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KILLURIN LANDFILL

ANNUAL ENVIRONMENTAL REPORT 2008

Quality Control Sheet

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EXECUTIVE SUMMARY

This *Annual Environmental Report* has been prepared for Killurin Landfill, Waste Licence 16-2, for the reporting period from **1 January 2008 to 31 December 2008 inclusive**.

1 INTRODUCTION

1.1 General Information

The Annual Environmental Report (AER) for Killurin Landfill includes the information specified in Schedule E of the Waste Licence 16-2, *Content of Annual Environmental Report* and has been prepared in accordance with the Environmental Protection Agency (EPA) publication *'Waste Licensing – Draft Guidance on Environmental Management Systems (EMS) and Reporting to the Agency, 1999'.*

The reporting period for this AER is **1 January 2008 to 31 December 2008 inclusive**.

1.2 Site information

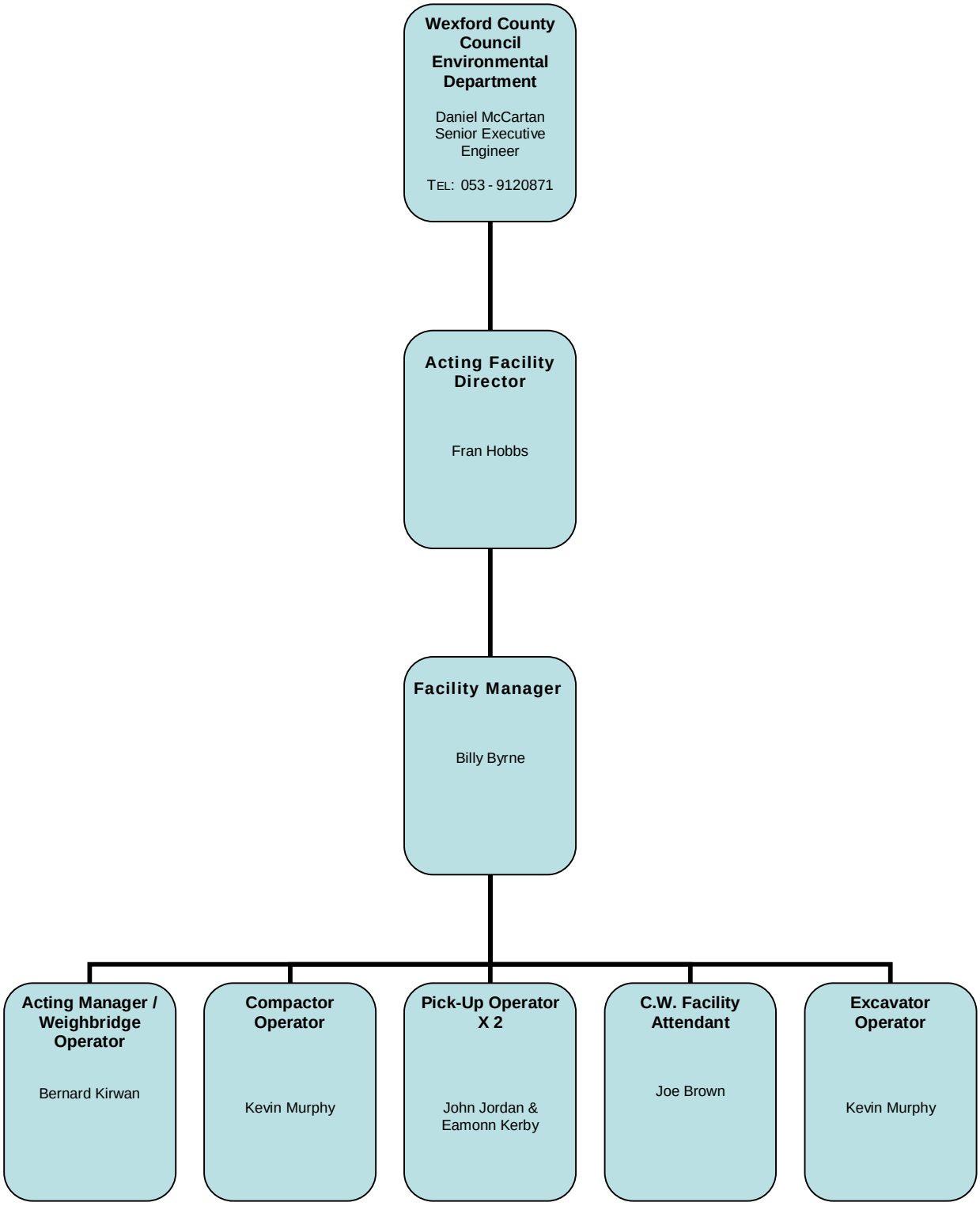
Table 1 Site information on Killurin Landfill Site

KILLURIN LANDFILL SITE	
Waste licence register no:	16-2
Name of operator, name and address of facility:	Wexford County Council County Hall Wexford
Site Description:	Killurin Landfill site is located in the townland of Newtown lower, Killurin, close to Deeps Bridge on a meander of the eastern bank of the River Slaney. The site is approximately 11km from Wexford town and covers an area of 10.7 hectares, of which 4.9 hectares are landfill and the remainder is screen. The facility is located in what once was a sand and gravel quarry. The area surrounding the site is rural with a mixed pattern of highly productive pasture and arable land use, with the River Slaney being the prominent landscape feature. The landfill closed on 7 June 2008. The new landfill, Holmestown located in Barntown, operated by Wexford County Council opened to waste acceptance on 29 April 2008

2 MANAGEMENT & STAFFING STRUCTURE

2.1 Management and staffing structure for Killurin Landfill

Figure 1 Management structure for Killurin Landfill site 2008



The site was operated by Wexford County Council in 2008 with consultancy support provided by sub consultants including Enviros Consulting Ltd, Wexford Energy Management Agency, CAAS Environmental Services, and Euro Environmental Services. Details of the management structure during the reporting period for the facility are provided above. Details on training can be found in Appendix 1.

2.2 Financial provisions

2.2.1 Provision for the Closure, Restoration and Aftercare

In accordance with the requirements of Condition 12.2.1 and 12.2.2. of the Killurin Landfill Waste Licence 16-2, Financial Provision for Closure, Restoration and Aftercare have been assessed in the form of a comprehensive and fully costed Environmental Liability Risk Assessment (ELRA). The ELRA was carried out by Enviros Consulting and submitted to the EPA in September 2006. The ELRA 2006 states that a total fund of €4,327,487.00 has been allocated by Wexford County Council for the Known and Unknown Liabilities that may arise during the Closure, Restoration and Aftercare of Killurin Landfill.

Condition 12.2.3. regarding the determination of annual charges for the disposal of wastes is no longer applicable to the facility as the Killurin landfill ceased accepting waste in June 2008.

2.2.2 Expenditure for 2008

Table 2 Total expenditure for Killurin Landfill during 2008.

	Amount €
Capital expenditure	1,125,400
Total expenditure	872,300
Excavator	69,000
Capping	803,300

2.3 Environmental Management System

2.3.1 Environmental Management Programme

The site has an operational environmental management system (EMS) in accordance with the Waste Licence condition 2.3.2.2. Implementation of the EMS continued during this reporting period (January 2008 - December 2008). The Objectives and Targets of the EMS were reviewed and revised for the reporting period 2008.

2.3.2 Environmental Objectives & Targets – Progress & Schedule for the forthcoming year

The first table below provides the Objectives and Targets for 2008 and details progress made regarding each objective. The subsequent table provides the Objectives and Targets for 2009 and the methods by which they will be achieved.

Table 3 Achievements of Objectives and Targets for 2008

Achievements of Objectives and Targets for 2008			
Objective	**Comments**	**Target**	**Progress**
1. To maintain a documented EMS 1.1 Review existing EMS annually	Ensure that annual modifications, omissions or deletions are incorporated into the EMS and agreed for inclusion into the AER	Ongoing	Ongoing No new procedures were developed in 2008.
2. To maintain a system for the notification of incidents and improve record keeping methods used at the facility 2.1 Improve current site record keeping and performance of site procedures including documentation of procedure reviews due to proposed closure of the landfill	Review existing filing system and record storage for the facility, in particular the retention of records for historical review of the facilities environmental performance. This will include for the archiving of files related to the sites' operations, communications and compliance of the waste licence at any time.	Recording and archiving ongoing	Partially completed. New record system for notification of incidences now in place.
3. To maintain the current site infrastructure			

Achievements of Objectives and Targets for 2008			
Objective	**Comments**	**Target**	**Progress**
3.1 Ensure ongoing maintenance of the following site infrastructure ▪ Site security ▪ Roads ▪ Weighbridge ▪ Fuel storage ▪ Surface water drains ▪ Site notice board ▪ Site offices and plant shed ▪ Landfill gas extraction system ▪ Leachate extraction system ▪ Scrap metal area	All of the items of existing infrastructure are being maintained in accordance with suppliers &/or manufacturers instructions or Wexford County Council staff instruction	This operational target is ongoing while the facility is operating	Maintenance ongoing. No significant infrastructural works were carried out in 2008
4. To control emissions from the facility			
4.1 Assess and submit a proposal on the management of surface water at the facility by July 2006		Carried over for completion since 2006.	Not complete. Ongoing to 2009
4.2 Works required to control surface water onsite	Assess the control of surface water from areas along the western and north-western boundary and its discharge through agreed points from the site. As capping of the vertical extension progresses over the following two years, additional surface water monitoring points will be required, these will be notified to the Agency for agreement	Works ongoing since 2007 and scheduled for completion during 2008	Ongoing to 2009
4.3 Assess current leachate extraction	Create a structured approach to the	Works ongoing, scheduled for	Ongoing to 2009

Achievements of Objectives and Targets for 2008			
Objective	**Comments**	**Target**	**Progress**
system to determine a schedule of maintenance and improvement to optimise the amounts of leachate removed for treatment from the facility	monitoring and performance of the leachate extraction system to include a schedule for servicing of pumps, compressors, air and leachate lines. The assessment of the system should provide increased leachate removal, additional control of leachate migration and preventative measures against failure of the system and additional protection against potential pollution sources.	completion in 2009	
4.4 Assess the potential for utilisation of landfill gas at the facility by July 2006	Additional landfill gas wells installed in 2005 have increased the amount of landfill gas being extracted and this should be assessed for the potential for its utilisation. This assessment will include a documented increase in monitoring of individual well performance, the flare performance and maintenance training for site operatives on collection network.	Preliminary investigation undertaken in 2006 indicated that the gas quality and quantity can not be determined until the more progress on capping works in 2008.	Irish Biotech Systems are to be involved in assessing this issue in 2009.
5. To provide for the restoration and aftercare of the facility			
5.1 Update the Restoration and Aftercare Plan for the facility by August 2007.	As waste acceptance policy has changed recently and tonnages accepted will be significantly reduced, a modified programme of the restoration and aftercare will need to be completed before the capping itself is completed at this facility and the operational phase of the landfill is completed. This will include a schedule of site inspections for routine maintenance of site infrastructure, monitoring of emissions, pollution control framework and slope	Work ongoing	Not applicable yet, progress in 2009.

Achievements of Objectives and Targets for 2008			
Objective	**Comments**	**Target**	**Progress**
	stability.		
6. To develop a system for the monitoring and measurement of emissions 6.1 Collate all environmental monitoring of the landfill site by private contractors	Wexford County Council will review all monitoring by site staff, EPAs regional laboratory and private monitoring contractors to ensure that all monitoring information gathered for the licence is submitted on time and in the correct formats to the OEE.	Ongoing.	All monitoring has been completed but all monitoring contractors still operate on individual contracts, it is proposed to review this and implement a cover contract for any monitoring at the facility for one or two contractors in conjunction with the new Holmestown facility. It is expected to have this in place by Q1 of 2009.
7. To develop post operational plan for the site 7.1 Review options under consideration at present and prepare proposal for submission to EPA by end of 2008 7.2 Move flare from present position to	None	Ongoing, several proposals being considered Remains under review	Not finalised. Progress in 2009 Reassess in 2009

Achievements of Objectives and Targets for 2008			
Objective	**Comments**	**Target**	**Progress**
facilitate ease of maintenance 7.3 Review of waste licence W0016/2, prepare submission for EPA by mid 2009.		Ongoing	Progress in 2009

Table 4 Objectives and targets for 2009

Objectives and targets for 2009			
Objective	**Comments**	**Target**	**Responsibility**
1. To maintain a documented EMS 1.1 Review existing EMS annually	Ensure that annual modifications, omissions or deletions are incorporated into the EMS and agreed for inclusion into the AER	Ongoing	Site Manager
2. To maintain a system for the notification of incidents and improve record keeping methods used at the facility 2.1 Improve current site record keeping and performance of site procedures including documentation of procedure reviews due to closure of the landfill	Review existing filing system and record storage for the facility, in particular the retention of records for historical review of the facilities environmental performance. This will include for the archiving of files related to the sites'	Recording and archiving ongoing. Files are being transferred to the Holmestown Landfill facility for storage.	Site Manager

Objectives and targets for 2009			
Objective	**Comments**	**Target**	**Responsibility**
	operations, communications and compliance of the waste licence at any time.		
3.To maintain the current site infrastructure 3.1 Ensure ongoing maintenance of the following site infrastructure ▪ Site security ▪ Roads ▪ Weighbridge (in the sort-term) ▪ Fuel storage ▪ Surface water drains ▪ Site offices and plant shed ▪ Landfill gas extraction system ▪ Leachate extraction system ▪ Scrap metal area	All of the items of existing infrastructure are being maintained in accordance with suppliers, manufacturers instructions or Wexford County Council staff instruction	Ongoing	Site Manager/ Site Engineer
4. To control emissions from the facility 4.1 Assess and submit a proposal on the management of surface water at the facility by July 2006	Assess the control of surface water from areas along the western and north-western boundary and its discharge through agreed points from the site. As capping of the vertical extension progresses over the following two years additional surface water monitoring points will be required, these will be notified to the Agency for agreement	Works ongoing through 2007 and scheduled for completion during 2008. Not complete., progress in 2009	Site Manager
4.2 Assess current leachate extraction system to determine a schedule of maintenance and improvement to optimise	Create a structured approach to the monitoring and performance of the leachate extraction system to include a	. Not complete., progress in 2009	Site Manager.

Objectives and targets for 2009			
Objective	**Comments**	**Target**	**Responsibility**
the amounts of leachate removed for treatment from the facility	schedule for servicing of pumps, compressors, air and leachate lines. The assessment of the system should provide increased leachate removal, additional control of leachate migration and preventative measures against failure of the system and additional protection against potential pollution sources.		
4.3 Re-assess the potential for utilisation of landfill gas at the facility by July 2006	Preliminary investigation undertaken in 2006 indicated that the gas quality and quantity can not be determined until the completion of capping works in 2008.	Irish Biotech Systems are to assess this issue in 2009	Site Manager
5. To provide for the restoration and aftercare of the facility			
5.1 Update the Restoration and Aftercare Plan for the facility in 2008	As waste acceptance policy has changed recently and tonnages accepted will be significantly reduced, a modified programme of the restoration and aftercare will need to be completed before the capping itself is completed at this facility and the operational phase of the landfill is completed. This will include a schedule of site inspections for routine maintenance of site infrastructure, monitoring of emissions, pollution control framework and slope stability.	Final restoration and aftercare plans to be submitted to the EPA in 2009.	Site Manager
6. To develop a system for the monitoring and measurement of emissions			
6.1 Collate all environmental monitoring of the landfill site by private contractors	Wexford County Council will review all monitoring by site staff, EPAs regional	Quotes received from various companies in Q1 2009 –	Site Manager

Objectives and targets for 2009			
Objective	**Comments**	**Target**	**Responsibility**
	laboratory and private monitoring contractors to ensure that all monitoring information gathered for the licence is submitted on time and in the correct formats to the OEE. All monitoring has been completed but all monitoring contractors still operate on individual contracts, it is proposed to review this and implement a cover contract for any monitoring at the facility for one or two contractors in conjunction with the new Holmestown facility.	Contract awarded to one company for all environmental monitoring on site going forward.	
7. To develop post operational plan for the site			
7.1 Review options under consideration at present and prepare proposal for submission to EPA by end of 2008	Landscaping plan for fully capped landfill.	Ongoing, several proposals were considered in 2008. To be finalised 2009 and submitted to EPA by end of 2009	Site Manager
7.2 Move flare.	Move flare from present position to facilitate ease of maintenance	Remains under review during 2009	Site Manager
7.3 Review Waste Licence	Review of waste licence W0016/02, prepare submission for EPA by mid 2009.	July 2009	Site Manager
7.4 Complete capping works	Complete capping of landfill during 2009	Late 2009	Site Manager / Site Engineer
7.5 Leachate extraction system	Full service and replacement (& where necessary installation) of wells for leachate extraction system	To be completed during 2009	Site Manager

Objectives and targets for 2009			
Objective	**Comments**	**Target**	**Responsibility**
7.6 Gas extraction system	Re-connect 3 wells in stage 5 & connect 2 new additional gas extraction wells.	To be completed during 2009	Site Manager

2.3.3 Full title & written summary of any procedures developed by the licensee in the year which relates to the facility operation

No additional procedures were developed or submitted during the reporting period.

