ENVIRONMENTAL PROTECTION AGENCY

SECTOR-SPECIFIC PRTR GUIDANCE DOCUMENT:

EMISSIONS AND WASTE TRANSFERS REPORTING GUIDANCE FOR THE WASTE SECTOR

For use in reporting of:

1 **Emissions and Waste Transfers information via the EPA Electronic AER / PRTR Reporting Workbook**

2 **The Emissions and Waste Transfers section of the Annual Environmental Report**

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General Introduction

This document is addressed to operators in the Waste sector who are required to:

- Report their annual Releases (emissions) under S.I. 123 of 2007, the **Pollutant Release and Transfer (PRTR) Regulations**[1]**,** and
- Submit an Annual Environmental Report to the EPA under their EPA Licences.

This Guidance Document is intended to provide sector specific guidance to assist in reporting the relevant emissions and off-site waste transfers from EPA-licensed facilities in the Waste Sector.

Chapter 1 Introduction to AER and PRTR Annual Reporting of Environmental Information

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Chapter 1 Introduction to AER and PRTR Annual Reporting of Environmental Information

1.1 Annual environmental information reporting: Two Tasks

The requirements for reporting of Annual Environmental Information [2] arise under the terms of both the PRTR Regulations and individual EPA licences issued under the EPA Acts 1992 – 2008, the Waste Management Acts 1996 – 2008, the Waste Water Discharge (authorisation) Regulations S.I. 684 of 2007 and other legislation.

The annual reporting of environmental information by licensed facility operators falls into two main tasks. These are:

1 Reporting of emissions and waste transfers information to the EPA's AER / PRTR Website via the EPA's AER / PRTR Electronic Reporting Workbook.

2 Submission of an electronic "pdf"[3] copy of the AER to the EPA's AER / PRTR Website via the EPA's AER / PRTR Electronic Reporting Workbook.

It is important to note that each of these steps is mandatory; the reporting obligation will not be satisfied until both steps are completed and an electronic confirmation of acceptance has been received.

[1] (European Communities (European Pollutant Release and Transfer Register) Regulation 2007, S.I. No. 123 of 2007), which signed into Irish Law on 22 March 2007 the E-PRTR Regulation, (EC) No 166/2006, concerning the establishment of a European Pollutant Release and Transfer Register. These regulations are collectively referred to herein as the PRTR Regulations.

2 This applies to Annual Reporting only; this does not supersede or render inapplicable the requirements in your licence for other regular reporting, e.g. returns of monitoring data, progress reports, waste records etc.

3 Electronic, fully searchable/read-only, PDF Formatted Text and Graphics (also known as PDF Normal).

Also, the information cannot be accepted in any other manner or format other than that specified in the guidance documentation.

1.2 Guidance for collating and reporting your annual environmental information

The EPA has developed a series of Guidance Documents to assist facility operators in making their Annual Environmental Information returns.

These guidance Documents are all available on the AER/PRTR webpage of the EPA website www.epa.ie. They are dived into four sections:

1. Reporting Guidance Requirements
2. Completing and Uploading the PRTR Workbook
3. PDF AER Guidance
4. Sector Specific Guidance

1.3 Reporting of emissions and waste transfers information to the European PRTR website

The PRTR Regulations require that emissions and waste transfers from specified industrial and waste management operations, that exceed the thresholds, must be reported to the European Commission for publication on a dedicated website (http://prtr.ec.europa.eu/).This data is also published on the Irish PRTR website (http:/prtr.epa.ie/).

Emissions and waste transfers are reportable under the European PRTR Regulation when two distinct criteria are met:

1 The facility itself must be carrying out one of the specified activities and must be of a sufficient size or capacity (*Annex 1 of the PRTR Regulation, see Appendix 4*), and

2 Each emission or the quantity of waste *transferred must exceed prescribed threshold quantities (Annex 2 of the PRTR Regulation, see Appendix 3*).

EPA-licensed facilities that exceed the relevant PRTR thresholds will consequently be included in the annual xml report for Ireland to the European Commission.

The relevant Activity Capacity Threshold and the Release Thresholds for the substances most likely to be emitted from your facility are set out in Annexes 1 and 2 of the Regulation and are reproduced as Appendices (3 & 4) of this Guidance Document for your information.

Reporting of data to the European PRTR or National PRTR website does NOT indicate non-compliance with any licence limits.

Chapter 2 All Waste Facilities excluding landfills – Guidance for completing the PRTR workbook

Waste facilities that fall under the PRTR class 5(a), 5(b) 5(c) or 5(e) (See Appendix 4) must submit annual PRTR reports. These include waste transfer stations, civic amenity sites, incinerators for non-hazardous waste, material recovery sites etc. Under PRTR each facility must report their annual emissions of PRTR pollutants and non-PRTR pollutants (pollutants outlined in the facility's IPPC license) to air, water and wastewater (sewer) and waste transfers. The PRTR data is submitted through an excel workbook that is uploaded electronically to the Agency's AER/PRTR reporting site.

****Facilities must be satisfied that they are reporting their PRTR data in line with all published PRTR Guidance including European Commission Guidance Document****

2.1 Quick Guide to PRTR Reporting for all Waste Facilities excluding landfills

Emissions to air

- Record pollutants emissions to air in kg/yr
- Emissions can be calculated, measured or estimated see guidance (pg23-29)
- Non-PRTR pollutants (licenses pollutants) are reported in Section C of the Emissions to Air Sheet
- You must report **Accidental** and **Fugitive** emissions, where applicable, as well as licensed emissions (licensed parameters plus PRTR pollutants).

