal PPC Regulation 63(2) notice, you are required to submit a return.

If you have not operated and have no emissions, then you should state this in your return. If your authorisation or permit has been revoked, then please state this within your return and, after checking, your company will be removed from the SPRI.

If your industrial operation has closed down during the reporting year, you are still required to report emissions from the site for the part of the year that the site operated, by 28 February of the following year. Our SPRI general operator guidance provides more help and advice on who has to report.









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How do I report?

Operators are required to submit their annual mass emission data by 28 February of the following year. So, for the current reporting calendar year, you must report by the deadline of 28 February. If you miss the reporting deadline, you must contact us as soon as possible for more information on what to do next. We will pursue the missing information in accordance with our enforcement policy.

Operators can complete the <u>SPRI electronic reporting form online</u> by entering a user name and activation code, which operators will be provided with in advance of the start of the reporting period. Electronic reporting is easy to use and you can complete your form in stages before finally submitting it.

Our <u>SPRI operator reporting system guidance</u> provides detailed help and advice on how to complete it. If you don't receive or have forgotten your user name or password, please contact us to receive a reminder. This can be done very quickly and need not delay you making your return.









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How do I report? (contd)

(Some operators of RSA sites cannot submit online returns, however we inform operators of such instances in advance).

Alternatively, you can request a paper form <u>from us</u>. After completing the form, please keep a copy for your records and return the original by post to the address on the form. Please note that it is your responsibility as an operator to provide us with accurate information and, by signing your declaration, you agree to accept this responsibility.

If you are experiencing any problems in completing or submitting your return, please contact us at the earliest point possible in the reporting period. We can then help and support you to successfully submit your return.









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What do I have to Report?

The SPRI has a <u>threshold value for each pollutant</u> – substances considered to be environmentally significant and of interest to the public. These thresholds are set at a UK level (reflecting EU levels) and are designed to capture 95% of the UK's total emitted pollutants for the particular substance.

Annual mass emissions alone are not necessarily directly related to concentrations being emitted at any particular time and cannot be used to directly predict the resulting concentrations in the environment.









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What do I have to Report? (contd)

Thresholds above which mass emissions of each substance must be reported are prescribed using knowledge of the pollutant (its toxicity, transport and persistence in the environment) to indicate what mass emission may give rise to 'significant' environmental concentrations.

Sites reporting to the SPRI all have total annual mass emissions above the reporting threshold for a particular substance, but this does not imply that these sites are in breach of their licenced emission concentration limits at any time during that year. High annual mass emissions are often due to the large size of the industrial process, where relatively low concentrations are released in very large flows of air or water.









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What do I have to Report? (contd)

When completing your return, you need to identify which of the SPRI pollutants you emit, all emissions sources and then which of these leave the site boundary and report the actual value of all substances identified on the SPRI schedule (a list of substances, thresholds and media receiving the pollutant).

Consented substances must be reported – however, substances such as waste (which are not normally consented) may breach the threshold(s) and, as such, must also be reported.









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What do I have to Report? (contd)

For each pollutant, emissions released should be summed and then reported against the appropriate media that it is released to. If your emissions are above the thresholds defined within the reporting criteria, you need to report the actual value.

It is very important that the emissions for separate receiving media (air, water and waste) are not added together. Thresholds for emissions to air are often different from emissions to water due to the different criteria considered during the determination of the thresholds.









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What do I have to Report? (contd)

Even if emissions values fall below the reporting threshold, it is important to us to know where the emissions of pollutants occur in Scotland. We also use this sort of information during auditing, so it is important to include this and shows you have considered all potential pollutant sources from your installation.

If the value of your emissions is below the threshold as defined in the reporting criteria, you should report Below the Reporting Threshold (BRT) and no value is required. You must, however, still report a method description you used to decide your emission level – our guidance on methods and methodologies has more information on this.









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What do I have to Report? (contd)

Accidental emissions, such as those caused by unplanned releases, should also be recorded and entered onto your SPRI annual return – there are separate parts to the form which allow you to add these unplanned events. Accidental releases should be added into the total emission figure for that substance before it is compared to the threshold value.









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What Happens Next?

On receiving your return, we check the information for obvious errors and omissions from the data provided. A return will be refused and returned to the operator if any mandatory information, including address, SIC and PRTR codes, is missing or ambiguous.

Once you have submitted a return, it is locked. If you need to make any changes to your return after you have submitted it to us, please contact us as soon as possible to enable any editing. We are required to record any changes and the reason for the change, so please ensure that you can provide this information.









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What Happens Next? (cont'd)

Please note that you may be asked to justify your emission values during any routine site audits, so please keep any paperwork, measurements or calculations for up to five years.

Once collated, the data returned through SPRI is used as a free and easily accessible information source for the public to review the emissions in their local or national area.

It is also used in research and to fulfil European Union reporting requirements, such as the **E-PRTR** and the **Industrial Emissions Directive**.