2.3.4 Report on programme for public information

The site's EMS includes a procedure for communication. In addition Wexford County Council provides the following documentation for public viewing at the site and at the Wexford County Hall:

Table 5 List of records available for public viewing in relation to the landfill

List of records available for public viewing
Waste Licence W0016-2
Waste Licence application
Correspondence with the EPA
Incident / complaints records
Audit records
Waste acceptance records
Rejected waste records
Recycled materials removal log book
Materials acceptance dockets
All monitoring records
Surface water inspection forms
Leachate and condensate removal records
Daily / weekly site log
Bird / vermin control reports

Note: All documentation was transferred to the Holmestown Landfill facility in mid 2008 for storage due to the closure of Killurin Landfill.

3 REPORTED INCIDENTS & COMPLAINTS SUMMARIES

3.1 Incidents

No incidents were recorded during this reporting period.

The EPA did note as an Observation in the Audit Report of 26/05/08, that gas trigger level exceedances should in future be reported as incidents.

3.2 Complaints

No complaints were received during this reporting period.

3.3 Non-compliances

A site inspection report was issued by the EPA on 02/02/2009 detailing the Agency's findings following an inspection of the Killurin Landfill site on 11/11/2008. It was observed that the installation of the leachate interception works remained outstanding onsite. It was advised that the capping works were required to be completed prior to commencement of work on the leachate interception wall. This is a repeat non-compliance with Condition 1.8 & 3.12.4.

A Licence Audit was also carried out on 26/05/08 by the EPA. As a result of these audits the site received 5 non-compliances and 12 observations. The findings of both reports are summarised in the following tables.

Table 6 Summary of Licence Audit Findings 26/05/2008

Audit findings	Details	Condition / Schedule of Licence breeched	Corrective Action Required	Action taken by Wexford County Council
Submission of reports	Delay in submitting monitoring reports for Q4 2007 and Q1 of 2008	Conditions 11.1	Submit all reports required to the Agency within specified timelines. Submit monitoring reports for Q1 of 2008 without delay.	Q1 & Q2 monitoring reports 2008 submitted to Agency
Leachate interception works and capping works	Installation of leachate interception wall remains outstanding	Condition 1.8 & 3.12.4	Submit programme of works to be completed in relation to the capping of the landfill. Notify the Agency when capping has commenced and again when capping works have been completed.	No action on this in 2008, under review with new executive engineer, to be reviewed in 2009
Annual Environmental Report 2007	AER for 2007 has not been submitted to date.	Condition 11.6.1	Submit AER 2007 without delay.	AER 2007 submitted to Agency on 6 February 2009
Environmental monitoring for Q4 of 2007	Landfill gas, leachate and surface water points were not monitored in accordance with the licence.	Condition 8.1 & Schedule D	Complete all monitoring in accordance with Condition 8.1 and Schedule D of the licence	Q4 report submitted to Agency

Table 7 Summary of Licence Audit Observations 26/05/2008

Audit observations	Corrective Action Required	Action taken by Wexford County Council
Waste Electrical and Electronic Equipment (WEEE) storage	Store WEEE in accordance with the sixth Schedule of Waste Management (Waste Electrical and Electronic Equipment) Regulations 2005, SI 340 of 2005, which requires WEEE to be protected from exposure to rainwater.	Verbal undertaking to cover WEEE with tarpaulin at the end of each day, this was carried out on site.
Trigger level exceedances in Q4 of 2007	Continue to monitor as per Condition 8.1 and Schedule D and continue	This does not take place.

	to notify the Agency of trigger level exceedances as incidents.	
Paint tin storage	Ensure all paint tins are stored in a bunded area at all times.	Paint tins were moved to a bunded area
Scrap metal yard	Ensure that inappropriate items are not stored in the scrap metal area	A skip is now provided in the scrap metal area for any contamination waste
Inappropriate storage on working face	Ensure that all waste not suitable for landfill (including oil drums) is diverted away from the landfill for appropriate storage and disposal.	A skip is now provided on the working face for any unsuitable material
Monitoring wells map	Submit a current map of all monitoring wells on site to the Agency	This action is under review with new well locations to be agreed with the Agency
Monitoring results for Q4 of 2007 did not include units on the landfill gas results	Ensure that all monitoring results are presented in a format that is easy to read and interpret with appropriate measurement units, including an interpretation of results being reported on.	Quarterly report template is being reviewed to aid accuracy in reporting
Elevated groundwater monitoring results	Track the monitored performance of each well and their responsiveness to improvements or changes to the site infrastructure.	This issue has been addressed

Table 8 Summary of Site Inspection Findings 11/11/2008

Audit findings	Condition/ Schedule of Licence breeched	Corrective Action Required	Action taken by Wexford County Council
Leachate interception works	Condition 1.8 & 3.12.4	Complete capping works and complete installation of landfill gas and leachate management equipment on site at the earliest opportunity and notify the Agency when they are complete. Submit a proposal timeframe for the slurry wall installation or equivalent proposal and plan to commence works no later than Q4 2009.	This issue is to be addressed going forward to final design stage in 2009

Table 9 Summary of Site Inspection Observations 11/11/2008

Audit observations	Corrective Action Required	Action taken by Wexford County Council

Leachate lagoon integrity assessment	Include results of the leachate lagoon integrity assessment in the 2008 AER	Report completed December 2008, summarised below in Section 8.2.2.
Waste storage	Investigate and anticipate the storage requirements for all wastes collected by the licensee for offsite recovery and notify the Agency of offsite or additional storage requirements	As the landfill is now closed, this is not an issue
Landfill gas extraction wells	Ensure all landfill gas extraction wells are connected to the flare and regularly ensure sufficient gas extraction occurs	This has been addressed
Leachate management	Submit a proposed timeframe for the slurry wall installation works or equivalent proposal and plan to commence works no later than Q3 2009	This issue is to be reviewed in 2009

4 DEVELOPMENT WORKS UNDERTAKEN DURING THE REPORTING PERIOD & THOSE PROPOSED FOR THE COMING YEAR

Table 10 Summary of Development Works 2008

Development Works	Start Date	Completion Date
Implementation of Closure and Aftercare Plan	2009	ongoing

4.1 Landfill Engineering Works

4.1.1 Capping Stage C5/1: Construction Quality Assurance Report

The Stage 4 capping works were undertaken throughout October 2008 and involved capping the southernmost sector of the site, an area covering 10,000m^2.

As with previous years, the capping system comprised of a 600mm layer of compacted clay, overlain by a geocomposite drainage layer (GDL), on which the restoration soils were placed. A uniaxial geogrid was incorporated into the low permeability clay layer on the steepest flanks of the sector, in order to provide stability. Further geogrid reinforcement will be provided in the restoration soils in the period when the full Stage C5 works are completed.

Stage C5/2, comprising the final stage of installation of the capping system is likely to take place during Spring/Summer of 2009. A separate or updated CQA report will be issued for that stage.

4.1.2 Restoration and Aftercare

With regard to the final Restoration and Aftercare plans, several proposals for the end use of the site are currently being reviewed. The footprint area of the landfill may be sown on a phased basis with shallow root/ quick growing trees – the trees will be harvested to produce fuel. The Civic Amenity Area may become the site for Wexford County Council's proposed new dog pound and animal sanctuary. The office area may be developed into a waste bin storage and service centre. The generation of electricity from the landfill gas was also reviewed. The feasibility of constructing a pipeline to transfer leachate to the treatment system at Holmestown was further discussed.

When these end-use and aftercare proposals are finalised they will be submitted to the EPA for approval.

4.2 Slope stability assessment

A slope stability assessment for Stage 5 at Killurin Landfill was carried out in autumn 2008 by Enviros Consulting. The conclusions presented in the report are as follows:

- The designed provision of geogrid reinforcement in the low permeability clay element of the capping system to Stage 5 ensures adequate long term factors of safety (not less than 1.3) are maintained against shallow multi-layer capping system slope instability.

- The design of geogrid reinforcement for the restoration soil layers which will be placed in 2009 ensures adequate factors of safety (not less than 1.3) are maintained against shallow multi-layer capping system slope instability.

- The slopes in Stage 5 remain adequately stable against potential overall slope instability (with long term factors of not less than 1.3). The unaltered perimeter slopes also remain adequately stable with long term factors of safety not less than 1.

- The slopes on areas outside of Stage 5 remain adequately stable but leachate levels in the site must be maintained at appropriate levels.

Recommendations

- Capping works will continue at the site in 2009 and once these are completed it is recommended that the stability of the slopes at the site is reviewed.

- Leachate levels across the site should be carefully monitored at regular intervals to ensure they are controlled appropriately. This is because the stability of the slopes on the site is potentially sensitive to rises in leachate levels.

- The defunct leachate monitoring borehole LB15 should be replaced with a new leachate monitoring borehole at the same location.

- Maintenance of boreholes to ensure their correct functioning is also essential.

4.3 Topographical survey

The Topographical Survey for 2008 is contained within the Slope Stability Assessment which was submitted to the Agency as a separate report in autumn 2008. Condition 4.2 of the Waste Licence limits the final height of the landfill to 31 metres AOD (Malin Datum). The maximum height recorded on the topographical survey of October 2008 was 30.842 m AOD in the North East of the landfill.

4.4 Facility Notice Board

The Civic Amenity site opening hours were displayed on the site notice board during the reporting period.

4.5 Proposed development of the facility & timescale for such development

The works proposed for 2009 include the following;

Table 11 Summary of Proposed Development Works 2008

Timescale	Proposed development
Early 2009	Discuss feasibility of leachate interception wall with the EPA – ongoing with further report "Impacts of Installation of Leachate Interception Wall" submitted in November 2008. Completion of Stage 5 capping works (C5/2)
Mid 2009	Additional verification of the clay cap thickness

5 WASTE ACCEPTANCE & HANDLING

5.1 Waste Activities carried out at the facility

The facility is licensed to accept up to 70,000 tonnes of waste per annum and also for the recycling / recovery of up to 2,500 tonnes of waste per annum at the civic waste facility

Both waste recovery and waste disposal activities were carried out at the site during 2008. Disposal only took place until June; the landfill then closed and waste was diverted to the new landfill facility at Holmestown. The site accepted household waste; it did not accept industrial / commercial non-hazardous liquids or hazardous wastes. The site also accepted wastes for recovery at the civic amenity site, which included glass bottles, cardboard, plastic, tetra pack, textiles, waste oils and oil filters, waste cooking oil, fluorescent tubes, batteries, WEEE, white goods and metal. .

5.2 Total quantity of wastes accepted

A summary of the total quantity of waste accepted at the facility for the reporting period 1st January 2007 to 31st December 2008 is presented below.

Table 12 Total quantity of each waste types accepted in 2008

Month	Total Quantity of Waste (tonnes) excluding cover & recyclable materials	Total Quantity of Waste (tonnes) including cover & recyclable materials
January	1031.82	1,241.22
February	746.98	879.82
March	984.56	1,012.26
April	690.76	733.39
May	385.10	494.96
June	65.96	1,636.67
July	0.00	493.66
August	0.00	241.22
September	0.00	243.18
October	0.00	12,111.28
November	0.00	123.42
December	0.00	22.34
Total	**3905.18**	**19,233.42**

Table 13 Comparison of annual waste tonnages

Year	Total Waste Quantity (tonnes) excluding cover and recyclable material	Total Waste Quantity (tonnes) including cover and recyclable material
1998	45,694	67,682
1999	54,106	59,312
2000	57,131	86,568
2001	43,110	81,521
2002	46,216	106,438
2003	37,160	86,966
2004	32,248	86,077
2005	13,178	73,429
2006	9,223	33,680
2007	11,631	46,441
2008	3,905	19,233

The cover material brought onto site was used for daily cover, bunding and capping. The total quantity of cover material brought onto site during the reporting period was 15,328 tonnes, with 12,111 tonnes imported during the month of October.

The tonnage of waste (domestic, recyclable material, waste arising from clean-up of illegal dumping, wastes from drain cleanings and sweepings) accepted on-site was 3,905 tonnes. This figure had decreased compared to the figure recorded for the previous reporting period (11,631 tonnes). A more detailed breakdown and trend analysis of waste accepted at and consigned from the facility is included in Tables 15 and 16 below. The major contributing factor for the reduction in waste landfilled since the 2004 figures is that the site was gradually accepting less waste as it progressed towards landfill closure at the end of June 2008. No waste was accepted from private waste contractors during 2008. Most of the household waste collected by Wexford County Council has been diverted to Carlow County Council's licensed landfill facility at Powerstown.

All waste consigned off-site was disposed of to facilities licensed or permitted to accept or treat that waste. Transport of waste was carried out in accordance with the *Waste Management (Collection Permit) Regulations, SI 820 of 2007, and Amendment Regulations, SI 87 of 2008* as appropriate.

Table 14 Waste accepted to Killurin Landfill from 1st January 2008 to 31st December 2008 (tonnes)

Waste	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Waste Description
Cover WCC	184.38	103.30	0.00	16.80	82.28	1541.29	462.58	209.30	212.44	12079.24	97.08	0.00	**14988.69**	Imported cover for daily cover, final capping, roads, etc
Domestic	6.16	10.24	15.50	6.48	5.78	65.54	0.00	0.00	0.00	0.00	0.00	0.00	**109.70**	Domestic waste from private waste contractors
Domestic Bor	151.76	42.14	40.36	8.92	4.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**247.62**	Domestic waste from borough council
Domestic WCC	760.20	578.24	638.56	592.90	309.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**2879.64**	Domestic from refuse collection, civic, New Ross, timber & after hours
Scrap	25.02	29.54	27.70	25.83	27.58	29.42	31.08	31.92	30.74	32.04	26.34	22.34	**339.55**	Scrap metal accepted from various sources
Illegal	52.68	52.32	30.72	31.86	18.32	0.42	0.00	0.00	0.00	0.00	0.00	0.00	**186.32**	Illegal dumping collected from reported dumping sites countywide
Clean-Up	4.50	10.48	208.48	4.38	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**233.74**	WCC clean-up days or specific cleanups of houses/sites/amenity areas
Sweepings	42.48	40.12	45.56	41.46	32.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**201.74**	Street litter & sweepings from Urban Councils
Gullies	14.04	13.44	5.38	4.76	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**46.42**	Gully cleaning debris
Totals	**1241.22**	**879.82**	**1012.26**	**733.39**	**494.96**	**1636.67**	**493.66**	**241.22**	**243.18**	**12111.28**	**123.42**	**22.34**	**19233.42**	
Levy	918.12	630.62	694.42	608.30	319.96	65.54	0.00	0.00	0.00	0.00	0.00	0.00	**3236.96**	15 Levy Charge Applies to this waste category
Levy Exempt	298.08	219.66	290.14	99.26	147.42	1541.71	462.58	209.30	212.44	12079.24	97.08	0.00	**15656.91**	Waste Total is exempt from landfill levy charge
Recycled	25.02	29.54	27.70	25.83	27.58	29.42	31.08	31.92	30.74	32.04	26.34	22.34	**339.55**	Recycled figures that are reported as waste in but not disposed of
Levy Payment	€13,771.80	€9,459.30	€10,416.23	€9,124.50	€4,799.40	€983.10	€0.00	€0.00	€0.00	€0.00	€0.00	€0.00	**€48,554.33**	

Table 15 Waste consigned off-site from Killurin Landfill from 1st January to 31st December 2008 (tonnes)