Emissions to water

- If your facility has a licensed emission point to surface water (process effluent from your facility is being discharged to a surface water body) you record the emissions on this sheet. Uncontaminated surface water run-off (e.g. surface run-off from roof areas) is **not** classed as an emission to water**.**
- Emissions are recorded in kg/yr
- Emissions can be calculated, measured or estimated see guidance (pg23-29)
- Non-PRTR pollutants (licensed pollutants) are reported in Section C of the Emissions to Water Sheet
- You must report **Accidental** and **Fugitive** emissions, where applicable, as well as licensed emissions (licensed parameters plus PRTR pollutants).

Emissions to Sewer

- If your facility has a licensed emission point to sewer (process effluent from your facility is being discharged to the sewer) you record the emissions on this sheet.

- Emissions are recorded in kg/yr
- Emissions can be calculated, measured or estimated see guidance (pg23-29)
- Non-PRTR pollutants (licenses pollutants) are reported in Section C of the Emissions to Wastewater Sheet
- You must report **Accidental** and **Fugitive** emissions, where applicable, as well as licensed emissions (licensed parameters plus PRTR pollutants).

Treatment and Transfer of Waste

- Quantity of waste recorded in tonnes /yr
- Only waste being transferred off site must be reported[4].
- For non-hazardous waste the **next destination** and **the recovery / disposal technique** of the waste being transferred off-site must be recorded [5] see guidance (pg14).
- For hazardous waste the **next destination**, the **ultimate destination** and **ultimate recovery / disposal technique** of the waste being transferred off-site must be recorded[5] see guidance (pg14). Please note in some instances the next and final destination may be the same.

Note

[4] The Treatment Location "**On-site of Generation**" is **only used** to record waste that is recovered or disposed of at the site where it was generated e.g. solvent recovery by a pharmaceutical facility.

[5] If waste is being sent to a waste transfer station where it undergoes blending, bulking, and/ or mixing prior to transfer, the facility should name the transfer station as the next and ultimate destination in the PRTR workbook. The recovery or disposal code should indicate the waste has undergone blending, bulking, and/or mixing at the waste transfer station. This will help eradicate double counting with PRTR. See Appendix 1 for examples of how to report waste going to a waste transfer station for mixing etc prior to recovery / disposal.

2.2 Quick Guide to Selecting Method Codes

A method code describes how an emission was measured, calculated or estimated. If standard method are being used it is preferable the name of the standard is provided either as the method code if it is on the approved list of Standards (Appendix 3) or in the description field if it is not on the approved Standard list. Here is an example of two method codes:

- If you are using an **approved ISO/CEN Standard** (Appendix 3) then this becomes the method code and no description is required.
- If you are using an ISO/CEN Standard that is not on the approved list you use the method code **ALT** and give the ISO/CEN number in the description field.

Appendix 3 outlines all method codes and where they can be used.

2.3 Common Errors

- Incorrect use of method codes especially **PER**. The method code PER is only used if your License tells you to use a specific ISO/CEN Standard (this is very rare).
- If the annual emission is calculated using monthly, quarterly etc samples this is still considered a measurement even if a calculation is used to determine the annual emissions.
- Inconsistent reporting i.e. reporting a pollutant one year and not the next.
- Not reporting all pollutants that were monitored
- Not including all licensed emission points.
- Reporting surface water run-off as an emission to water.
- Incorrect Recovery and Disposal Codes.
- Incorrect license/permit numbers of waste recovers/disposers.
- Incorrect use of the treatment location “on-site in Ireland”. This is only used for facilities that are recovering or disposing of a waste (generated on their site) at their own facility e.g. solvent recovery etc.
- Incorrect units
- Incorrect unit conversions

Chapter 3 Landfills – Guidance for completing the PRTR workbook

Waste landfills that fall under the PRTR class 5(c) or 5(d) (see Appendix 4) must submit annual PRTR reports. Under PRTR each facility must report their annual emissions of PRTR pollutants and non-PRTR pollutants (pollutants outlined in the facility's IPPC license) to air, water and wastewater (sewer) and waste transfers. The PRTR data is submitted through an excel workbook that is uploaded electronically to Agency's AER/PRTR reporting site.

****Facilities must be satisfied that they are reporting their PRTR data in line with all published PRTR Guidance including European Commission Guidance Document****

3.1 Quick Guide to PRTR Reporting for Waste Landfills

Emissions to air

- Record pollutants emissions to air in kg/yr
- Emissions can be calculated, measured or estimated see guidance (pg23-29)
- Non-PRTR pollutants (licenses pollutants) are reported in Section C of the Emissions to Air Sheet
- You must report **Accidental** and **Fugitive** emissions, where applicable, as well as licensed emissions (licensed parameters plus PRTR pollutants).

Emissions to water

- If your facility has a licensed emission point to surface water (leachate from your facility is being discharged to a surface water body) you record the emissions on this sheet. Uncontaminated surface water run-off is **not** classed as an emission to water**.**
- Emissions are recorded in kg/yr
- Emissions can be calculated, measured or estimated see guidance (pg23-29)
- Non-PRTR pollutants (licensed pollutants) are reported in Section C of the Emissions to Water Sheet
- You must report **Accidental** and **Fugitive** emissions, where applicable, as well as licensed emissions (licensed parameters plus PRTR pollutants).