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Information shown in the PRTR data sets

Displayed data includes:

- facility, including the facility's parent company where applicable, and its geographical location, including the river basin
- activity
- pollutant or waste, as appropriate
- each environmental medium (air, water, land) into which the pollutant is released
- off-site transfers of waste and their destination, as appropriate
- off-site transfers of pollutants in waste water
- period trends (time series) displayed using graphs









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Features include:

- view current and previous records for each pollutant release using the time series feature
- view records of each release from each activity/all activities
- view each site's release and transfer record and use graphs to assess trends
- view release and transfer trends in graphs from 2007
- interactively access data and view facility location using Google Earth (needs Google Earth application)
- compare release and transfer data from 2007
- compare release information using river basin districts and area
- view the destination of hazardous waste transferred out of the UK
- view waste data from industrial activities in graphs and tables
- download data in complete blocks, for example, by using activity headings with supporting facility level information









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Publication of datasets

Defra aims to publish data approximately one year after the end of the calendar year under report. For example, data for the 2013 report cycle is likely to be available by the end of 2014 and in that order for subsequent years.









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Reliability and validity

PRTR data is provided by operators who submit their annual emission and waste data to the appropriate regulator. A number of quality checks are built into the data collection and reporting processes. These include cross referencing information contained in permits with operator-reported PRTR data, using information from inspections and monitoring regimes to validate reported data, scrutinising and validating data from each operator for omissions, errors and/or incomplete information. Nonetheless, quality assurance is an ongoing exercise and is kept under regular review.

The PRTR regulation places the responsibility for data collection on the operator. The operator has a legal responsibility to monitor substances that are released during the course of operation of an installation using a variety of methods as specified in the operating permit and sector guidance.









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Reliability and validity (cont'd)

The These are then reported to the regulators who compile and check the information before it is published online.

EU's PRTR regulation and the UN ECE PRTR protocol specify which industrial activities are included for reporting purposes and their associated thresholds. This means that an installation whose details are not shown on the site have not reached the stated thresholds and therefore do not have to be included. Also, for installations shown but where the threshold for reporting for a pollutant is not reached or where there has been no release, no data for the pollutant will be shown.









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Search the PRTR database on your chosen parameters

The database lists data on 91 pollutants, such as amount released, when and where, based on reports from facilities that have reached the required threshold for inclusion. The search tool lets you perform queries on this data including:

- search by facility, including the facility name, parent company, location or postcode
- search by activity, including energy, metals, minerals, chemicals, waste management, paper and wood, farming, food and 'other'
- search by economic sector, as defined by NACE
- search by pollutant, including pesticides, greenhouse gases, metals etc
- search by waste type and treatment, including hazardous, transboundary, disposal etc
- search by each environmental medium (air, water, land) into which the pollutant is released









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You can also search for time comparisons of:

- pollutant releases
- pollutant transfers
- waste transfers









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Pollutants and thresholds list

You can check the list of pollutants by name and chemical composition for information about environmental impact, effect on human health and current level of control.

You can switch to the thresholds view to see the different thresholds for reporting against each pollutant with in the UK PRTR.









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Methods for obtaining data

The data is calculated (C), estimated (E) or measured (M) by the operator. Data reporting method may also be unspecified (U).

Within the calculated and measured categories, there are sub-categories which each have their own code.









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PRTR specific method sub-categories

Method code	Method description
C_EMEP	Calculation using the UNECE/EMEP Emission Inventory Guidebook
C_ETS	Calculation using the guidelines for the monitoring and reporting of greenhouse gas emissions under the Emission Trading Scheme.
C_IPCC	Calculation using the IPCC Guidelines.
C_ISO	
C_MAB	Mass balance method which is accepted by the competent authority.
C_NRB	National or regional binding calculation methodology prescribed by legal act for the pollutant and facility concerned.
C_OTH	Other calculation methodology.
C_PER	Calculation methodology already prescribed by the competent authority in a licence or an operating permit for that facility.
C_SSC	European-wide sector specific calculation method.
Е	Estimated.









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PRTR specific method sub-categories (cont'd)

M_ALT	Alternative measurement methodology in accordance with existing CEN/ISO measurement standards.
M_CRM	Measurement methodology for the performance of which is demonstrated by means of certified reference materials and accepted by competent authority.
M_ISO	Internationally approved CEN or ISO measurement standard.
M_NRB	National or regional binding measurement methodology prescribed by legal act for the pollutant and facility concerned.
M_OTH	Other measurement methodology.
M_PER	Measurement Methodology already prescribed by the competent authority in a licence or an operating permit for that facility
M_SSC	European-wide sector specific calculation method.
M_WEIGH	Measurement by weighing.
U	Unspecified









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Accessing the UK Pollutant Release and Transfer Register (PRTR): 2013 to 2016 review – Public Consultation by DEFRA

We want to know your thoughts on how easy it is to use the Pollutant Release and Transfer Register (PRTR) in the UK. Is it easy to access, and if not, what improvements do you think we should make?

The PRTR is a searchable database containing information on the pollution (to air, water and soil) and transfer of waste from industrial sources. It needs to be accessible to the public as a 'right to know'.

Every three years the UK reports to the United Nations (UN) on whether this is being done appropriately or whether improvements could be made. Your views will help inform the report.