Waste	January	February	March	April	May	June	July	August	September	October	November	December	Totals	Waste Description
Batteries	1.96	2.12	2.58	2.00	0.00	5.02	0.00	0.00	0.00	0.00	0.00	0.00	**13.68**	Lead Acid, NiCad & Primary Batteries from Civic Waste Facility (CWF)
Cardboard	12.86	6.26	34.72	5.36	7.18	3.00	0.00	0.00	0.00	0.00	0.00	0.00	**69.38**	Cardboard from CWF
Deceased Canines	1.52	1.38	0.92	1.48	1.32	1.22	0.36	1.24	0.64	1.64	0.88	1.14	**13.74**	Deceased Canines from Vetinary Practices
Fluorescent Tubes	0.00	0.06	0.00	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00	**0.24**	
Mixed WEEE	34.12	31.18	32.28	30.00	28.80	17.08	0.00	0.00	0.00	0.00	0.00	0.00	**173.46**	Large Household WEEE
Leachate	556.50	246.96	160.46	91.10	182.42	180.20	522.50	684.36	456.04	439.60	224.04	73.06	**3817.24**	Leachate for treatment at Enniscorthy & Wexford STW
Magazines	0.98	0.00	2.66	1.12	3.38	1.52	0.00	0.00	0.00	0.00	0.00	0.00	**9.66**	
Newspaper	7.22	4.36	4.30	4.16	4.78	1.94	0.00	0.00	0.00	0.00	0.00	0.00	**26.76**	Newspapers from CWF
Oil Filters	0.00	0.00	0.00	0.00	0.00	0.34	0.00	0.00	0.00	0.00	0.00	0.00	**0.34**	Oil Filters from CWF
Phonebooks	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.38**	Phonebooks from CWF
Plastic Bottles	1.92	1.86	1.40	1.64	2.62	0.60	0.00	0.00	0.00	0.00	0.00	0.00	**10.04**	Plastic Bottles from CWF & 15 No. Collection Sites
Print Cartridges	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.04**	
Scrap Metals	83.66	54.50	0.00	100.40	0.06	128.44	0.00	80.58	7.36	0.00	0.00	133.84	**588.84**	Scrap Metals from CWF & other sources
Tetrapack	0.54	0.44	2.64	0.24	1.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**5.30**	Tetrapacks from CWF
Textiles	3.14	2.62	1.98	2.56	2.62	0.78	0.00	0.00	0.00	0.00	0.00	0.00	**13.70**	Textiles from CWF (used clothes)
Waste Oil	1.02	0.00	1.74	22.24	1.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**26.32**	Waste Oil from CWF
Mixed Glass	0.00	0.00	0.00	0.00	0.00	1.62	0.00	0.00	0.00	0.00	0.00	0.00	**1.62**	
Oil and Fat	0.00	0.00	0.00	0.00	0.00	0.52	0.00	0.00	0.00	0.00	0.00	0.00	**0.52**	
Waste Paints	1.96	2.28	0.00	1.66	1.34	0.00	3.40	0.00	0.00	0.00	0.00	0.00	**10.64**	
Totals	**707.40**	**354.06**	**246.06**	**263.96**	**237.28**	**342.46**	**526.26**	**766.18**	**464.04**	**441.24**	**224.92**	**208.04**	**4781.90**	

5.3 Remaining capacity of the site

Killurin Landfill closed in the end of June 2008. There is no space remaining in the landfill for deposition of waste. Landfill waste for the area is now diverted to the Holmestown facility nearby.

5.4 Area occupied by waste

The entire footprint of the landfill just over 12 acres (approximately 50,000m^2) has been filled with waste.

5.5 Waste deposition

During 2008 the North West corner of the site with an approximate footprint of 8,000 m^2 was the active tipping area. Waste was brought to the active tipping face by the refuse transport vehicle. The vehicle reversed up to the tipping face and tipped the load out. The waste was spread out and compacted into the active tip face by a Compactor. This usually took 3 to 4 passes to fully compact the waste into the active landfill face.

Only one working face was operational at any time. The working face was maintained at less than 25 metres wide and 2.5 metres in height after compaction with a slope of no greater than 1.3. Cover material was placed over the working face by the end of each working day.

6 ENVIRONMENTAL NUISANCES

6.1 Review of environmental nuisance control at the facility for the reporting period

Nuisances are logged in a weekly tick-box report. The table below summarises weeks during which action was taken.

Table 16 Environmental Nuisance Control 2008

Nuisance	Action taken
Birds	Bird control Ireland was on site for a minimum of 3 days a week every week during the reporting period. The bird control log is available to view on request.
Vermin	Vermin boxes were baited once a month during the reporting period.
Litter	Daily litter picking was ongoing. A student was employed during the summer months for offsite litter picking.
Flies	Flies were sprayed by contractor during the weeks of March 2008 and June 2008.
Odour	No incidents.

7 RESOURCE & ENERGY CONSUMPTION

7.1 Electricity

The cost of electricity on site for 2008 was €43,000.

7.2 Water

Approximately 2,000 cubic metres of water was used during the reporting period. There has been no change to dust suppression techniques used during 2008 compared to the previous reporting period.

7.3 Diesel

Total diesel fuel consumption for 2008 was estimated to be 9,682 litres. This is significantly reduced from the 2007 figure of 52,259 litres due to reduced activity on site.

7.4 Energy usage

Wexford Energy Management Agency Ltd. carried out an energy audit of Killurin Landfill in November 2008. The audit concluded that due to the nature of the landfill it is difficult to estimate the long term gas production rates with certainty. The low price for electricity generated and the high cost of a grid connection along with the slow connection application process has meant that flaring has been the preferred option. The gas collection system was identified as the main consumer of energy onsite with flaring being energy intensive. It was suggested that the gas be put to better use by installing a small landfill gas fired generator for self supply as the total cost of electricity in 2008 was €43,000.

8 ENVIRONMENTAL MONITORING & EMISSIONS SUMMARY

8.1 Summary report on emissions

A summary of emissions monitoring at Killurin Landfill carried out during this reporting period (January 2008 – December 2008) is contained in Table 17 below.

The E-PRTR Regulation (EC) No 166/2006 concerning the establishment of a European Pollutant Release and Transfer Register came into force in February 2006 and was brought into Irish law through SI No 123 of 2007. As a result all industries have to annually report environmental emissions and waste transfer data through a web-based form as part of their AER. The PRTR 2008 document is included in the Appendix.

Table 17 A summary of Emissions monitoring as specified in the Licence.

Emission Monitoring	Frequency
Landfill Gas	Weekly
Leachate	Quarterly
Surface water	Quarterly
Groundwater Levels	Monthly
Groundwater	Quarterly
River water	Quarterly
Noise	Annually
Dust	Tri-Annually

8.2 Environmental Monitoring

Wexford County Council carries out a comprehensive environmental monitoring programme in compliance with the waste licence conditions to assess the significance of emissions. The monitoring programme includes Landfill Gas, Leachate Level & Quality, Surface Water Quality, Groundwater Level & Quality, River Water Quality, Noise and Dust monitoring, Meteorological data, as well as Ecological and Topographical surveys.

Monitoring during this reporting period was carried out according to Schedule D of Waste Licence W0016-2. Quarters 1, 2, 3 and 4 of 2007 are summarised in this chapter.

8.2.1 Landfill gas

In accordance with Schedule D.1 of the Waste Licence 16-2, the following monitoring has been carried out and reported to the Agency.

- Monitoring boreholes LB2, LB3, LB4, LB5, LB6, LB7, LB8, LB12, LB13, LB14, LB15, LB16 as specified in the licence.

- Additional boreholes T1, T2, T3, T5, T6, T7, T9, T10, T11, T12, T13, T14, T15, T16, T17, T18, T19 and T20 have been provided (date) around the site perimeter and were monitored on a monthly basis by Wexford County Council site staff.

The majority of boreholes have varying levels of gas quality over the reporting period and no particular trend could be identified.

Table 18 Gas Monitoring Points

Off site and on site gas boreholes		
CO_2 and CH_4 levels (monthly)	41 points	In waste gas monitoring wells LB2 to LB8, LB12 to LB16
		Boundary gas monitoring wells T1 to T3, T5 to T7, T9 to T20 GW1, GW9 to GW11, GW17 to GW19.
		Resident gas borehole: GB1 and GB2
Site offices & Residential Dwelling gas alarms		
CO_2 and CH_4 levels (continuously)	5 points	Storage shed Electrical Shed Trax Shed Two closest residences
CO_2 and CH_4 levels (weekly)	All site buildings	All modified containers located on site

Carbon Dioxide (CO_2)

Perimeter boreholes

CO_2 concentrations at GW17 and GW19 were noted to be above the trigger level of 1.5% v/v and similar to results recorded in the previous reporting period. CO_2 concentrations of 0.4% to 29.7% v/v were recorded during the year. Although this represents an improvement in the results from 2007, the results are very high. The elevated results at GW17 and GW19 are consistent with the migration of landfill gas away from the fill areas. These boreholes are located on the landfill gas side of the gas vent trench. Extraction of landfill gas is likely to gradually reduce the concentration of landfill gas detected at these particular monitoring locations. The CO_2 concentration at GW18 has seen a slight reduction since the last reporting period with half the monitoring results being above the emission limit value.

For the most part CO_2 levels were recorded below the limit value of 1.5% v/v at groundwater monitoring boreholes GW1, GW9, GW10 and GW11 during 2007. The highest level was recorded at GW9 in September at a concentration of 4.3% v/v.

The landfill gas monitoring results for the leachate boreholes all showed high levels of methane and carbon dioxide. This is as expected as the boreholes are located in the body of the waste which is in the methanogenic stage of gas generation. In general gas levels at each of the waste gas monitoring wells (LB2 - LB8 and LB12 - LB16) are variable with no specific trend being apparent.

Residents boreholes

The following was recorded at resident's boreholes during this reporting period:

- **GB1 at Carley's:** In November 2008 the level of carbon dioxide reported at this location reached 6.1%. All other monthly results were below the 1.5% volume per volume (v/v) trigger-level.

- **GB2 at Foxes:** Carbon dioxide levels at this monitoring location were seen to be below the 1.5% volume per volume (v/v) trigger-level throughout the reporting period as was for the previous reporting period.

Both monitoring boreholes are located on the residence side of the gas vent trench. The results indicate that the vent trench and the gas abstraction system have reduced the levels of carbon dioxide in both of these wells.

Methane (CH_4)

Perimeter boreholes

CH_4 readings at GW17, GW18 and GW 19 were noted to range from 0% to 68.9% v/v. CH_4 levels were recorded below the limit value of 1.0% v/v at groundwater monitoring boreholes GW1, GW9, GW10 and GW11 in 2008.

Residents boreholes

The following was recorded at resident's boreholes during this reporting period:

- **GB1 at Carley's:** Methane levels at this location exceeded the 1.0% volume per volume (v/v) trigger-level in April with a value of 6.1% recorded.

- **GB2 at Foxes:** Methane levels at this monitoring location were seen to be below the 1.0% volume per volume (v/v) trigger-level throughout the reporting period.

8.2.2 Leachate levels and monitoring

Table 19 Leachate Monitoring Points

Leachate Monitoring			
Levels	12 points	LB2-LB8, LB12 – LB16	Weekly
Monitoring	2 points	Leachate Tank, LB2, LB12, LB13	Annual

Leachate levels

Leachate levels were taken at 12 leachate boreholes during 2008 in compliance with Schedule D.5 of the waste licence. Composite samples for this reporting period were obtained from LB2, LB12 & LB13 and the leachate storage tank. The levels were recorded using a dip meter on a weekly basis by Wexford County Council staff at the landfill. Wexford County Council has adopted a Leachate Management Plan designed to maintain leachate at acceptable levels by routine removal from the holding tank. The volumes of leachate removed from the tank in 2008 are detailed in Table 20. The quantities exported off-site in 2008 were significantly less than those of the previous reporting period. The total volume of leachate exported off-site in 2008 was 3,817 cubic metres compared to approximately 4,803 cubic metres in 2007.

Table 20 Leachate volumes removed from site in 2008

Month	Volume (m^3)
January	556.50
February	246.96
March	160.46
April	91.10
May	182.42
June	180.20
July	522.50
August	684.36
September	456.04
October	439.60
November	224.04
December	73.06
Total	**3817.24**

Leachate is generated by incident rainfall seeping into the landfill and by the decomposition of the waste itself. The other potential sources of leachate such as groundwater and surface water run-off are prevented from entering the waste fill areas through a combination of temporary capping and site engineering works.

Leachate is collected from a number of low points around the landfill and from 34 extraction wells located around the site within the waste boundary. This leachate is directed to the three holding tanks located in the northwest of the landfill. It is then removed by road tanker on a routine basis and transported to Enniscorthy wastewater treatment plant for treatment in accordance with the leachate management plan.

LB15 was recorded as being obsolete in the monitoring results from 2007. Borehole LB15 is referred to in the Slope Stability Assessment 2008 which was carried out by Enviros Consulting. In the report it is recommended that “the defunct leachate monitoring borehole LB15 is replaced with a new leachate monitoring borehole at the same location”. This recommendation is made because “the stability of the slopes on the site is potentially sensitive to rises in leachate levels”. The monitoring borehole LB15 was not replaced during this time but will be replaced during final capping works in 2009.

Leachate monitoring

Annual monitoring was undertaken on 6th and 7th of August 2008. Leachate samples were collected from four locations, LB2, LB12, LB13 and the leachate storage tank. The samples were analysed for a range of organic and inorganic parameters as defined in Table D.5.1 of the Waste Licence 16-2.

The levels recorded did not reveal any significant change to those recorded in the previous reporting period.

The typical characteristics of leachate generated on site are presented in Table 21. The results are similar to those obtained for the last reporting period and are in general indicative of a landfill in the methanogenic stage of decomposition of organic compounds i.e. conversion of organic compounds to landfill gas.

Table 21 Leachate analysis results August 2008

Leachate analysis August 2008					
		Sampling points[1]			
Parameter	**Units**	**LB2**	**LB12**	**LB13**	**Tank**
Ammonia	mg/l N	87	-	10,000	230
Arsenic	µg/l Ar	17.2	<50	170	<10
BOD	mg/l O2	5.8	16.6	60	32
Boron	µg/l B	879	724	2751	1266
Cadmium	µg/l Cd	<10	<50	<10	<10
Chloride	mg/l Cl	162	-	>12000	404
Chromium	µg/l Cr	<10	<50	33.9	<10
COD	mg/l 02	174	152	1148	319
Conductivity	µS/cm	2300	2430	12480	4160
Copper	µg/l Cu	<10	<50	13.6	<10
Total Cyanide	spectro	-	-	17	-
Fluoride	mg/l F	1.17	0.24	4.04	0.74
Lead	µg/l Pb	<10	<50	<10	<10
Mercury	µg/l Hg	<0.5	<0.5	<5	<5
Nickel	µg/l Ni	<10	<50	132	18.3
Total Oxidised Nitrogen	mg/l N	<0.1	-	0.2	3.7
pH	pH	6.7	6.8	7.5	7.9
Ortho-phosphate	mg/l P	<0.006	-	12	0.33
Selenium	µg/l Se	<10	<50	22.5	<10

[1] Blank cells indicate that no monitoring results were recorded for these parameters.

Sulphate	mg/l SO4	28.5	72.7	62.2	54.4
Zinc	µg/l Zn	<60	<300	<60	200

Inspection and testing of leachate storage tanks 2008

In December 2008 Enviros Consulting carried out analysis of the leachate storage tanks at Killurin Landfill. The report concluded the following:

1. The leachate storage tanks were drained and inspected. Some of the seals in tank 1 and tank 2 were not pointed with cement mortar; however the bitumen seals were found to be intact. The pointing should be replaced to maintain the integrity of the seals.

2. A small area of damaged concrete was noted on the upper north western corner of tank 3. This damage should be fixed.

3. The steel anchor should be cleaned and covered to reduce corrosion of the concrete around these points and to provide uniform thickness of concrete at all points of the tanks.

4. Tank 2 and 3 were integrity tested between 23 and 30 October 2008. The tanks passed the integrity test and are deemed fit for storing leachate.

5. Tank 1 was not tested due to operational restrictions, but the tank was visually inspected and is of the same age, construction and condition as Tank 2 and Tank 3.