Emissions to Wastewater/Sewer

- Only **Accidental Emissions** to Wastewater / Sewer should be reported

Treatment and Transfer of Waste

- Quantity of waste recorded in tonnes /yr
- Only waste being transferred off site (e.g. metal waste, glass bottles, cardboard, fluorescent tubes etc) must be reported[4].
- Leachate tankered/sewered offsite is classified as a waste transfer under PRTR.
- For non-hazardous waste the **next destination** and **the recovery / disposal technique** of the waste being transferred off-site must be recorded [5] see guidance (pg14).
- For hazardous waste the **next destination**, the **ultimate destination** and **ultimate recovery / disposal technique** of the waste being transferred off-site must be recorded[5] see guidance (pg14). Please note in some instances the next and final destination may be the same.

Note

[4] The Treatment Location "**On-site of Generation**" is only used to record waste that is recovered or disposed of at the site where it was generated e.g. solvent recovery by a pharmaceutical facility.

[5] If waste is being sent to a waste transfer station where it undergoes blending, bulking, and/ or mixing prior to transfer, the facility should name the transfer station as the next and ultimate destination in the PRTR workbook. The recovery or disposal code should indicate the waste has undergone blending, bulking, and/or mixing at the waste transfer station. This will help eradicate double counting with PRTR. See Appendix 1 for examples of how to report waste going to a waste transfer station for mixing etc prior to recovery / disposal.

3.2 Reporting Methane Emissions

Figure 1 shows the landfill section of the PRTR Workbook where the facility enters their methane data. It demonstrates what data the operator must fill in. It also gives the correct M/C/E, Method Codes and Descriptions to use. The operator must check the net methane figure and the methane emission in the PRTR pollutant emission section of the emissions to air sheet are consistent.

The current procedure for reporting Methane is as follows:

(i) Total Methane Generated: This figured is taken from a model (LandGem, GasSim etc)

(ii)Methane Flared or Utilised: This figure is taken from the EPA Landfill Gas Survey (LFG)

(iii)Methane Emissions to Atmosphere or Net Methane Emission: This is the Total methane generated minus Methane flared / utilised

Landfill:						
Please enter summary data on the quantities of methane flared and / or utilised	T (Total) kg/Year	M/C/E	Method Used		Facility Total Capacity m3 per hour	
			Method Code	Designation or Description		
(i)Total estimated methane generation (as per site model)		C	OTH	GasSim, LandGem etc		
(ii) Methane flared		M	OTH	Landfill Gas Survey		(Total Flaring Capacity)
(ii) Methane utilised in engine/s		M	OTH	Landfill Gas Survey		(Total Utilising Capacity)
(iii) Net methane emission (as reported in Section A above)		C	OTH	Total estimated methane generated minus the methane flared/utilised		

Figure 1 Methane data entry table from the PRTR Workbook

3.3 Quick Guide to Selecting Method Codes

A method code describes how an emission was measured, calculated or estimated. If standard method are being used it is preferable the name of the standard is provided either as the method code if it is on the approved list of Standards (Appendix 3) or in the description field if it is not on the approved Standard list. Here is an example of two method codes:

- If you are using an **approved ISO/CEN Standard** (Appendix 3) then this becomes the method code and no description is required.
- If you are using an ISO/CEN Standard that is not on the approved list you use the method code **ALT** and you give the ISO/CEN number in the description field.

Appendix (3) outlines all method codes and where they can be used.

3.4 Common Errors

- Reporting leachate as an emission to Wastewater/Sewer. Leachate removed from site, whether tankered or by sewer is considered an **Off-Site Waste Transfer** and must be reported in the "**On-Site Treatment and Off-Site Waste Transfers"** Sheet of the PRTR Workbook**.**
- Incorrect use of method codes (see Appendix III for a quick guide to Method codes).
- Incorrectly classing method for determining an emission as a calculation instead of a measurement. If the annual emission is calculated using monthly, quarterly etc samples this is still considered a measurement even if a calculation is used to determine the annual emissions.
- Inconsistent reporting i.e. reporting a pollutant one year and not the next.
- Not reporting all pollutants that were monitored

- Not including all licensed emission points.
- Reporting surface water run-off as an emission to water.
- Incorrect Recovery and Disposal Codes.
- Incorrect license/permit numbers of waste recovers/disposers.
- Incorrect use of the treatment location “on-site in Ireland”. This is only used for facilities that are recovering or disposing of a waste (generated on their site) at their own facility e.g. solvent recovery etc.
- Incorrect units
- Incorrect unit conversions

Appendix 1 Examples of How to Record Waste, in the PRTR, that is being sent to a Waste Transfer Station (WTS) for Blending/Mixing/Bulking etc Prior to Recovery or Disposal

Example1: **Facility X** sends 10 Tonnes of EWC 150104 (Non-Haz) to **Facility Y** where it is mixed and blended with other waste (quantity is 50T after mixing) prior to being sent to a facility in Ireland for Recovery

Facility X (IPPC Facility) PRTR Returns: ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

			Quantity (Tonnes per Year)			Method Used			Haz Waste : Name and Licence/Permit No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
Transfer Destination	European Waste Code	Hazardous	Quantity T/Year	Description of Waste	Waste Treatment Operation	M/C/E	Method Used	Location of Treatment	Name and Licence / Permit No. of Recoverer / Disposer / Broker	Address of Recoverer / Disposer / Broker	Name and Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)	Licence / Permit No. of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
Within the Country	150104	N	10	metallic packaging	R12	M	Weighed	Offsite in Ireland	Facility Y (WXXXX)	xxxx, Ireland		

Facility Y (Waste Transfer Station) PRTR Returns: ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