6. It is reasonable to conclude that Tank 1 is also fit for the storage of leachate at Killurin Landfill.

8.2.3 Surface Water

Under Schedule D.5 of the Waste Licence 16-2, surface water monitoring was required in the locations listed below. SW1 is located upstream of the site, SW2 is situated downstream of the site and SW4 is located at the southern tip of the facility. A further one-off surface water sample was taken in 2008 on the track near GW23. The site streams sometimes run dry during the drier months of the year and consequently surface water samples cannot be obtained. These are discussed in subsequent sections.

Table 22 Surface water monitoring locations and frequency

Surface water Monitoring Locations and Frequency			
Parameter	**Location**	**Name**	**Frequency**
Visual Inspection/Odour	Off site	S1, S2, S4	Quarterly
Chemical analysis	Off site	S1, S2, S4	Quarterly and Annual
Biological analysis	Off site	Station 1-13, Grab1-3,	Annual
Visual Inspection	On site	SW1, SW2, SW4	Weekly
Chemical analysis	On site	SW1, SW2, SW4 SW near GW23	Quarterly and Annual

Visual inspection of surface water

Weekly visual inspections of surface water were conducted for monitoring points SW1, SW2 and SW4, and quarterly at off-site locations S1, S2 and S3. All surface water details are included in previously submitted monitoring reports for the landfill. No visual abnormalities were recorded for any of the surface water inspection points during the reporting period.

Surface water quality analysis

Results for all surface water monitoring carried out in 2008 have been submitted to the Agency in quarterly monitoring reports. Due to dry periods it was not always possible to retrieve samples from all of the monitoring points. Only 2 samples were collected for SW1, SW2 and SW4.

All sampling and analysis was carried out in accordance with recognised quality assurance and control procedures. The detailed monitoring results are presented in the quarterly monitoring reports submitted to the Agency in the reporting period. The range of analysis is as specified in Schedule D.5 of the Waste Licence 16-2 and includes parameters such as ammoniacal nitrogen, BOD, COD, dissolved oxygen, pH, electrical conductivity and organic and inorganic parameters.

No exceedances were reported during the quarterly monitoring.

Surface water Biological Survey

No biological survey was carried out during 2008.

8.2.4 Benthic Survey

No Benthic survey was carried out during 2008.

8.2.5 Groundwater

Table 23 Groundwater Monitoring Locations

Groundwater Monitoring Locations		
Upgradient	1 point	GW1
Downgradient (border of reed beds)	1 point	GW9
Downgradient (border of reed beds)	1 point	GW10
Upgradient	1 point	GW11
Upgradient	1 point	GW17
Upgradient	1 point	GW18
Upgradient	1 point	GW19
	1 point	GBH1
	1 point	GBH2

Groundwater levels

Groundwater levels were measured on a monthly basis using a dip meter. The groundwater dip levels have been submitted to the Agency in the quarterly monitoring reports. Details of groundwater levels are also available for inspection at the site office. Groundwater levels remained relatively constant throughout the monitoring period, with only minor variations in groundwater levels in accordance with prevailing weather conditions. During the drier months the groundwater levels were seen to gradually decrease while during wetter periods where prolonged rain was evident, levels of groundwater were noted to rise steadily over a number of months.

Groundwater quality boreholes

Upgradient groundwater boreholes (GW1)

Wexford County Council monitors groundwater quality in four boreholes (GW1, GW9, GW10 and GW11) located around the landfill. Monitoring is carried out as per Condition 8 and Schedules D1 and D.5.1 of the waste licence.

Elevated levels of ammonia were consistently detected at GW1, throughout each of the quarterly monitoring rounds. Levels were found to be as high as 8.4 mg/l N during February 2008. This monitoring point is located upgradient of the landfill site and so pollution from agricultural sources or road run-off is most likely the reason for these elevated levels. The landfill may be having an effect on the boreholes but it is difficult to isolate a source. Elevated levels of iron and manganese are typical of the groundwater chemistry of the area although they are elevated above the levels of the other groundwater boreholes. In relation to List I/II substances no exceedences were recorded. All other parameters were noted to be within acceptable limits.

Downgradient groundwater boreholes (GW9, GW10, GW11)

Elevated levels of ammonia were detected at GW9 during each round of quarterly sampling. Levels were consistently high during 2008 with 28mg/l N detected in Q1. High electrical conductivity and low dissolved oxygen levels were also noted at GW9 throughout the year. All other parameters remained below limits throughout the year.

Elevated levels of ortho-phosphate in conjunction with a reduced dissolved oxygen level were found at GW10 in the August. These levels indicate slight contamination which is most likely to have been from leachate as a result of landfill operations on site. List I/II organic substances were not found to be above detection limits which is consistent with the previous reporting period.

At GW10 chloride and ammonia levels were found to be within acceptable limits.

Private well water analysis

Table 24 Private well monitoring locations

Drinking water		
Pearson's residence	UV treated	Pearson's tap

Quarterly monitoring was carried out on drinking water samples from the Pearson's residence. Total coliforms were found in the untreated water sample in Q3 and Q4. The results do not distinguish between faecal and non-faecal coliforms but as the numbers of E. coli are low or zero it can be concluded that the pollution was not recent and was of a low severity. All other parameters were within required limits.

8.2.6 Noise

The EPA Waste Licence (Ref. N^{o}. 16-2) specifies that noise emissions from the site shall not exceed a L_{Aeq} 30 min. of 55dBA during the daytime and a L_{Aeq} 30 min. of 45 dBA during night time.

Under Schedule of the Waste Licence 16-2, annual monitoring of noise emissions from the site is required at 10 locations.

Euro Environmental Services carried out day and night time noise monitoring in spring 2008 at predetermined noise monitoring locations around Killurin landfill. The daytime noise survey was carried out between 11:34 and 17:30 on Wednesday 26 March 2008. The night time measurements were carried out on the same day between 22:00 and 23:30. Measurements lasted 30 minutes.

Day time Noise Monitoring results				
Monitoring Location	**Date & Time**	**L(A)eq**	**L(A)10**	**L(A)90**
NSL1	26/03/08 @ 11:34	56	53	39
NSL2	26/03/08 @ 12:07	62	57	40
NSL3	26/03/08 @ 15:15	68	65	39
NSL4	26/03/08 @ 12:36	57	57	34
NSL5	26/03/08 @14:15	62	62	59
NSL6	26/03/08 @ 13:40	55	54	38
NSL7	26/03/08 @ 13:10	54	55	37
Carleys Residence	26/03/08 @ 15:47	66	66	39
Foxes Residence	26/03/08 @ 16:18	74	79	32
Pearsons Residence	26/03/08 @ 17:00	55	48	35

Night time Noise Monitoring Results				
Monitoring Location	**Date & Time**	**L(A)eq**	**L(A)10**	**L(A)90**
Pearsons Residence	26/03/08 @ 22:00	46	39	31
Foxes Residence	26/03/08 @ 22:31	59	56	31
Carleys Residence	26/03/08 @ 23:00	60	49	35

The Euro Environmental Services report does not offer an interpretation as to why the majority of reported L_{Aeq} noise levels are higher than the corresponding L_{A10} values, as this would generally be seen as an anomaly. The noise report states that the main sources of interference during monitoring at the landfill included passing traffic, birds singing and wind moving through trees and reeds.

Eight out of ten daytime monitoring points and all three night time monitoring points exceeded emission limits outlined in Schedule C, Part C.1 of the Waste License. NSL6, NSL7 and Pearsons Residence were within the emissions limits. Noise from the landfill was audible at these points. The main flare was the primary source of noise at NSL5, NSL6 and NSL7.

During the night time monitoring all activities had ceased at the landfill, although the flare would still be expected to be operational. All points exceeded the emission limits set out in the Waste License. Noise recorded at these points was attributed to passing traffic and dogs barking.

The report concluded that landfill activities and traffic noise contributed to most of the overall levels at the site.

8.2.7 River water

As requested by the EPA, the river water monitoring results for the river Slaney are reported in the table below.

The *Surface Water Regulations, 1989,* specify the limits for river water quality monitoring.

Chlorine, conductivity and temperature failed to comply with limits set out in the Regulations at all three monitoring points on 14/05/08.

No cause for this elevation has been identified.

Table 25 River water monitoring results for River Slaney 2008

River water Monitoring for the River Slaney													
		Monitoring locations											
		S1				S2				S3			
Parameter	Limit / Units	13/02/08	14/05/08	04/09/08	27/11/08	13/02/08	14/05/08	04/09/08	27/11/08	13/02/08	14/05/08	04/09/08	27/11/08
BOD	5 mg/l	1	1.6	1.8	2.6	0.9	1.9	1.6	1.5	0.6	1.5	2.6	2
COD	40 mg/l	<3	8	11	43	<3	7	6	17	5	12	6	8
Chlorine as Cl	250 mg/l	24	793	22	17	24	1016	20	17	59	1700	26	16
Dissolved Oxygen	mg/l	8.59	8.91	9.57	8.84	9.61	8.92	9.62	8.61	8.71	9.8	9.75	.37
Conductivity	1500 µs/cm	258	2570	229	222	262	3120	228	219	369	5070	245	213
pH	6<pH>9	7.75	8.19	7.65	7.36	7.77	8.2	7.61	7.52	7.8	8.2	7.67	7.36
Suspended Solids	30 mg/l	<2	6	4	<2	<2	4	<2	6	<2	2	14	6
Ammonia as NH_3-N	0.3 mg/l	0.04	<0.02	0.03	<0.02	0.02	0.04	0.04	0.04	0.03	<0.02	0.04	0.02
Temperature	Degrees Celsius	7.2	17.9	nm	nm	7.2	17.9	nm	nm	7.2	17.9	nm	nm

* nm = non measurable

8.2.8 Dust

Euro Environmental Services carried out dust monitoring was at three representative locations using Bergerhoff dust gauges three times during the year, as specified in Schedule D.3.1 of the licence. Sampling locations and results are provided in the table below.

Table 26 Dust monitoring locations and frequency

Dust Monitoring Locations and Frequency			
Dust analysis	On site	D1 – D3	Licence requires three times a year
Dust Monitoring Results (mg/m^2/day)			
		01/09/08 – 30/09/08	**29/09/08 – 30/10/08**
D1	North west area	225	187
D2	North area	217	987
D3	North east area	68	165

The dust deposition limit of 350mg/m^2/day was exceeded at monitoring location D2 during September to October monitoring period where a concentration of 988mg/m^2/day was recorded. No cause for this elevation has been identified.

Dust monitoring was not carried out three times during 2008 as stated in the licence requirements.

8.2.9 Meteorological monitoring

All monitoring information was obtained from the weather station located at Johnstown House in Wexford, this station is within 10km of Killurin Landfill site.

A full set of data has been previously sent to the Agency in the four quarterly monitoring reports.

8.2.10 Ecological report on Killurin Landfill

An ecological report was issued in autumn 2008 by CAAS Environmental Services. The report states that the landfill area shows significant ecological change since the last visit in 2006. Capping and re-seeding have resulted in a considerable loss of plant diversity with a reduction of the dependent birdlife. The landfill has also been abandoned by scavenging birds. Other changes, though less noticeable, are still to be found onsite, like the increase in the area covered by nutrient-demanding plants. There has also been a spread of introduced species in the woodland. These introduced plants were probably brought in by the land-filling operation and are likely to outlive its influence unless controlled.

APPENDICES

A1 STAFF TRAINING RECORD 2008

Table 27 Summary of Staff Training Records 2008

TRAINING COURSE	STAFF MEMBER											TARGET DATES	DETAILS
	Daniel McCartan	Bernard Kirwin	Billy Byrne Jnr	Fran Hobbs	Mark Collins	Kevin Murphy	Noel Byrne	Joe Brown	John Jordan	Eamonn Kelly	Barry Browne		
Safe Pass	√	√	√	√	√	√	√	√	√	√	√	as soon as possible	At least two candidates will attend
Fire safety	x	√	√	√	√	√	√	√	√	√	√	as soon as possible	Following review of safety statement
First Aid	x	√	√	√	√	√	√	√	x	√	√	as soon as possible	Dependant on availability of spaces
FAS Plant Operative	x	x	x	x	√	√	√	√	x	√	√	end of 2008	Other general operatives training will be reviewed when appointed
FAS Waste Management Training	x	x	√	√	√	x	x	x	x	x	x	none	none
Beginners Computers Course	x	x	x	x	x	x	x	x	x	x	√	end of 2008	Placement dependant on availability of spaces and staff interest
ECDL Computer Course	x	x	√	√	x	x	√	x	x	x	√	end of 2008	Placement dependant on availability of spaces and staff interest
FAS Waste Management Operative Course	x	√	x	x	x	√	√	√	x	√	√	2008	All operatives will be required to attend

A2 PRTR 2008

Environmental Protection Agency

AER Returns Worksheet

Version 1.1.02

REFERENCE YEAR	2008

1. FACILITY IDENTIFICATION

Parent Company Name	Wexford County Council
Facility Name	Killurin Landfill Site
PRTR Identification Number	W0016
Licence Number	W0016-02

Waste or IPPC Classes of Activity

No.	class_name
3.1	Deposit on, in or under land (including landfill).
3.2	Land treatment, including biodegradation of liquid or sludge discards in soils.
3.4	Surface impoundment, including placement of liquid or sludge discards into pits, ponds or lagoons.
3.7	Physico-chemical treatment not referred to elsewhere in this Schedule (including evaporation, drying and calcination) which results in final compounds or mixtures which are disposed of by means of any activity referred to in paragraphs 1. to 10. of t...
3.10	Release of waste into a water body (including a seabed insertion).
3.12	Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.
3.13	Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.
4.2	Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).
4.3	Recycling or reclamation of metals and metal compounds.
4.4	Recycling or reclamation of other inorganic materials.
4.9	Use of any waste principally as a fuel or other means to generate energy.
4.10	The treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system.
4.11	Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule.
4.12	Exchange of waste for submission to any activity referred to in a preceding paragraph of this Schedule.
4.13	Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced.

Address 1	Newtown Lower
Address 2	Killurin
Address 3	Co. Wexford
Address 4	
Country	Ireland
Coordinates of Location	424500.000
River Basin District	IE-South Eastern
NACE Code	382
Main Economic Activity	Waste treatment and disposal
AER Returns Contact Name	Daniel McCartan (W0016)
AER Returns Contact Email Address	daniel.mccartan@wexfordcoco.ie
AER Returns Contact Position	Facility Director
AER Returns Contact Telephone Number	053 28603 053 28382
AER Returns Contact Mobile Phone Number	
AER Returns Contact Fax Number	
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	0
User Feedback/Comments	Releases to air: the figure used to estimate the "methane flared" was taken from the E-PRTR document from 2004. Releases to water: the licence W0016-02 states a limit for suspended solids, this is impossible to quantify without a flow rate - hence the paramater has not been included in the spreadsheet.
Web Address	

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
5d	Landfills

5c	Installations for the disposal of non-hazardous waste

3. SOLVENTS REGULATIONS (S.I. No. 543 of 2002)

Is it applicable?	No
Have you been granted an exemption ?	No
If applicable which activity class applies (as per Schedule 2 of the regulations) ?	
Is the reduction scheme compliance route being used ?	

4.1 RELEASES TO AIR

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

RELEASES TO AIR								
POLLUTANT		METHOD				QUANTITY		
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION B : REMAINING PRTR POLLUTANTS

RELEASES TO AIR								
POLLUTANT		METHOD				QUANTITY		
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION C : REMAINING POLLUTANT EMISSIONS (As required in your Licence)

RELEASES TO AIR								
POLLUTANT		METHOD				QUANTITY		
			Method Used					
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
210	Dust	M	VDI 2199	Bergerhoff Dust Gauges	0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

Additional Data Requested from Landfill operators

For the purposes of the National Inventory on Greenhouse Gases, landfill operators are requested to provide summary data on landfill gas (Methane) flared or utilised on their facilities to accompany the figures for total methane generated. Operators should only report their Net methane (CH4) emission to the environment under T(total) KG/yr for Section A: Sector specific PRTR pollutants above. Please complete the table below:

Landfill: Killurin Landfill Site

Please enter summary data on the quantities of methane flared and / or utilised			Method Used			
	T (Total) kg/Year	**M/C/E**	**Method Code**	**Designation or Description**	**Facility Total Capacity m3 per hour**	
Total estimated methane generation (as per site model)	0.0				N/A	
Methane flared	729560.0	E	estimation	flare operational data	5562.62	(Total Flaring Capacity)
Methane utilised in engine/s	0.0				0.0	(Total Utilising Capacity)
Net methane emission (as reported in Section A above)	0.0				N/A	

4.2 RELEASES TO WATERS

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

Data on ambient monitoring of storm/surface water or groundwater, conducted as part of your licence requirements, should NOT be submitted under AER / PRTR Reporting as this only concerns Releases from your facility

RELEASES TO WATERS								
POLLUTANT					QUANTITY			
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION B : REMAINING PRTR POLLUTANTS

RELEASES TO WATERS								
POLLUTANT					QUANTITY			
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION C : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

RELEASES TO WATERS								
POLLUTANT					QUANTITY			
			Method Used					
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

4.3 RELEASES TO WASTEWATER OR SEWER

SECTION A : PRTR POLLUTANTS

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER								
POLLUTANT		METHOD			QUANTITY			
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION B : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER								
POLLUTANT		METHOD			QUANTITY			
			Method Used					
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

4.4 RELEASES TO LAND

SECTION A : PRTR POLLUTANTS

RELEASES TO LAND							
POLLUTANT		METHOD			QUANTITY		
			Method Used				
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
					0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION B : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

RELEASES TO LAND							
POLLUTANT		METHOD			QUANTITY		
			Method Used				
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
					0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

Transfer Destination	European Waste Code	Hazardous	Quantity T/Year	Description of Waste	Waste Treatment Operation	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)
						M/C/E	Method Used					
Within the Country	20 01 33	Yes	13.68	Lead acid, Ni-Cd & Primary batteries from CWF	D15	M	Weighed	Offsite in Ireland	ReturnBatt - WCP/KK/001(A)/05	Unit 1, Old Mill Industrial Estate, Kill, Co. Kildare		
Within the Country	20 01 01	No	69.38	cardboard from CWF	R3	M	Weighed	Offsite in Ireland	Southeast Recycling - WCP/KK/054(A)08	Pembrokestown, Wexford		
Within the Country	02 01 02	No	13.74	deceased canines from vetinary practices	D10	M	Weighed	Offsite in Ireland	Waterford Proteins - Sept of Agriculture Permit - R919	Ferrybank, Waterford		
Within the Country	20 01 21	Yes	0.24	flourescent tubes	R5	M	Weighed	Offsite in Ireland	Irish Lamp Recycling - WCP/KK/030(A)07	Athy, Co. Kildare		
Within the Country	16 02 11	Yes	173.46	large household WEEE	R5	M	Weighed	Offsite in Ireland	Cedar - WCP/KK/312/06	Cedar House, Greenogue Business Park, Rathcoole, Dublin		
Within the Country	**19 07 03**	**No**	3717.24	leachate from landfill	D8	M	Weighed	Offsite in Ireland	Enniscorty & Wexford Sewage Treatment Plants	Saint Johns, Enniscorthy and Trinity Street, Wexford		
Within the Country	20 01 01	No	9.66	magazines	R3	M	Weighed	Onsite in Ireland	Recycling 2000 - WP/06/06	Wexford Enterprise Centre, Drinagh, Wexford		
Within the Country	20 01 01	No	26.76	newspapers	R3	M	Weighed	Onsite in Ireland	Recycling 2000 - WP/06/06	Wexford Enterprise Centre, Drinagh, Wexford		
Within the Country	16 01 07	Yes	0.34	oil filters from CWF	R5	M	Weighed	Offsite in Ireland	Atlas Environmental - WCP/KK/059(A)05	Clonmain Industrial Estate, Portlaois Co. Laois		
Within the Country	20 01 01	No	0.38	phonebooks	R3	M	Weighed	Offsite in Ireland	Recycling 2000 - WP/06/06	Wexford Enterprise Centre, Drinagh, Wexford		
Within the Country	20 01 39	No	10.04	plastic bottles from CWF	R3	M	Weighed	Onsite in Ireland	Southeast Recycling - WCP/KK/054(A)08	Pembrokestown, Wexford		
Within the Country	20 01 27	Yes	0.04	print cartridges	R5	M	Weighed	Offsite in Ireland	Jack & Jill Foundation - CP - D656/4	Johnstown Manor, Johnstown, nass, Co. Kildare		
Within the Country	20 01 40	No	588.84	scrap metal from CWF & other sources	R4	M	Weighed	Offsite in Ireland	Mulligan Recyclers, WCP/KK/262/05	Mulligan Dismantling& Salvage, Scarnagh Lower, Inch, Gorey, Wexford.		
Within the Country	20 01 01	No	5.3	tetrapack from CWF	R3	M	Weighed	Offsite in Ireland	Southeast Recycling - WCP/KK/054(A)08	Pembrokestown, Wexford		
Within the Country	20 01 10	No	13.7	textiles form CWF	R3	M	Weighed	Offsite in Ireland	Textile Recycling Ireland, WPR/014	Glen Abby Complex, Belgard road, Tallagh, Dublin		
Within the Country	20 01 26	Yes	26.32	waste oil from CWF	R5	M	Weighed	Offsite in Ireland	Atlas Environmental - WCP/KK/059(A)05	Clonmain Industrial Estate, Portlaois Co. Laois		
Within the Country	20 01 02	No	1.62	mixed glass	R3	M	Weighed	Offsite in Ireland	Southeast Recycling - WCP/KK/054(A)08	Pembrokestown, Wexford		
Within the Country	20 01 26	Yes	0.52	oil & fat	R5	M	Weighed	Offsite in Ireland	Atlas Environmental - WCP/KK/059(A)05	Clonmain Industrial Estate, Portlaois Co. Laois		
Within the Country	20 01 27	Yes	10.64	waste paints	R5	M	Weighed	Offsite in Ireland	Rathcliffe - WCP/KK/312/06	Greenogue Business Park, Rathcoole, Dublin		

* Select a row by double-clicking the Description of Waste then click the delete button

NACE_Group	NACE_SubGroup	NACE_Code	NACE_Description	NACE_ISIC
12	0	0	Manufacture of tobacco products	1200
36	0	0	Water collection, treatment and supply	3600
37	0	0	Sewerage	3700
39	0	0	Remediation activities and other waste management services	3900
75	0	0	Veterinary activities	7500
92	0	0	Gambling and betting activities	9200
97	0	0	Activities of households as employers of domestic personnel	9700
99	0	0	Activities of extraterritorial organisations and bodies	9900
02	1	0	Silviculture and other forestry activities	0210
05	1	0	Mining of hard coal	0510
06	1	0	Extraction of crude petroleum	0610
07	1	0	Mining of iron ores	0710
09	1	0	Support activities for petroleum and natural gas extraction	0910
13	1	0	Preparation and spinning of textile fibres	1311
16	1	0	Sawmilling and planing of wood	1610
19	1	0	Manufacture of coke oven products	1910
21	1	0	Manufacture of basic pharmaceutical products	2100*
24	1	0	Manufacture of basic iron and steel and of ferro-alloys	2410*
29	1	0	Manufacture of motor vehicles	2910
41	1	0	Development of building projects	4100*
49	1	0	Passenger rail transport, interurban	4911
50	1	0	Sea and coastal passenger water transport	5011
51	1	0	Passenger air transport	5110
52	1	0	Warehousing and storage	5210
53	1	0	Postal activities under universal service obligation	5310
55	1	0	Hotels and similar accommodation	5510*
56	1	0	Restaurants and mobile food service activities	5610
60	1	0	Radio broadcasting	6010
61	1	0	Wired telecommunications activities	6110
68	1	0	Buying and selling of own real estate	6810*
69	1	0	Legal activities	6910
70	1	0	Activities of head offices	7010
74	1	0	Specialised design activities	7410
78	1	0	Activities of employment placement agencies	7810
80	1	0	Private security activities	8010
81	1	0	Combined facilities support activities	8110
85	1	0	Pre-primary education	8510*
86	1	0	Hospital activities	8610
87	1	0	Residential nursing care activities	8710
88	1	0	Social work activities without accommodation for the elderly and disabled	8810
98	1	0	Undifferentiated goods-producing activities of private households for own use	9810
02	2	0	Logging	0220
05	2	0	Mining of lignite	0520
06	2	0	Extraction of natural gas	0620
10	2	0	Processing and preserving of fish, crustaceans and molluscs	1020
13	2	0	Weaving of textiles	1312
14	2	0	Manufacture of articles of fur	1420
15	2	0	Manufacture of footwear	1520
18	2	0	Reproduction of recorded media	1820
19	2	0	Manufacture of refined petroleum products	1920
20	2	0	Manufacture of pesticides and other agrochemical products	2021
21	2	0	Manufacture of pharmaceutical preparations	2100*
23	2	0	Manufacture of refractory products	2391
24	2	0	Manufacture of tubes, pipes, hollow profiles and related fittings, of steel	2410*
26	2	0	Manufacture of computers and peripheral equipment	2620
27	2	0	Manufacture of batteries and accumulators	2720
29	2	0	Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers	2920
30	2	0	Manufacture of railway locomotives and rolling stock	3020
32	2	0	Manufacture of musical instruments	3220
33	2	0	Installation of industrial machinery and equipment	3320
41	2	0	Construction of residential and non-residential buildings	4100*
45	2	0	Maintenance and repair of motor vehicles	4520
49	2	0	Freight rail transport	4912
50	2	0	Sea and coastal freight water transport	5012
53	2	0	Other postal and courier activities	5320
55	2	0	Holiday and other short-stay accommodation	5510*
59	2	0	Sound recording and music publishing activities	5920
60	2	0	Television programming and broadcasting activities	6020
61	2	0	Wireless telecommunications activities	6120
64	2	0	Activities of holding companies	6420
65	2	0	Reinsurance	6520
68	2	0	Renting and operating of own or leased real estate	6810*
69	2	0	Accounting, bookkeeping and auditing activities; tax consultancy	6920
71	2	0	Technical testing and analysis	7120
72	2	0	Research and experimental development on social sciences and humanities	7220
73	2	0	Market research and public opinion polling	7320
74	2	0	Photographic activities	7420
78	2	0	Temporary employment agency activities	7820
80	2	0	Security systems service activities	8020
82	2	0	Activities of call centres	8220
85	2	0	Primary education	8510*
87	2	0	Residential care activities for mental retardation, mental health and substance abuse	8720
94	2	0	Activities of trade unions	9420
98	2	0	Undifferentiated service-producing activities of private households for own use	9820
01	3	0	Plant propagation	0130
02	3	0	Gathering of wild growing non-wood products	0230
13	3	0	Finishing of textiles	1313
20	3	0	Manufacture of paints, varnishes and similar coatings, printing ink and mastics	2022
25	3	0	Manufacture of steam generators, except central heating hot water boilers	2513

26	3	0	Manufacture of communication equipment	2630
28	3	0	Manufacture of agricultural and forestry machinery	2821
30	3	0	Manufacture of air and spacecraft and related machinery	3030
32	3	0	Manufacture of sports goods	3230
35	3	0	Steam and air conditioning supply	3530
47	3	0	Retail sale of automotive fuel in specialised stores	4730
50	3	0	Inland passenger water transport	5021
55	3	0	Camping grounds, recreational vehicle parks and trailer parks	5520
56	3	0	Beverage serving activities	5630
61	3	0	Satellite telecommunications activities	6130
64	3	0	Trusts, funds and similar financial entities	6430
65	3	0	Pension funding	6530
66	3	0	Fund management activities	6630
74	3	0	Translation and interpretation activities	7490*
78	3	0	Other human resources provision	7830
80	3	0	Investigation activities	8030
81	3	0	Landscape service activities	8130
82	3	0	Organisation of conventions and trade shows	8230
84	3	0	Compulsory social security activities	8430
87	3	0	Residential care activities for the elderly and disabled	8730
02	4	0	Support services to forestry	0240
25	4	0	Manufacture of weapons and ammunition	2520
26	4	0	Manufacture of consumer electronics	2640
27	4	0	Manufacture of electric lighting equipment	2740
30	4	0	Manufacture of military fighting vehicles	3040
32	4	0	Manufacture of games and toys	3240
45	4	0	Sale, maintenance and repair of motorcycles and related parts and accessories	4540
50	4	0	Inland freight water transport	5022
77	4	0	Leasing of intellectual property and similar products, except copyrighted works	7740
01	5	0	Mixed farming	0150
25	5	0	Forging, pressing, stamping and roll-forming of metal; powder metallurgy	2591
32	5	0	Manufacture of medical and dental instruments and supplies	3250
49	5	0	Transport via pipeline	4930
20	6	0	Manufacture of man-made fibres	2030
26	6	0	Manufacture of irradiation, electromedical and electrotherapeutic equipment	2660
85	6	0	Educational support activities	8550
01	7	0	Hunting, trapping and related service activities	0170
23	7	0	Cutting, shaping and finishing of stone	2396
26	7	0	Manufacture of optical instruments and photographic equipment	2670
26	8	0	Manufacture of magnetic and optical media	2680
09	9	0	Support activities for other mining and quarrying	0990
27	9	0	Manufacture of other electrical equipment	2790
46	9	0	Non-specialised wholesale trade	4690
55	9	0	Other accommodation	5590
61	9	0	Other telecommunications activities	6190
74	9	0	Other professional, scientific and technical activities n.e.c.	7490*
79	9	0	Other reservation service and related activities	7990
86	9	0	Other human health activities	8690
87	9	0	Other residential care activities	8790
11	0	1	Distilling, rectifying and blending of spirits	1101
31	0	1	Manufacture of office and shop furniture	3100*
62	0	1	Computer programming activities	6201
90	0	1	Performing arts	9000*
91	0	1	Library and archives activities	9101
96	0	1	Washing and (dry-)cleaning of textile and fur products	9601
01	1	1	Growing of cereals (except rice), leguminous crops and oil seeds	0111
03	1	1	Marine fishing	0311
08	1	1	Quarrying of ornamental and building stone, limestone, gypsum, chalk and slate	0810*
10	1	1	Processing and preserving of meat	1010*
14	1	1	Manufacture of leather clothes	1410*
15	1	1	Tanning and dressing of leather; dressing and dyeing of fur	1511
17	1	1	Manufacture of pulp	1701*
18	1	1	Printing of newspapers	1811*
20	1	1	Manufacture of industrial gases	2011*
22	1	1	Manufacture of rubber tyres and tubes; retreading and rebuilding of rubber tyres	2211
23	1	1	Manufacture of flat glass	2310*
25	1	1	Manufacture of metal structures and parts of structures	2511*
26	1	1	Manufacture of electronic components	2610*
27	1	1	Manufacture of electric motors, generators and transformers	2710*
28	1	1	Manufacture of engines and turbines, except aircraft, vehicle and cycle engines	2811
30	1	1	Building of ships and floating structures	3011
32	1	1	Striking of coins	3211*
33	1	1	Repair of fabricated metal products	3311
35	1	1	Production of electricity	3510*
38	1	1	Collection of non-hazardous waste	3811
42	1	1	Construction of roads and motorways	4210*
43	1	1	Demolition	4311
45	1	1	Sale of cars and light motor vehicles	4510*
46	1	1	Agents involved in the sale of agricultural raw materials, live animals, textile raw materials and semi-fi	4610*
47	1	1	Retail sale in non-specialised stores with food, beverages or tobacco predominating	4711
58	1	1	Book publishing	5811
59	1	1	Motion picture, video and television programme production activities	5911
63	1	1	Data processing, hosting and related activities	6311
64	1	1	Central banking	6411
65	1	1	Life insurance	6511
66	1	1	Administration of financial markets	6611
71	1	1	Architectural activities	7110*
72	1	1	Research and experimental development on biotechnology	7210*
73	1	1	Advertising agencies	7310*
77	1	1	Renting and leasing of cars and light motor vehicles	7710*