			Quantity (Tonnes per Year)			Method Used			Haz Waste : Name and Licence/Permit No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
Transfer Destination	European Waste Code	Hazardous	Quantity T/Year	Description of Waste	Waste Treatment Operation	M/C/E	Method Used	Location of Treatment	Name and Licence / Permit No. of Recoverer / Disposer / Broker	Address of Recoverer / Disposer / Broker	Name and Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)	Licence / Permit No. of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
Within the Country	150104	N	50	metallic packaging	R4	M	Weighed	Offsite in Ireland	AA Waste , WXXXX	XXX, Dublin 20 , Ireland		

Example 2: **Facility X** sends 10 Tonnes of EWC 070501 (Haz) to **Facility Y** where it is mixed and blended with other waste (quantity is 50T after mixing) prior to being sent abroad (Germany) for disposal at another facility.

Facility X (IPPC Facility) PRTR Returns: ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

			Quantity (Tonnes per Year)			Method Used			Haz Waste : Name and Licence/Permit No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
Transfer Destination	European Waste Code	Hazardous	Quantity T/Year	Description of Waste	Waste Treatment Operation	M/C/E	Method Used	Location of Treatment	Name and Licence / Permit No. of Recoverer / Disposer / Broker	Address of Recoverer / Disposer / Broker	Name and Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)	Licence / Permit No. of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
Within the Country	070501	Y	10	Waste aqueous solvent mixture (Ethanol,Methanol) trace pharma	R12	M	Weighed	Offsite in Ireland	Facility Y (WXXXX)	xxxx, Ireland	Facility Y (WXXXX)	xxxx, Ireland

Facility Y (Waste Transfer Station) PRTR Returns: ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

			Quantity (Tonnes per Year)			Method Used			Haz Waste : Name and Licence/Permit No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
Transfer Destination	European Waste Code	Hazardous	Quantity T/Year	Description of Waste	Waste Treatment Operation	M/C/E	Method Used	Location of Treatment	Name and Licence / Permit No. of Recoverer / Disposer / Broker	Address of Recoverer / Disposer / Broker	Name and Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)	Licence / Permit No. of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
To Other Countries	070501	Y	50	Waste aqueous solvent mixture (Ethanol,Methanol) trace pharma	D10	M	Weighed	Abroad	Example -AGGG,IB2234/AGGG-GENB-2,Borsigstrasse ,2 D22113 ,Berlin,.,Germany	Borsigstrasse ,2 D22113 ,Berlin,.,Germany	Example -AGGG,IB2234/AGGG-GENB-2,Borsigstrasse ,2 D22113 ,Berlin,.,Germany	Borsigstrasse ,2 D22113 ,Berlin,.,Germany

Appendix 2 Method Codes

Approved ISO/CEN Standards for Determination of Releases to Air			
Method Code	**M/C/E**	**Where this code is applicable**	**Designation or Description**
ISO 10397:1993	M	Asbestos	Leave Blank
ISO 11338-1 to 2:2003	M	Anthracene, polycyclic aromatic hydrocarbons (PAHs) & flouranthene	Leave Blank
EN 14385:2004	M	(Arsenic, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Lead, Antimony, Thallium, Vanadium and Zinc) & Compounds	Leave Blank
EN 15058:2004	M	Carbon Monoxide (CO)	Leave Blank
ISO 12039:2001	M	Carbon Monoxide (CO) & Carbon Dioxide (CO2)	Leave Blank
EN 1911-1 to 3:2003	M	Chlorine & Inorganic Compounds (as HCl)	Leave Blank
ISO/DIS 15713:2004	M	Fluorine & Inorganic Compounds (as HF)	Leave Blank
EN 13211:2001	M		Leave Blank
EN 14884:2005	M	Mercury & Compounds (as Hg)	Leave Blank
EN 14792:2005	M		Leave Blank
ISO 11564:1998	M		Leave Blank
ISO 10849:1996	M	Nitrogen Oxides (Nox/NO2)	Leave Blank
EN 13649:2001	M	Non-Methane Volatile Organic (NMVOC) & Benzene	Leave Blank
EN 1948-1to 3:2003	M	PCDD + PCDF(dioxins + furans) (as Teq),	Leave Blank
EN 14791:2005	M		Leave Blank
ISO 7934:1989	M		Leave Blank
ISO 7935: 1992	M		Leave Blank
ISO 11632:1998	M	Sulphur Oxides (Sox/SO2)	Leave Blank

Approved ISO/CEN Standards for Determination of Releases to Water or Wastewater / sewer:			
Method Code	**M/C/E**	**Where this code is applicable**	**Designation or Description**
EN ISO 10301:1997	M	1,2-dichloroethane (EDC), dichloromethane (DCM)	Leave Blank
EN ISO 15680:2003	M	1,2-dichloroethane (EDC), dichloromethane (DCM), tetrachloroethlyene (PER), trichlorobenzenes (TCBs) (all isomers), trichloroethlene, trichloromethane, vinyl chloride, benzene, ethyl benzene, naphthalene, toluene, xylenes	Leave Blank
EN ISO 6468:1996	M	Aldrin, DDT, dieldrin,endosulfan, endrin, heptachlor, hexachlorobenzene (HCB), 1,2,3,4,5,6- hexachlorocyclohexane (HCH), lindane, pentachlorobenzene, polychlorinated biphenols (PCBs)	Leave Blank
EN ISO 17993:2003	M	Anthracene, naphthalene, polycyclic aromatic hydrocarbons (PAHs), flouranthene, benzo(g,h,i)perylene	Leave Blank
EN ISO 11969:1996	M		
EN 26595:1992	M	Arsenic & Compuonds (as As)	Leave Blank
EN ISO 10695:2000	M	Atrazine, Simanzine	Leave Blank
EN ISO 11423-1 to 2:1997	M	Benzene	Leave Blank
ISO 22032	M	Brominated Biphenylethers (PBDE)	Leave Blank
EN ISO 5961:1995	M	Cadmium & Compounds(as Cd)	Leave Blank
EN ISO 15682:2001	M	Chlorides (as total Cl)	Leave Blank
EN ISO 10304-1 to 4:1995	M	Chlorides (as total Cl), Fluorides (as total F)	Leave Blank
EN 1233:1996	M	Chromium & (as Cr)	Leave Blank
EN ISO 14403:2002	M	Cyanides (as total CN)	Leave Blank
EN ISO 18856:2005	M	Di-(2-ethyl hexyl) phthalate (DEHP)	Leave Blank
EN ISO 11369:1997	M	Diuron, Simazine	Leave Blank