79	1	1	Travel agency activities	7911
82	1	1	Combined office administrative service activities	8211
84	1	1	General public administration activities	8411
93	1	1	Operation of sports facilities	9311*
94	1	1	Activities of business and employers membership organisations	9411
95	1	1	Repair of computers and peripheral equipment	9511
01	2	1	Growing of grapes	0121
03	2	1	Marine aquaculture	0321
07	2	1	Mining of uranium and thorium ores	0721
16	2	1	Manufacture of veneer sheets and wood-based panels	1621
17	2	1	Manufacture of corrugated paper and paperboard and of containers of paper and paperboard	1702
22	2	1	Manufacture of plastic plates, sheets, tubes and profiles	2220*
25	2	1	Manufacture of central heating radiators and boilers	2512*
28	2	1	Manufacture of ovens, furnaces and furnace burners	2815
35	2	1	Manufacture of gas	3520*
38	2	1	Treatment and disposal of non-hazardous waste	3821
42	2	1	Construction of utility projects for fluids	4220*
43	2	1	Electrical installation	4321
46	2	1	Wholesale of grain, unmanufactured tobacco, seeds and animal feeds	4620*
47	2	1	Retail sale of fruit and vegetables in specialised stores	4721*
51	2	1	Freight air transport	5120*
52	2	1	Service activities incidental to land transportation	5221
56	2	1	Event catering activities	5621
58	2	1	Publishing of computer games	5820*
66	2	1	Risk and damage evaluation	6621
70	2	1	Public relations and communication activities	7020*
77	2	1	Renting and leasing of recreational and sports goods	7721
81	2	1	General cleaning of buildings	8121
84	2	1	Foreign affairs	8421
86	2	1	General medical practice activities	8620*
93	2	1	Activities of amusement parks and theme parks	9321
95	2	1	Repair of consumer electronics	9521
10	3	1	Processing and preserving of potatoes	1030*
14	3	1	Manufacture of knitted and crocheted hosiery	1430*
23	3	1	Manufacture of ceramic tiles and flags	2392*
24	3	1	Cold drawing of bars	2410*
27	3	1	Manufacture of fibre optic cables	2731
29	3	1	Manufacture of electrical and electronic equipment for motor vehicles	2930*
38	3	1	Dismantling of wrecks	3830*
43	3	1	Plastering	4330*
45	3	1	Wholesale trade of motor vehicle parts and accessories	4530*
46	3	1	Wholesale of fruit and vegetables	4630*
49	3	1	Urban and suburban passenger land transport	4921
68	3	1	Real estate agencies	6820*
77	3	1	Renting and leasing of agricultural machinery and equipment	7730*
85	3	1	General secondary education	8521
01	4	1	Raising of dairy cattle	0141*
10	4	1	Manufacture of oils and fats	1040*
20	4	1	Manufacture of soap and detergents, cleaning and polishing preparations	2023*
23	4	1	Manufacture of ceramic household and ornamental articles	2393*
24	4	1	Precious metals production	2420*
28	4	1	Manufacture of metal forming machinery	2822*
46	4	1	Wholesale of textiles	4641*
47	4	1	Retail sale of computers, peripheral units and software in specialised stores	4741*
49	4	1	Freight transport by road	4923*
85	4	1	Post-secondary non-tertiary education	8530*
10	5	1	Operation of dairies and cheese making	1050*
20	5	1	Manufacture of explosives	2029*
23	5	1	Manufacture of cement	2394*
24	5	1	Casting of iron	2431*
26	5	1	Manufacture of instruments and appliances for measuring, testing and navigation	2651
27	5	1	Manufacture of electric domestic appliances	2750*
46	5	1	Wholesale of computers, computer peripheral equipment and software	4651
47	5	1	Retail sale of textiles in specialised stores	4751
85	5	1	Sports and recreation education	8541
01	6	1	Support activities for crop production	0161
10	6	1	Manufacture of grain mill products	1061
23	6	1	Manufacture of concrete products for construction purposes	2395*
25	6	1	Treatment and coating of metals	2592*
46	6	1	Wholesale of agricultural machinery, equipment and supplies	4653
47	6	1	Retail sale of books in specialised stores	4761*
10	7	1	Manufacture of bread; manufacture of fresh pastry goods and cakes	1071*
25	7	1	Manufacture of cutlery	2593*
46	7	1	Wholesale of solid, liquid and gaseous fuels and related products	4661
47	7	1	Retail sale of clothing in specialised stores	4771*
10	8	1	Manufacture of sugar	1072
47	8	1	Retail sale via stalls and markets of food, beverages and tobacco products	4781
08	9	1	Mining of chemical and fertiliser minerals	0891
10	9	1	Manufacture of prepared feeds for farm animals	1080*
13	9	1	Manufacture of knitted and crocheted fabrics	1391
23	9	1	Production of abrasive products	2399*
25	9	1	Manufacture of steel drums and similar containers	2599*
28	9	1	Manufacture of machinery for metallurgy	2823
30	9	1	Manufacture of motorcycles	3091
32	9	1	Manufacture of brooms and brushes	3290*
42	9	1	Construction of water projects	4290*
43	9	1	Roofing activities	4390*
47	9	1	Retail sale via mail order houses or via Internet	4791
63	9	1	News agency activities	6391
64	9	1	Financial leasing	6491

82	9	1	Activities of collection agencies and credit bureaus	8291
88	9	1	Child day-care activities	8890*
94	9	1	Activities of religious organisations	9491
11	0	2	Manufacture of wine from grape	1102*
31	0	2	Manufacture of kitchen furniture	3100*
62	0	2	Computer consultancy activities	6202*
90	0	2	Support activities to performing arts	9000*
91	0	2	Museums activities	9102*
96	0	2	Hairdressing and other beauty treatment	9602
01	1	2	Growing of rice	0112
03	1	2	Freshwater fishing	0312
08	1	2	Operation of gravel and sand pits; mining of clays and kaolin	0810*
10	1	2	Processing and preserving of poultry meat	1010*
14	1	2	Manufacture of workwear	1410*
15	1	2	Manufacture of luggage, handbags and the like, saddlery and harness	1512
17	1	2	Manufacture of paper and paperboard	1701*
18	1	2	Other printing	1811*
20	1	2	Manufacture of dyes and pigments	2011*
23	1	2	Shaping and processing of flat glass	2310*
25	1	2	Manufacture of doors and windows of metal	2511*
26	1	2	Manufacture of loaded electronic boards	2610*
27	1	2	Manufacture of electricity distribution and control apparatus	2710*
28	1	2	Manufacture of fluid power equipment	2812
30	1	2	Building of pleasure and sporting boats	3012
32	1	2	Manufacture of jewellery and related articles	3211*
33	1	2	Repair of machinery	3312
35	1	2	Transmission of electricity	3510*
38	1	2	Collection of hazardous waste	3812
42	1	2	Construction of railways and underground railways	4210*
43	1	2	Site preparation	4312*
46	1	2	Agents involved in the sale of fuels, ores, metals and industrial chemicals	4610*
58	1	2	Publishing of directories and mailing lists	5812
59	1	2	Motion picture, video and television programme post-production activities	5912
63	1	2	Web portals	6312
65	1	2	Non-life insurance	6512
66	1	2	Security and commodity contracts brokerage	6612
71	1	2	Engineering activities and related technical consultancy	7110*
73	1	2	Media representation	7310*
77	1	2	Renting and leasing of trucks	7710*
79	1	2	Tour operator activities	7912
84	1	2	Regulation of the activities of providing health care, education, cultural services and other social servi	8412
93	1	2	Activities of sport clubs	9312
94	1	2	Activities of professional membership organisations	9412
95	1	2	Repair of communication equipment	9512
01	2	2	Growing of tropical and subtropical fruits	0122
03	2	2	Freshwater aquaculture	0322
16	2	2	Manufacture of assembled parquet floors	1622*
17	2	2	Manufacture of household and sanitary goods and of toilet requisites	1709*
22	2	2	Manufacture of plastic packing goods	2220*
28	2	2	Manufacture of lifting and handling equipment	2816
35	2	2	Distribution of gaseous fuels through mains	3520*
38	2	2	Treatment and disposal of hazardous waste	3822
42	2	2	Construction of utility projects for electricity and telecommunications	4220*
43	2	2	Plumbing, heat and air conditioning installation	4322
46	2	2	Wholesale of flowers and plants	4620*
47	2	2	Retail sale of meat and meat products in specialised stores	4721*
51	2	2	Space transport	5120*
52	2	2	Service activities incidental to water transportation	5222
66	2	2	Activities of insurance agents and brokers	6622
70	2	2	Business and other management consultancy activities	7020*
77	2	2	Renting of video tapes and disks	7722
81	2	2	Other building and industrial cleaning activities	8129*
84	2	2	Defence activities	8422
86	2	2	Specialist medical practice activities	8620*
95	2	2	Repair of household appliances and home and garden equipment	9522
10	3	2	Manufacture of fruit and vegetable juice	1030*
23	3	2	Manufacture of bricks, tiles and construction products, in baked clay	2392*
24	3	2	Cold rolling of narrow strip	2410*
27	3	2	Manufacture of other electronic and electric wires and cables	2732
29	3	2	Manufacture of other parts and accessories for motor vehicles	2930*
38	3	2	Recovery of sorted materials	3830*
43	3	2	Joinery installation	4330*
45	3	2	Retail trade of motor vehicle parts and accessories	4530*
46	3	2	Wholesale of meat and meat products	4630*
49	3	2	Taxi operation	4922*
68	3	2	Management of real estate on a fee or contract basis	6820*
77	3	2	Renting and leasing of construction and civil engineering machinery and equipment	7730*
85	3	2	Technical and vocational secondary education	8522
01	4	2	Raising of other cattle and buffaloes	0141*
10	4	2	Manufacture of margarine and similar edible fats	1040*
20	4	2	Manufacture of perfumes and toilet preparations	2023*
23	4	2	Manufacture of ceramic sanitary fixtures	2393*
24	4	2	Aluminium production	2420*
46	4	2	Wholesale of clothing and footwear	4641*
47	4	2	Retail sale of telecommunications equipment in specialised stores	4741*
49	4	2	Removal services	4923*
85	4	2	Tertiary education	8530*
10	5	2	Manufacture of ice cream	1050*
20	5	2	Manufacture of glues	2029*
23	5	2	Manufacture of lime and plaster	2394*

24	5	2	Casting of steel	2431*
26	5	2	Manufacture of watches and clocks	2652
27	5	2	Manufacture of non-electric domestic appliances	2750*
46	5	2	Wholesale of electronic and telecommunications equipment and parts	4652
47	5	2	Retail sale of hardware, paints and glass in specialised stores	4752
85	5	2	Cultural education	8542
01	6	2	Support activities for animal production	0162
10	6	2	Manufacture of starches and starch products	1062
23	6	2	Manufacture of plaster products for construction purposes	2395*
25	6	2	Machining	2592*
46	6	2	Wholesale of machine tools	4659*
47	6	2	Retail sale of newspapers and stationery in specialised stores	4761*
10	7	2	Manufacture of rusks and biscuits; manufacture of preserved pastry goods and cakes	1071*
25	7	2	Manufacture of locks and hinges	2593*
46	7	2	Wholesale of metals and metal ores	4662
47	7	2	Retail sale of footwear and leather goods in specialised stores	4771*
10	8	2	Manufacture of cocoa, chocolate and sugar confectionery	1073
47	8	2	Retail sale via stalls and markets of textiles, clothing and footwear	4782
08	9	2	Extraction of peat	0892
10	9	2	Manufacture of prepared pet foods	1080*
13	9	2	Manufacture of made-up textile articles, except apparel	1392
25	9	2	Manufacture of light metal packaging	2599*
28	9	2	Manufacture of machinery for mining, quarrying and construction	2824
30	9	2	Manufacture of bicycles and invalid carriages	3092
64	9	2	Other credit granting	6492
82	9	2	Packaging activities	8292
94	9	2	Activities of political organisations	9492
11	0	3	Manufacture of cider and other fruit wines	1102*
31	0	3	Manufacture of mattresses	3100*
62	0	3	Computer facilities management activities	6202*
90	0	3	Artistic creation	9000*
91	0	3	Operation of historical sites and buildings and similar visitor attractions	9102*
96	0	3	Funeral and related activities	9603
01	1	3	Growing of vegetables and melons, roots and tubers	0113
10	1	3	Production of meat and poultry meat products	1010*
14	1	3	Manufacture of other outerwear	1410*
18	1	3	Pre-press and pre-media services	1812*
20	1	3	Manufacture of other inorganic basic chemicals	2011*
23	1	3	Manufacture of hollow glass	2310*
28	1	3	Manufacture of other pumps and compressors	2813*
32	1	3	Manufacture of imitation jewellery and related articles	3212
33	1	3	Repair of electronic and optical equipment	3313
35	1	3	Distribution of electricity	3510*
42	1	3	Construction of bridges and tunnels	4210*
43	1	3	Test drilling and boring	4312*
46	1	3	Agents involved in the sale of timber and building materials	4610*
58	1	3	Publishing of newspapers	5813*
59	1	3	Motion picture, video and television programme distribution activities	5913
84	1	3	Regulation of and contribution to more efficient operation of businesses	8413
93	1	3	Fitness facilities	9311*
01	2	3	Growing of citrus fruits	0123
16	2	3	Manufacture of other builders' carpentry and joinery	1622*
17	2	3	Manufacture of paper stationery	1709*
22	2	3	Manufacture of builders' ware of plastic	2220*
28	2	3	Manufacture of office machinery and equipment (except computers and peripheral equipment)	2817
35	2	3	Trade of gas through mains	3520*
46	2	3	Wholesale of live animals	4620*
47	2	3	Retail sale of fish, crustaceans and molluscs in specialised stores	4721*
52	2	3	Service activities incidental to air transportation	5223
84	2	3	Justice and judicial activities	8423*
86	2	3	Dental practice activities	8620*
95	2	3	Repair of footwear and leather goods	9523
24	3	3	Cold forming or folding	2410*
27	3	3	Manufacture of wiring devices	2733
43	3	3	Floor and wall covering	4330*
46	3	3	Wholesale of dairy products, eggs and edible oils and fats	4630*
77	3	3	Renting and leasing of office machinery and equipment (including computers)	7730*
01	4	3	Raising of horses and other equines	0142
23	4	3	Manufacture of ceramic insulators and insulating fittings	2393*
24	4	3	Lead, zinc and tin production	2420*
46	4	3	Wholesale of electrical household appliances	4649*
47	4	3	Retail sale of audio and video equipment in specialised stores	4742
20	5	3	Manufacture of essential oils	2029*
24	5	3	Casting of light metals	2432*
47	5	3	Retail sale of carpets, rugs, wall and floor coverings in specialised stores	4753
85	5	3	Driving school activities	8549*
01	6	3	Post-harvest crop activities	0163
23	6	3	Manufacture of ready-mixed concrete	2395*
46	6	3	Wholesale of mining, construction and civil engineering machinery	4659*
47	6	3	Retail sale of music and video recordings in specialised stores	4762
10	7	3	Manufacture of macaroni, noodles, couscous and similar farinaceous products	1074
25	7	3	Manufacture of tools	2593*
46	7	3	Wholesale of wood, construction materials and sanitary equipment	4663*
47	7	3	Dispensing chemist in specialised stores	4772*
10	8	3	Processing of tea and coffee	1079*
08	9	3	Extraction of salt	0893
13	9	3	Manufacture of carpets and rugs	1393
25	9	3	Manufacture of wire products, chain and springs	2599*
28	9	3	Manufacture of machinery for food, beverage and tobacco processing	2825
11	0	4	Manufacture of other non-distilled fermented beverages	1102*