Approved ISO/CEN Standards for Determination of Releases to Water or Wastewater / sewer:			
Method Code	**M/C/E**	**Where this code is applicable**	**Designation or Description**
EN ISO 9562:2004	M	Halogenated Organics (as AOX)	Leave Blank
EN 1483:1997	M		
EN 12338:1998	M		
EN 13506:2001	M	Mercury & Compounds (as Hg)	Leave Blank
EN ISO 17353:2005	M	Organotin (as total Sn), Tributyltin, Triphenyltin & Compounds	Leave Blank
ISO 18073:2004	M	PCDD + PCDF (dioxins + furans) (as Teq)	Leave Blank
ISO 18857-1:2005	M	Phenols (as total C)	Leave Blank
ISO 7981-1 to 2:2005	M	Polycyclic Aromatic Hydrocarbons (PAHs)	Leave Blank
EN 1484:1997	M	Total Organic Carbon (TOC) (as total C or COD/3)	Leave Blank
EN 12260:2003	M		
EN ISO 11905-1:1998	M	Total Nitrogen	Leave Blank
EN ISO 15681-1 to 2:2004	M		
EN ISO 6878:2004	M	Total Phosphorous	Leave Blank
EN ISO 11885:1997	M	Total Phosphorous, Cadmium, Chromium, Copper, Nickel, Lead and zinc	Leave Blank

Common Method Codes for Releases to Air, Water & Wastewater / Sewer			
Method Code	**M/C/E**	**Where this code is applicable**	**Designation or Description**
ALT	M	Is applicable if the facility is using a CEN or ISO standard but not the one on the approved list in the PRTR Guidance.	Name of the ISO /CEN Standard
OTH	M /C	If the method or the calculation does not fall under any of the method codes e.g. in-house methodology not based on CEN/ISO standard.	Brief & specific description of the method / Calculation used.
CRM	M	If a lab/facility is using a non-ISO/CEN Method that is validated and accredited or has been accepted by the Agency.	Name of the non-ISO/CEN Method
ETS	C	If a facility is registered as part of the Emission Trading Scheme.	Leave Blank
PER	M/C	This is only applicable if the facility's license specifies a specific standard method to use e.g. Use ISO/CEN... If you license states to use "Standard Methods" or a particular piece of equipment this does not fall under PER.	Name of the prescribed standard
NRB	M/C	Not Applicable to Irish Licenses.	-
MAB	C	Used for the calculation of fugitive emissions.	Brief & specific description of the Calculation used.
SSC	C	The only European wide sector specific calculation method used in Ireland is for Greenhouse methods and this is covered by ETS.	-
ESTIMATE	E	Estimates are used when the releases are determined by best assumptions or expert guesses that are not based on publicly available references or in case of absence of recognised emission estimation methodologies or good practice guidelines.	Leave blank, however a detailed description of how the estimation was undertaken must be outlined in your Annual Environmental Report (AER)

Appendix 3 PRTR Pollutant Thresholds

ANNEX II

Pollutants (*)

No	CAS number	Pollutant (1)	Threshold for releases (column 1)		
			to air (column 1a) kg/year	to water (column 1b) kg/year	to land (column 1c) kg/year
1	74-82-8	Methane (CH_4)	100 000	— (2)	—
2	630-08-0	Carbon monoxide (CO)	500 000	—	—
3	124-38-9	Carbon dioxide (CO_2)	100 million	—	—
4		Hydro-fluorocarbons (HFCs) (3)	100	—	—
5	10024-97-2	Nitrous oxide (N_2O)	10 000	—	—
6	7664-41-7	Ammonia (NH_3)	10 000	—	—
7		Non-methane volatile organic compounds (NMVOC)	100 000	—	—
8		Nitrogen oxides (NO_x/NO_2)	100 000	—	—
9		Perfluorocarbons (PFCs) (4)	100	—	—
10	2551-62-4	Sulphur hexafluoride (SF_6)	50	—	—
11		Sulphur oxides (SO_x/SO_2)	150 000	—	—
12		Total nitrogen	—	50 000	50 000
13		Total phosphorus	—	5 000	5 000
14		Hydrochlorofluorocarbons (HCFCs) (5)	1	—	—
15		Chlorofluorocarbons (CFCs) (6)	1	—	—
16		Halons (7)	1	—	—
17		Arsenic and compounds (as As) (8)	20	5	5
18		Cadmium and compounds (as Cd) (8)	10	5	5
19		Chromium and compounds (as Cr) (8)	100	50	50
20		Copper and compounds (as Cu) (8)	100	50	50
21		Mercury and compounds (as Hg) (8)	10	1	1
22		Nickel and compounds (as Ni) (8)	50	20	20
23		Lead and compounds (as Pb) (8)	200	20	20
24		Zinc and compounds (as Zn) (8)	200	100	100
25	15972-60-8	Alachlor	—	1	1
26	309-00-2	Aldrin	1	1	1
27	1912-24-9	Atrazine	—	1	1
28	57-74-9	Chlordane	1	1	1

(*) Releases of pollutants falling into several categories of pollutants shall be reported for each of these categories.

No	CAS number	Pollutant [1]	Threshold for releases (column 1)		
			to air (column 1a) kg/year	to water (column 1b) kg/year	to land (column 1c) kg/year
29	143-50-0	Chlordecone	1	1	1
30	470-90-6	Chlorfenvinphos	—	1	1
31	85535-84-8	Chloro-alkanes, C_{10}-C_{13}	—	1	1
32	2921-88-2	Chlorpyrifos	—	1	1
33	50-29-3	DDT	1	1	1
34	107-06-2	1,2-dichloroethane (EDC)	1 000	10	10
35	75-09-2	Dichloromethane (DCM)	1 000	10	10
36	60-57-1	Dieldrin	1	1	1
37	330-54-1	Diuron	—	1	1
38	115-29-7	Endosulphan	—	1	1
39	72-20-8	Endrin	1	1	1
40		Halogenated organic compounds (as AOX) [9]	—	1 000	1 000
41	76-44-8	Heptachlor	1	1	1
42	118-74-1	Hexachlorobenzene (HCB)	10	1	1
43	87-68-3	Hexachlorobutadiene (HCBD)	—	1	1
44	608-73-1	1,2,3,4,5,6-hexachlorocyclohexane(HCH)	10	1	1
45	58-89-9	Lindane	1	1	1
46	2385-85-5	Mirex	1	1	1
47		PCDD + PCDF (dioxins + furans) (as Teq) [10]	0,0001	0,0001	0,0001
48	608-93-5	Pentachlorobenzene	1	1	1
49	87-86-5	Pentachlorophenol (PCP)	10	1	1
50	1336-36-3	Polychlorinated biphenyls (PCBs)	0,1	0,1	0,1
51	122-34-9	Simazine	—	1	1
52	127-18-4	Tetrachloroethylene (PER)	2 000	10	—
53	56-23-5	Tetrachloromethane (TCM)	100	1	—
54	12002-48-1	Trichlorobenzenes (TCBs) (all isomers)	10	1	—
55	71-55-6	1,1,1-trichloroethane	100	—	—
56	79-34-5	1,1,2,2-tetrachloroethane	50	—	—
57	79-01-6	Trichloroethylene	2 000	10	—
58	67-66-3	Trichloromethane	500	10	—
59	8001-35-2	Toxaphene	1	1	1
60	75-01-4	Vinyl chloride	1 000	10	10
61	120-12-7	Anthracene	50	1	1

No	CAS number	Pollutant [1]	Threshold for releases (column 1)		
			to air (column 1a) kg/year	to water (column 1b) kg/year	to land (column 1c) kg/year
62	71-43-2	Benzene	1 000	200 (as BTEX) [11]	200 (as BTEX) [11]
63		Brominated diphenylethers (PBDE) [12]	—	1	1
64		Nonylphenol and Nonylphenol ethoxylates (NP/NPEs)	—	1	1
65	100-41-4	Ethyl benzene	—	200 (as BTEX) [11]	200 (as BTEX) [11]
66	75-21-8	Ethylene oxide	1 000	10	10
67	34123-59-6	Isoproturon	—	1	1
68	91-20-3	Naphthalene	100	10	10
69		Organotin compounds(as total Sn)	—	50	50
70	117-81-7	Di-(2-ethyl hexyl) phthalate (DEHP)	10	1	1
71	108-95-2	Phenols (as total C) [13]	—	20	20
72		Polycyclic aromatic hydrocarbons (PAHs) [14]	50	5	5
73	108-88-3	Toluene	—	200 (as BTEX) [11]	200 (as BTEX) [11]
74		Tributyltin and compounds [15]	—	1	1
75		Triphenyltin and compounds [16]	—	1	1
76		Total organic carbon (TOC) (as total C or COD/3)	—	50 000	—
77	1582-09-8	Trifluralin	—	1	1
78	1330-20-7	Xylenes [17]	—	200 (as BTEX) [11]	200 (as BTEX) [11]
79		Chlorides (as total Cl)	—	2 million	2 million
80		Chlorine and inorganic compounds (as HCl)	10 000	—	—
81	1332-21-4	Asbestos	1	1	1
82		Cyanides (as total CN)	—	50	50
83		Fluorides (as total F)	—	2 000	2 000
84		Fluorine and inorganic compounds (as HF)	5 000	—	—
85	74-90-8	Hydrogen cyanide (HCN)	200	—	—
86		Particulate matter (PM_{10})	50 000	—	—
87	1806-26-4	Octylphenols and Octylphenol ethoxylates	—	1	—

No	CAS number	Pollutant (1)	Threshold for releases (column 1)		
			to air (column 1a) kg/year	to water (column 1b) kg/year	to land (column 1c) kg/year
88	206-44-0	Fluoranthene	—	1	—
89	465-73-6	Isodrin	—	1	—
90	36355-1-8	Hexabromobiphenyl	0,1	0,1	0,1
91	191-24-2	Benzo(g,h,i)perylene		1	

(1) Unless otherwise specified any pollutant specified in Annex II shall be reported as the total mass of that pollutant or, where the pollutant is a group of substances, as the total mass of the group.