90	0	4	Operation of arts facilities	9000*
91	0	4	Botanical and zoological gardens and nature reserves activities	9103
96	0	4	Physical well-being activities	9609*
01	1	4	Growing of sugar cane	0114
14	1	4	Manufacture of underwear	1410*
18	1	4	Binding and related services	1812*
20	1	4	Manufacture of other organic basic chemicals	2011*
23	1	4	Manufacture of glass fibres	2310*
28	1	4	Manufacture of other taps and valves	2813*
33	1	4	Repair of electrical equipment	3314
35	1	4	Trade of electricity	3510*
46	1	4	Agents involved in the sale of machinery, industrial equipment, ships and aircraft	4610*
58	1	4	Publishing of journals and periodicals	5813*
59	1	4	Motion picture projection activities	5914
01	2	4	Growing of pome fruits and stone fruits	0124
16	2	4	Manufacture of wooden containers	1623
17	2	4	Manufacture of wallpaper	1709*
28	2	4	Manufacture of power-driven hand tools	2818
46	2	4	Wholesale of hides, skins and leather	4620*
47	2	4	Retail sale of bread, cakes, flour confectionery and sugar confectionery in specialised stores	4721*
52	2	4	Cargo handling	5224
84	2	4	Public order and safety activities	8423*
95	2	4	Repair of furniture and home furnishings	9524
24	3	4	Cold drawing of wire	2410*
43	3	4	Painting and glazing	4330*
46	3	4	Wholesale of beverages	4630*
77	3	4	Renting and leasing of water transport equipment	7730*
01	4	4	Raising of camels and camelids	0143
23	4	4	Manufacture of other technical ceramic products	2393*
24	4	4	Copper production	2420*
46	4	4	Wholesale of china and glassware and cleaning materials	4649*
24	5	4	Casting of other non-ferrous metals	2432*
47	5	4	Retail sale of electrical household appliances in specialised stores	4759*
01	6	4	Seed processing for propagation	0164
23	6	4	Manufacture of mortars	2395*
46	6	4	Wholesale of machinery for the textile industry and of sewing and knitting machines	4659*
47	6	4	Retail sale of sporting equipment in specialised stores	4763
46	7	4	Wholesale of hardware, plumbing and heating equipment and supplies	4663*
47	7	4	Retail sale of medical and orthopaedic goods in specialised stores	4772*
10	8	4	Manufacture of condiments and seasonings	1079*
13	9	4	Manufacture of cordage, rope, twine and netting	1394
25	9	4	Manufacture of fasteners and screw machine products	2599*
28	9	4	Manufacture of machinery for textile, apparel and leather production	2826
11	0	5	Manufacture of beer	1103*
01	1	5	Growing of tobacco	0115
20	1	5	Manufacture of fertilisers and nitrogen compounds	2012
28	1	5	Manufacture of bearings, gears, gearing and driving elements	2814
33	1	5	Repair and maintenance of ships and boats	3315*
46	1	5	Agents involved in the sale of furniture, household goods, hardware and ironmongery	4610*
01	2	5	Growing of other tree and bush fruits and nuts	0125
28	2	5	Manufacture of non-domestic cooling and ventilation equipment	2819*
47	2	5	Retail sale of beverages in specialised stores	4722
84	2	5	Fire service activities	8423*
95	2	5	Repair of watches, clocks and jewellery	9529*
46	3	5	Wholesale of tobacco products	4630*
77	3	5	Renting and leasing of air transport equipment	7730*
01	4	5	Raising of sheep and goats	0144
24	4	5	Other non-ferrous metal production	2420*
46	4	5	Wholesale of perfume and cosmetics	4649*
23	6	5	Manufacture of fibre cement	2395*
46	6	5	Wholesale of office furniture	4659*
47	6	5	Retail sale of games and toys in specialised stores	4764
46	7	5	Wholesale of chemical products	4669*
47	7	5	Retail sale of cosmetic and toilet articles in specialised stores	4772*
10	8	5	Manufacture of prepared meals and dishes	1075
13	9	5	Manufacture of non-wovens and articles made from non-wovens, except apparel	1399*
28	9	5	Manufacture of machinery for paper and paperboard production	2829*
11	0	6	Manufacture of malt	1103*
01	1	6	Growing of fibre crops	0116
20	1	6	Manufacture of plastics in primary forms	2013*
33	1	6	Repair and maintenance of aircraft and spacecraft	3315*
46	1	6	Agents involved in the sale of textiles, clothing, fur, footwear and leather goods	4610*
01	2	6	Growing of oleaginous fruits	0126
47	2	6	Retail sale of tobacco products in specialised stores	4723
46	3	6	Wholesale of sugar and chocolate and sugar confectionery	4630*
01	4	6	Raising of swine/pigs	0145
24	4	6	Processing of nuclear fuel	2420*
46	4	6	Wholesale of pharmaceutical goods	4649*
46	6	6	Wholesale of other office machinery and equipment	4659*
46	7	6	Wholesale of other intermediate products	4669*
47	7	6	Retail sale of flowers, plants, seeds, fertilisers, pet animals and pet food in specialised stores	4773*
10	8	6	Manufacture of homogenised food preparations and dietetic food	1079*
13	9	6	Manufacture of other technical and industrial textiles	1399*
28	9	6	Manufacture of plastic and rubber machinery	2829*
11	0	7	Manufacture of soft drinks; production of mineral waters and other bottled waters	1104
20	1	7	Manufacture of synthetic rubber in primary forms	2013*
33	1	7	Repair and maintenance of other transport equipment	3315*
46	1	7	Agents involved in the sale of food, beverages and tobacco	4610*
01	2	7	Growing of beverage crops	0127
46	3	7	Wholesale of coffee, tea, cocoa and spices	4630*

01	4	7	Raising of poultry	0146
46	4	7	Wholesale of furniture, carpets and lighting equipment	4649*
46	7	7	Wholesale of waste and scrap	4669*
47	7	7	Retail sale of watches and jewellery in specialised stores	4773*
46	1	8	Agents specialised in the sale of other particular products	4610*
01	2	8	Growing of spices, aromatic, drug and pharmaceutical crops	0128
46	3	8	Wholesale of other food, including fish, crustaceans and molluscs	4630*
46	4	8	Wholesale of watches and jewellery	4649*
47	7	8	Other retail sale of new goods in specialised stores	4773*
31	0	9	Manufacture of other furniture	3100*
62	0	9	Other information technology and computer service activities	6209
96	0	9	Other personal service activities n.e.c.	9609*
01	1	9	Growing of other non-perennial crops	0119
14	1	9	Manufacture of other wearing apparel and accessories	1410*
22	1	9	Manufacture of other rubber products	2219
23	1	9	Manufacture and processing of other glass, including technical glassware	2310*
33	1	9	Repair of other equipment	3319
45	1	9	Sale of other motor vehicles	4510*
46	1	9	Agents involved in the sale of a variety of goods	4610*
47	1	9	Other retail sale in non-specialised stores	4719
58	1	9	Other publishing activities	5819
64	1	9	Other monetary intermediation	6419
66	1	9	Other activities auxiliary to financial services, except insurance and pension funding	6619
72	1	9	Other research and experimental development on natural sciences and engineering	7210*
82	1	9	Photocopying, document preparation and other specialised office support activities	8219
93	1	9	Other sports activities	9319
01	2	9	Growing of other perennial crops	0129
07	2	9	Mining of other non-ferrous metal ores	0729
16	2	9	Manufacture of other products of wood; manufacture of articles of cork, straw and plaiting materials	1629
17	2	9	Manufacture of other articles of paper and paperboard	1709*
22	2	9	Manufacture of other plastic products	2220*
25	2	9	Manufacture of other tanks, reservoirs and containers of metal	2512*
28	2	9	Manufacture of other general-purpose machinery n.e.c.	2819*
43	2	9	Other construction installation	4329
47	2	9	Other retail sale of food in specialised stores	4721*
52	2	9	Other transportation support activities	5229
56	2	9	Other food service activities	5629
58	2	9	Other software publishing	5820*
66	2	9	Other activities auxiliary to insurance and pension funding	6629
77	2	9	Renting and leasing of other personal and household goods	7729
81	2	9	Other cleaning activities	8129*
93	2	9	Other amusement and recreation activities	9329
95	2	9	Repair of other personal and household goods	9529*
10	3	9	Other processing and preserving of fruit and vegetables	1030*
14	3	9	Manufacture of other knitted and crocheted apparel	1430*
43	3	9	Other building completion and finishing	4330*
46	3	9	Non-specialised wholesale of food, beverages and tobacco	4630*
49	3	9	Other passenger land transport n.e.c.	4922*
77	3	9	Renting and leasing of other machinery, equipment and tangible goods n.e.c.	7730*
01	4	9	Raising of other animals	0149
23	4	9	Manufacture of other ceramic products	2393*
28	4	9	Manufacture of other machine tools	2822*
46	4	9	Wholesale of other household goods	4649*
20	5	9	Manufacture of other chemical products n.e.c.	2029*
47	5	9	Retail sale of furniture, lighting equipment and other household articles in specialised stores	4759*
85	5	9	Other education n.e.c.	8549*
23	6	9	Manufacture of other articles of concrete, plaster and cement	2395*
46	6	9	Wholesale of other machinery and equipment	4659*
47	7	9	Retail sale of second-hand goods in stores	4774
10	8	9	Manufacture of other food products n.e.c.	1079*
47	8	9	Retail sale via stalls and markets of other goods	4789
08	9	9	Other mining and quarrying n.e.c.	0899
13	9	9	Manufacture of other textiles n.e.c.	1399*
23	9	9	Manufacture of other non-metallic mineral products n.e.c.	2399*
25	9	9	Manufacture of other fabricated metal products n.e.c.	2599*
28	9	9	Manufacture of other special-purpose machinery n.e.c.	2829*
30	9	9	Manufacture of other transport equipment n.e.c.	3099
32	9	9	Other manufacturing n.e.c.	3290*
42	9	9	Construction of other civil engineering projects n.e.c.	4290*
43	9	9	Other specialised construction activities n.e.c.	4390*
47	9	9	Other retail sale not in stores, stalls or markets	4799
63	9	9	Other information service activities n.e.c.	6399
64	9	9	Other financial service activities, except insurance and pension funding n.e.c.	6499
82	9	9	Other business support service activities n.e.c.	8299
88	9	9	Other social work activities without accommodation n.e.c.	8890*
94	9	9	Activities of other membership organisations n.e.c.	9499

Activity_Group	Activity_SubGroup	Activity_Code	Activity_Name	Capacity_Threshold
1	NA	a	Mineral oil and gas refineries	
2	NA	a	Metal ore (including sulphide ore) roasting or sintering installations	
3	NA	a	Underground mining and related operations	0
5	NA	a	Installations for the recovery or disposal of hazardous waste	Receiving 10 tonnes per day
6	NA	a	Industrial plants for the production of pulp from timber or similar fibrous materials	0
8	NA	a	Slaughterhouses	With a carcass production capacity of 50 tonnes per day
9	NA	a	Plants for the pre-treatment (operations such as washing, bleaching, mercerisation) or dyeing of fibres	With a treatment capacity of 10 tonnes per day
1	NA	b	Installations for gasification and liquefaction	0
2	NA	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
3	NA	b	Opencast mining and quarrying	Where the surface of the area effectively under extractive operation equals 25 hectares
5	NA	b	Installations for the incineration of non-hazardous waste in the scope of Directive 2000/76/EC of the E	With a capacity of 3 tonnes per hour
6	NA	b	Industrial plants for the production of paper and board and other primary wood products (such as chipl	With a production capacity of 20 tonnes per day
7	NA	b	Intensive aquaculture	With a production capacity of 1 000 tonnes of fish or shellfish per year
9	NA	b	Plants for the tanning of hides and skins	With a treatment capacity of 12 tonnes of finished product per day
1	NA	c	Thermal power stations and other combustion installations	With a heat input of 50 megawatts (MW)
4	NA	c	Chemical installations for the production on an industrial scale of phosphorous-, nitrogen- or potassiun	0
5	NA	c	Installations for the disposal of non-hazardous waste	With a capacity of 50 tonnes per day
6	NA	c	Industrial plants for the preservation of wood and wood products with chemicals	With a production capacity of 50 m3 per day
8	NA	c	Treatment and processing of milk	With a capacity to receive 200 tonnes of milk per day (average value on an annual basis)
9	NA	c	Installations for surface treatment of substances,objects or products using organic solvents,in particula	With a consumption capacity of 150 kg per hour or 200 tonnes per year
1	NA	d	Coke ovens	0
2	NA	d	Ferrous metal foundries	With a production capacity of 20 tonnes per day
3	NA	d	Installations for the production of asbestos and the manufacture of asbestos-based products	0
4	NA	d	Chemical installations for the production on an industrial scale of basic plant health products and of bic	0
5	NA	d	Landfills	Receiving 10 tonnes per day or with a total capacity of 25 000 tonnes
9	NA	d	Installations for the production of carbon (hard-burnt coal) or electro-graphite by means of incineration	0
1	NA	e	Coal rolling mills	With a capacity of 1 tonne per hour
3	NA	e	Installations for the manufacture of glass, including glass fibre	With a melting capacity of 20 tonnes per day
4	NA	e	Installations using a chemical or biological process for the production on an industrial scale of basic pl	0
5	NA	e	Installations for the disposal or recycling of animal carcasses and animal waste	With a treatment capacity of 10 tonnes per day
9	NA	e	Installations for the building of, and painting or removal of paint from ships	With a capacity for ships 100 m long
1	NA	f	Installations for the manufacture of coal products and solid smokeless fuel	0
2	NA	f	Installations for surface treatment of metals and plastic materials using an electrolytic or chemical proc	Where the volume of the treatment vats equals 30 m3
3	NA	f	Installations for melting mineral substances, including the production of mineral fibres	With a melting capacity of 20 tonnes per day
4	NA	f	Installations for the production on an industrial scale of explosives and pyrotechnic products	0
5	NA	f	Urban waste-water treatment plants	With a capacity of 100 000 population equivalents
3	NA	g	Installations for the manufacture of ceramic products by firing, in particular roofing tiles, bricks, refractc	With a production capacity of 75 tonnes per day, or with a kiln capacity of 4 m3 and with a setting dens
5	NA	g	Independently operated industrial waste-water treatment plants which serve one or more activities of tl	With a capacity of 10 000 m3 per day
4	a	i	Simple hydrocarbons (linear or cyclic, saturated or unsaturated, aliphatic or aromatic)	0
7	a	i	Installations for the intensive rearing of poultry or pigs (i)	With 40 000 places for poultry
4	b	i	Gases, such as ammonia, chlorine or hydrogen chloride,fluorine or hydrogen fluoride, carbon oxides, s	0
8	b	i	Animal raw materials (other than milk)	With a finished product production capacity of 75 tonnes per day
2	c	i	Hot-rolling mills	With a capacity of 20 tonnes of crude steel per hour per hour
3	c	i	Cement clinker in rotary kilns	With a production capacity of 500 tonnes per day
2	e	i	For the production of non-ferrous crude metals from ore,concentrates or secondary raw materials by n	0
4	a	ii	Oxygen-containing hydrocarbons such as alcohols, aldehydes, ketones, carboxylic acids, esters, aceta	0
7	a	ii	Installations for the intensive rearing of poultry or pigs (ii)	With 2 000 places for production pigs (over 30 kg)
4	b	ii	Acids, such as chromic acid, hydrofluoric acid, phosphoric acid, nitric acid, hydrochloric acid, sulphuric	0
8	b	ii	Vegetable raw materials	With a finished product production capacity of 300 tonnes per day (average value on a quarterly basis)
2	c	ii	Smitheries with hammers	With an energy of 50 kilojoules per hammer, where the calorific power used exceeds 20 MW
3	c	ii	Lime in rotary kilns	With a production capacity of 50 tonnes per day
2	e	ii	For the smelting, including the alloying, of non-ferrous metals, including recovered products (refining, f	With a melting capacity of 4 tonnes per day for lead and cadmium or 20 tonnes per day for all other me
4	a	iii	Sulphurous hydrocarbons	0
7	a	iii	Installations for the intensive rearing of poultry or pigs (iii)	With 750 places for sows
4	b	iii	Bases, such as ammonium hydroxide, potassium hydroxide, sodium hydroxide	0
2	c	iii	Application of protective fused metal coats	With an input of 2 tonnes of crude steel per hour

3	c	iii	Cement clinker or lime in other furnaces	With a production capacity of 50 tonnes per day
4	a	iv	Nitrogenous hydrocarbons such as amines, amides, nitrous compounds, nitro compounds or nitrate cc	0
4	b	iv	Salts, such as ammonium chloride, potassium chlorate, potassium carbonate, sodium carbonate, perb	0
4	a	ix	Synthetic rubbers	0
4	a	v	Phosphorus-containing hydrocarbons	0
4	b	v	Non-metals, metal oxides or other inorganic compounds such as calcium carbide, silicon, silicon carbi	0
4	a	vi	Halogenic hydrocarbons	0
4	a	vii	Organometallic compounds	0
4	a	viii	Basic plastic materials (polymers, synthetic fibres and cellulose-based fibres)	0
4	a	x	Dyes and pigments	0
4	a	xi	Surface-active agents and surfactants	0