(2) A hyphen (—) indicates that the parameter and medium in question do not trigger a reporting requirement.

(3) Total mass of hydrogen fluorocarbons: sum of HFC23, HFC32, HFC41, HFC4310mee, HFC125, HFC134, HFC134a, HFC152a, HFC143, HFC143a, HFC227ea, HFC236fa, HFC245ca, HFC365mfc.

(4) Total mass of perfluorocarbons: sum of CF_4, C_2F_6, C_3F_8, C_4F_{10}, c-C_4F_8, C_5F_{12}, C_6F_{14}.

(5) Total mass of substances including their isomers listed in Group VIII of Annex I to Regulation (EC) No 2037/2000 of the European Parliament and of the Council of 29 June 2000 on substances that deplete the ozone layer (OJ L 244, 29.9.2000, p. 1). Regulation as amended by Regulation (EC) No 1804/2003 (OJ L 265, 16.10.2003, p. 1).

(6) Total mass of substances including their isomers listed in Group I and II of Annex I to Regulation (EC) No 2037/2000.

(7) Total mass of substances including their isomers listed in Group III and VI of Annex I to Regulation (EC) No 2037/2000.

(8) All metals shall be reported as the total mass of the element in all chemical forms present in the release.

(9) Halogenated organic compounds which can be adsorbed to activated carbon expressed as chloride.

(10) Expressed as I-TEQ.

(11) Single pollutants are to be reported if the threshold for BTEX (the sum parameter of benzene, toluene, ethyl benzene, xylenes) is exceeded.

(12) Total mass of the following brominated diphenylethers: penta-BDE, octa-BDE and deca-BDE.

(13) Total mass of phenol and simple substituted phenols expressed as total carbon.

(14) Polycyclic aromatic hydrocarbons (PAHs) are to be measured for reporting of releases to air as benzo(a)pyrene (50-32-8), benzo(b)fluoranthene (205-99-2), benzo(k)fluoranthene (207-08-9), indeno(1,2,3-cd)pyrene (193-39-5) (derived from Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants (OJ L 229, 29.6.2004, p. 5)).

(15) Total mass of tributyltin compounds, expressed as mass of tributyltin.

(16) Total mass of triphenyltin compounds, expressed as mass of triphenyltin.

(17) Total mass of xylene (ortho-xylene, meta-xylene, para-xylene).

Appendix 4 PRTR Classes of Activity

ANNEX I

Activities

No	Activity	Capacity threshold
1.	Energy sector	
(a)	Mineral oil and gas refineries	* (1)
(b)	Installations for gasification and liquefaction	*
(c)	Thermal power stations and other combustion installations	With a heat input of 50 megawatts (MW)
(d)	Coke ovens	*
(e)	Coal rolling mills	With a capacity of 1 tonne per hour
(f)	Installations for the manufacture of coal products and solid smokeless fuel	*
2.	Production and processing of metals	
(a)	Metal ore (including sulphide ore) roasting or sintering installations	*
(b)	Installations for the production of pig iron or steel (primary or secondary melting) including continuous casting	With a capacity of 2,5 tonnes per hour
(c)	Installations for the processing of ferrous metals:	
	(i) Hot-rolling mills	With a capacity of 20 tonnes of crude steel per hour
	(ii) Smitheries with hammers	With an energy of 50 kilojoules per hammer, where the calorific power used exceeds 20 MW
	(iii) Application of protective fused metal coats	With an input of 2 tonnes of crude steel per hour
(d)	Ferrous metal foundries	With a production capacity of 20 tonnes per day
(e)	Installations:	
	(i) For the production of non-ferrous crude metals from ore, concentrates or secondary raw materials by metallurgical, chemical or electrolytic processes	*
	(ii) For the smelting, including the alloying, of non-ferrous metals, including recovered products (refining, foundry casting, etc.)	With a melting capacity of 4 tonnes per day for lead and cadmium or 20 tonnes per day for all other metals
(f)	Installations for surface treatment of metals and plastic materials using an electrolytic or chemical process	Where the volume of the treatment vats equals 30 m^3
3.	Mineral industry	
(a)	Underground mining and related operations	*
(b)	Opencast mining and quarrying	Where the surface of the area effectively under extractive operation equals 25 hectares
(c)	Installations for the production of:	
	(i) Cement clinker in rotary kilns	With a production capacity of 500 tonnes per day
	(ii) Lime in rotary kilns	With a production capacity of 50 tonnes per day
	(iii) Cement clinker or lime in other furnaces	With a production capacity of 50 tonnes per day
(d)	Installations for the production of asbestos and the manufacture of asbestos-based products	*

No	Activity	Capacity threshold
(e)	Installations for the manufacture of glass, including glass fibre	With a melting capacity of 20 tonnes per day
(f)	Installations for melting mineral substances, including the production of mineral fibres	With a melting capacity of 20 tonnes per day
(g)	Installations for the manufacture of ceramic products by firing, in particular roofing tiles, bricks, refractory bricks, tiles, stoneware or porcelain	With a production capacity of 75 tonnes per day, or with a kiln capacity of 4 m^3 and with a setting density per kiln of 300 kg/m^3
4.	Chemical industry	
(a)	Chemical installations for the production on an industrial scale of basic organic chemicals, such as: (i) Simple hydrocarbons (linear or cyclic, saturated or unsaturated, aliphatic or aromatic) (ii) Oxygen-containing hydrocarbons such as alcohols, aldehydes, ketones, carboxylic acids, esters, acetates, ethers, peroxides, epoxy resins (iii) Sulphurous hydrocarbons (iv) Nitrogenous hydrocarbons such as amines, amides, nitrous compounds, nitro compounds or nitrate compounds, nitriles, cyanates, isocyanates (v) Phosphorus-containing hydrocarbons (vi) Halogenic hydrocarbons (vii) Organometallic compounds (viii) Basic plastic materials (polymers, synthetic fibres and cellulose-based fibres) (ix) Synthetic rubbers (x) Dyes and pigments (xi) Surface-active agents and surfactants	*
(b)	Chemical installations for the production on an industrial scale of basic inorganic chemicals, such as: (i) Gases, such as ammonia, chlorine or hydrogen chloride, fluorine or hydrogen fluoride, carbon oxides, sulphur compounds, nitrogen oxides, hydrogen, sulphur dioxide, carbonyl chloride (ii) Acids, such as chromic acid, hydrofluoric acid, phosphoric acid, nitric acid, hydrochloric acid, sulphuric acid, oleum, sulphurous acids (iii) Bases, such as ammonium hydroxide, potassium hydroxide, sodium hydroxide (iv) Salts, such as ammonium chloride, potassium chlorate, potassium carbonate, sodium carbonate, perborate, silver nitrate (v) Non-metals, metal oxides or other inorganic compounds such as calcium carbide, silicon, silicon carbide	*

No	Activity	Capacity threshold
(c)	Chemical installations for the production on an industrial scale of phosphorous-, nitrogen- or potassium-based fertilisers (simple or compound fertilisers)	*
(d)	Chemical installations for the production on an industrial scale of basic plant health products and of biocides	*
(e)	Installations using a chemical or biological process for the production on an industrial scale of basic pharmaceutical products	*
(f)	Installations for the production on an industrial scale of explosives and pyrotechnic products	*
5.	Waste and wastewater management	
(a)	Installations for the recovery or disposal of hazardous waste	Receiving 10 tonnes per day
(b)	Installations for the incineration of non-hazardous waste in the scope of Directive 2000/76/EC of the European Parliament and of the Council of 4 December 2000 on the incineration of waste (2)	With a capacity of 3 tonnes per hour
(c)	Installations for the disposal of non-hazardous waste	With a capacity of 50 tonnes per day
(d)	Landfills (excluding landfills of inert waste and landfills, which were definitely closed before 16.7.2001 or for which the after-care phase required by the competent authorities according to Article 13 of Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste (3) has expired)	Receiving 10 tonnes per day or with a total capacity of 25 000 tonnes
(e)	Installations for the disposal or recycling of animal carcasses and animal waste	With a treatment capacity of 10 tonnes per day
(f)	Urban waste-water treatment plants	With a capacity of 100 000 population equivalents
(g)	Independently operated industrial waste-water treatment plants which serve one or more activities of this annex	With a capacity of 10 000 m^3 per day (4)
6.	Paper and wood production and processing	
(a)	Industrial plants for the production of pulp from timber or similar fibrous materials	*
(b)	Industrial plants for the production of paper and board and other primary wood products (such as chipboard, fibreboard and plywood)	With a production capacity of 20 tonnes per day
(c)	Industrial plants for the preservation of wood and wood products with chemicals	With a production capacity of 50 m^3 per day
7.	Intensive livestock production and aquaculture	
(a)	Installations for the intensive rearing of poultry or pigs	(i) With 40 000 places for poultry (ii) With 2 000 places for production pigs (over 30 kg) (iii) With 750 places for sows
(b)	Intensive aquaculture	With a production capacity of 1 000 tonnes of fish or shellfish per year

No	Activity	Capacity threshold
8.	Animal and vegetable products from the food and beverage sector	
(a)	Slaughterhouses	With a carcass production capacity of 50 tonnes per day
(b)	Treatment and processing intended for the production of food and beverage products from:	
	(i) Animal raw materials (other than milk)	With a finished product production capacity of 75 tonnes per day
	(ii) Vegetable raw materials	With a finished product production capacity of 300 tonnes per day (average value on a quarterly basis)
(c)	Treatment and processing of milk	With a capacity to receive 200 tonnes of milk per day (average value on an annual basis)
9.	Other activities	
(a)	Plants for the pre-treatment (operations such as washing, bleaching, mercerisation) or dyeing of fibres or textiles	With a treatment capacity of 10 tonnes per day
(b)	Plants for the tanning of hides and skins	With a treatment capacity of 12 tonnes of finished product per day
(c)	Installations for the surface treatment of substances, objects or products using organic solvents, in particular for dressing, printing, coating, degreasing, waterproofing, sizing, painting, cleaning or impregnating	With a consumption capacity of 150 kg per hour or 200 tonnes per year
(d)	Installations for the production of carbon (hard-burnt coal) or electro-graphite by means of incineration or graphitisation	*
(e)	Installations for the building of, and painting or removal of paint from ships	With a capacity for ships 100 m long

(1) An asterisk (*) indicates that no capacity threshold is applicable (all facilities are subject to reporting).
(2) OJ L 332, 28.12.2000, p. 91.
(3) OJ L 182, 16.7.1999, p. 1. Directive as amended by Regulation (EC) No 1882/2003.
(4) The capacity threshold shall be reviewed by 2010 at the latest in the light of the results of the first reporting cycle.