Emission Type : Air

Category Specific PRTR Pollutants

Pollutant_Number	Pollutant_Name	Pollutant_Lookup
55	1,1,1-trichloroethane	55 - 1,1,1-trichloroethane
06	Ammonia (NH3)	06 - Ammonia (NH3)
17	Arsenic and compounds (as As)	17 - Arsenic and compounds (as As)
18	Cadmium and compounds (as Cd)	18 - Cadmium and compounds (as Cd)
03	Carbon dioxide (CO2)	03 - Carbon dioxide (CO2)
02	Carbon monoxide (CO)	02 - Carbon monoxide (CO)
19	Chromium and compounds (as Cr)	19 - Chromium and compounds (as Cr)
20	Copper and compounds (as Cu)	20 - Copper and compounds (as Cu)
42	Hexachlorobenzene (HCB)	42 - Hexachlorobenzene (HCB)
04	Hydro-fluorocarbons (HFCs)	04 - Hydro-fluorocarbons (HFCs)
23	Lead and compounds (as Pb)	23 - Lead and compounds (as Pb)
21	Mercury and compounds (as Hg)	21 - Mercury and compounds (as Hg)
01	Methane (CH4)	01 - Methane (CH4)
22	Nickel and compounds (as Ni)	22 - Nickel and compounds (as Ni)
08	Nitrogen oxides (NOx/NO2)	08 - Nitrogen oxides (NOx/NO2)
05	Nitrous oxide (N2O)	05 - Nitrous oxide (N2O)
07	Non-methane volatile organic compounds (NMVOC)	07 - Non-methane volatile organic compounds (NMVOC)
86	Particulate matter (PM10)	86 - Particulate matter (PM10)
47	PCDD + PCDF (dioxins + furans)(as Teq)	47 - PCDD + PCDF (dioxins + furans)(as Teq)
48	Pentachlorobenzene	48 - Pentachlorobenzene
10	Sulphur hexafluoride (SF6)	10 - Sulphur hexafluoride (SF6)
11	Sulphur oxides (SOx/SO2)	11 - Sulphur oxides (SOx/SO2)
53	Tetrachloromethane (TCM)	53 - Tetrachloromethane (TCM)
24	Zinc and compounds (as Zn)	24 - Zinc and compounds (as Zn)

Remaining PRTR Pollutants

Pollutant_Number	Pollutant_Name	Pollutant_Lookup
56	1,1,2,2-tetrachloroethane	56 - 1,1,2,2-tetrachloroethane
44	1,2,3,4,5,6-hexachlorocyclohexane(HCH)	44 - 1,2,3,4,5,6-hexachlorocyclohexane(HCH)
34	1,2-dichloroethane (EDC)	34 - 1,2-dichloroethane (EDC)
26	Aldrin	26 - Aldrin
61	Anthracene	61 - Anthracene
81	Asbestos	81 - Asbestos
62	Benzene	62 - Benzene
28	Chlordane	28 - Chlordane

Air Lookup	
From Row A	4
To Row A	27
Start Cell A	3
From Row B	31
To Row B	72
Start Cell B	30
Water Lookup	
From Row A	77
To Row A	145
Start Cell A	76
From Row B	149
To Row B	151
Start Cell B	148
Offsite Xfers Lookup	
From Row	156
To Row	246
Start Cell	155
Land Lookup	
From Row	251
To Row	341
Start Cell	250

29	Chlordecone	29 - Chlordecone
79	Chlorides (as Cl)	79 - Chlorides (as Cl)
80	Chlorine and inorganic compounds (as HCl)	80 - Chlorine and inorganic compounds (as HCl)
15	Chlorofluorocarbons (CFCs)	15 - Chlorofluorocarbons (CFCs)
33	DDT	33 - DDT
70	Di-(2-ethyl hexyl) phthalate (DEHP)	70 - Di-(2-ethyl hexyl) phthalate (DEHP)
35	Dichloromethane (DCM)	35 - Dichloromethane (DCM)
36	Dieldrin	36 - Dieldrin
39	Endrin	39 - Endrin
65	Ethyl benzene	65 - Ethyl benzene
66	Ethylene oxide	66 - Ethylene oxide
84	Fluorine and inorganic compounds (as HF)	84 - Fluorine and inorganic compounds (as HF)
40	Halogenated organic compounds (as AOX)	40 - Halogenated organic compounds (as AOX)
16	Halons	16 - Halons
41	Heptachlor	41 - Heptachlor
90	Hexabromobiphenyl	90 - Hexabromobiphenyl
14	Hydrochlorofluorocarbons (HCFCs)	14 - Hydrochlorofluorocarbons (HCFCs)
85	Hydrogen cyanide (HCN)	85 - Hydrogen cyanide (HCN)
45	Lindane	45 - Lindane
46	Mirex	46 - Mirex
68	Naphthalene	68 - Naphthalene
49	Pentachlorophenol (PCP)	49 - Pentachlorophenol (PCP)
09	Perfluorocarbons (PFCs)	09 - Perfluorocarbons (PFCs)
71	Phenols (as total C)	71 - Phenols (as total C)
50	Polychlorinated biphenyls (PCBs)	50 - Polychlorinated biphenyls (PCBs)
72	Polycyclic aromatic hydrocarbons (PAHs)	72 - Polycyclic aromatic hydrocarbons (PAHs)
52	Tetrachloroethylene (PER)	52 - Tetrachloroethylene (PER)
73	Toluene	73 - Toluene
59	Toxaphene	59 - Toxaphene
54	Trichlorobenzenes (TCBs)(all isomers)	54 - Trichlorobenzenes (TCBs)(all isomers)
57	Trichloroethylene	57 - Trichloroethylene
58	Trichloromethane	58 - Trichloromethane
60	Vinyl chloride	60 - Vinyl chloride
78	Xylenes	78 - Xylenes

Emission Type : Water

Category Specific PRTR Pollutants

Pollutant_Number	Pollutant_Name	Pollutant_Lookup

44	1,2,3,4,5,6-hexachlorocyclohexane(HCH)	44 - 1,2,3,4,5,6-hexachlorocyclohexane(HCH)
34	1,2-dichloroethane (EDC)	34 - 1,2-dichloroethane (EDC)
25	Alachlor	25 - Alachlor
26	Aldrin	26 - Aldrin
61	Anthracene	61 - Anthracene
17	Arsenic and compounds (as As)	17 - Arsenic and compounds (as As)
81	Asbestos	81 - Asbestos
27	Atrazine	27 - Atrazine
62	Benzene	62 - Benzene
91	Benzo(g,h,i)perylene	91 - Benzo(g,h,i)perylene
63	Brominated diphenylethers (PBDE)	63 - Brominated diphenylethers (PBDE)
18	Cadmium and compounds (as Cd)	18 - Cadmium and compounds (as Cd)
28	Chlordane	28 - Chlordane
29	Chlordecone	29 - Chlordecone
30	Chlorfenvinphos	30 - Chlorfenvinphos
79	Chlorides (as Cl)	79 - Chlorides (as Cl)
31	Chloro-alkanes, C10-C13	31 - Chloro-alkanes, C10-C13
32	Chlorpyrifos	32 - Chlorpyrifos
19	Chromium and compounds (as Cr)	19 - Chromium and compounds (as Cr)
20	Copper and compounds (as Cu)	20 - Copper and compounds (as Cu)
82	Cyanides (as total CN)	82 - Cyanides (as total CN)
33	DDT	33 - DDT
70	Di-(2-ethyl hexyl) phthalate (DEHP)	70 - Di-(2-ethyl hexyl) phthalate (DEHP)
35	Dichloromethane (DCM)	35 - Dichloromethane (DCM)
36	Dieldrin	36 - Dieldrin
37	Diuron	37 - Diuron
38	Endosulphan	38 - Endosulphan
39	Endrin	39 - Endrin
65	Ethyl benzene	65 - Ethyl benzene
88	Fluoranthene	88 - Fluoranthene
83	Fluorides (as total F)	83 - Fluorides (as total F)
40	Halogenated organic compounds (as AOX)	40 - Halogenated organic compounds (as AOX)
41	Heptachlor	41 - Heptachlor
90	Hexabromobiphenyl	90 - Hexabromobiphenyl
42	Hexachlorobenzene (HCB)	42 - Hexachlorobenzene (HCB)
43	Hexachlorobutadiene (HCBD)	43 - Hexachlorobutadiene (HCBD)
89	Isodrin	89 - Isodrin
67	Isoproturon	67 - Isoproturon

23	Lead and compounds (as Pb)	23 - Lead and compounds (as Pb)
45	Lindane	45 - Lindane
21	Mercury and compounds (as Hg)	21 - Mercury and compounds (as Hg)
46	Mirex	46 - Mirex
68	Naphthalene	68 - Naphthalene
22	Nickel and compounds (as Ni)	22 - Nickel and compounds (as Ni)
64	Nonylphenol and Nonylphenol ethoxylates (NP/NPEs)	64 - Nonylphenol and Nonylphenol ethoxylates (NP/NPEs)
87	Octylphenols and Octylphenol ethoxylates	87 - Octylphenols and Octylphenol ethoxylates
69	Organotin compounds (as total Sn)	69 - Organotin compounds (as total Sn)
47	PCDD + PCDF (dioxins + furans)(as Teq)	47 - PCDD + PCDF (dioxins + furans)(as Teq)
48	Pentachlorobenzene	48 - Pentachlorobenzene
49	Pentachlorophenol (PCP)	49 - Pentachlorophenol (PCP)
71	Phenols (as total C)	71 - Phenols (as total C)
50	Polychlorinated biphenyls (PCBs)	50 - Polychlorinated biphenyls (PCBs)
72	Polycyclic aromatic hydrocarbons (PAHs)	72 - Polycyclic aromatic hydrocarbons (PAHs)
51	Simazine	51 - Simazine
52	Tetrachloroethylene (PER)	52 - Tetrachloroethylene (PER)
53	Tetrachloromethane (TCM)	53 - Tetrachloromethane (TCM)
73	Toluene	73 - Toluene
12	Total nitrogen	12 - Total nitrogen
76	Total organic carbon (TOC) (as total C or COD/3)	76 - Total organic carbon (TOC) (as total C or COD/3)
13	Total phosphorus	13 - Total phosphorus
74	Tributyltin and compounds	74 - Tributyltin and compounds
54	Trichlorobenzenes (TCBs)(all isomers)	54 - Trichlorobenzenes (TCBs)(all isomers)
57	Trichloroethylene	57 - Trichloroethylene
58	Trichloromethane	58 - Trichloromethane
77	Trifluralin	77 - Trifluralin
75	Triphenyltin and compounds	75 - Triphenyltin and compounds
60	Vinyl chloride	60 - Vinyl chloride
78	Xylenes	78 - Xylenes
24	Zinc and compounds (as Zn)	24 - Zinc and compounds (as Zn)

Remaining PRTR Pollutants

Pollutant_Number	Pollutant_Name	Pollutant_Lookup
66	Ethylene oxide	66 - Ethylene oxide
07	Non-methane volatile organic compounds (NMVOC)	07 - Non-methane volatile organic compounds (NMVOC)
59	Toxaphene	59 - Toxaphene

Emission Type : Offsite Transfers

PRTR Pollutants

Pollutant_Number	Pollutant_Name	Pollutant_Lookup
55	1,1,1-trichloroethane	55 - 1,1,1-trichloroethane
56	1,1,2,2-tetrachloroethane	56 - 1,1,2,2-tetrachloroethane
44	1,2,3,4,5,6-hexachlorocyclohexane(HCH)	44 - 1,2,3,4,5,6-hexachlorocyclohexane(HCH)
34	1,2-dichloroethane (EDC)	34 - 1,2-dichloroethane (EDC)
25	Alachlor	25 - Alachlor
26	Aldrin	26 - Aldrin
06	Ammonia (NH3)	06 - Ammonia (NH3)
61	Anthracene	61 - Anthracene
17	Arsenic and compounds (as As)	17 - Arsenic and compounds (as As)
81	Asbestos	81 - Asbestos
27	Atrazine	27 - Atrazine
62	Benzene	62 - Benzene
91	Benzo(g,h,i)perylene	91 - Benzo(g,h,i)perylene
63	Brominated diphenylethers (PBDE)	63 - Brominated diphenylethers (PBDE)
18	Cadmium and compounds (as Cd)	18 - Cadmium and compounds (as Cd)
03	Carbon dioxide (CO2)	03 - Carbon dioxide (CO2)
02	Carbon monoxide (CO)	02 - Carbon monoxide (CO)
28	Chlordane	28 - Chlordane
29	Chlordecone	29 - Chlordecone
30	Chlorfenvinphos	30 - Chlorfenvinphos
79	Chlorides (as Cl)	79 - Chlorides (as Cl)
80	Chlorine and inorganic compounds (as HCl)	80 - Chlorine and inorganic compounds (as HCl)
31	Chloro-alkanes, C10-C13	31 - Chloro-alkanes, C10-C13
15	Chlorofluorocarbons (CFCs)	15 - Chlorofluorocarbons (CFCs)
32	Chlorpyrifos	32 - Chlorpyrifos
19	Chromium and compounds (as Cr)	19 - Chromium and compounds (as Cr)
20	Copper and compounds (as Cu)	20 - Copper and compounds (as Cu)
82	Cyanides (as total CN)	82 - Cyanides (as total CN)
33	DDT	33 - DDT
70	Di-(2-ethyl hexyl) phthalate (DEHP)	70 - Di-(2-ethyl hexyl) phthalate (DEHP)
35	Dichloromethane (DCM)	35 - Dichloromethane (DCM)
36	Dieldrin	36 - Dieldrin
37	Diuron	37 - Diuron
38	Endosulphan	38 - Endosulphan
39	Endrin	39 - Endrin

65	Ethyl benzene	65 - Ethyl benzene
66	Ethylene oxide	66 - Ethylene oxide
88	Fluoranthene	88 - Fluoranthene
83	Fluorides (as total F)	83 - Fluorides (as total F)
84	Fluorine and inorganic compounds (as HF)	84 - Fluorine and inorganic compounds (as HF)
40	Halogenated organic compounds (as AOX)	40 - Halogenated organic compounds (as AOX)
16	Halons	16 - Halons
41	Heptachlor	41 - Heptachlor
90	Hexabromobiphenyl	90 - Hexabromobiphenyl
42	Hexachlorobenzene (HCB)	42 - Hexachlorobenzene (HCB)
43	Hexachlorobutadiene (HCBD)	43 - Hexachlorobutadiene (HCBD)
04	Hydro-fluorocarbons (HFCs)	04 - Hydro-fluorocarbons (HFCs)
14	Hydrochlorofluorocarbons (HCFCs)	14 - Hydrochlorofluorocarbons (HCFCs)
85	Hydrogen cyanide (HCN)	85 - Hydrogen cyanide (HCN)
89	Isodrin	89 - Isodrin
67	Isoproturon	67 - Isoproturon
23	Lead and compounds (as Pb)	23 - Lead and compounds (as Pb)
45	Lindane	45 - Lindane
21	Mercury and compounds (as Hg)	21 - Mercury and compounds (as Hg)
01	Methane (CH4)	01 - Methane (CH4)
46	Mirex	46 - Mirex
68	Naphthalene	68 - Naphthalene
22	Nickel and compounds (as Ni)	22 - Nickel and compounds (as Ni)
08	Nitrogen oxides (NOx/NO2)	08 - Nitrogen oxides (NOx/NO2)
05	Nitrous oxide (N2O)	05 - Nitrous oxide (N2O)
07	Non-methane volatile organic compounds (NMVOC)	07 - Non-methane volatile organic compounds (NMVOC)
64	Nonylphenol and Nonylphenol ethoxylates (NP/NPEs)	64 - Nonylphenol and Nonylphenol ethoxylates (NP/NPEs)
87	Octylphenols and Octylphenol ethoxylates	87 - Octylphenols and Octylphenol ethoxylates
69	Organotin compounds (as total Sn)	69 - Organotin compounds (as total Sn)
86	Particulate matter (PM10)	86 - Particulate matter (PM10)
47	PCDD + PCDF (dioxins + furans)(as Teq)	47 - PCDD + PCDF (dioxins + furans)(as Teq)
48	Pentachlorobenzene	48 - Pentachlorobenzene
49	Pentachlorophenol (PCP)	49 - Pentachlorophenol (PCP)
09	Perfluorocarbons (PFCs)	09 - Perfluorocarbons (PFCs)
71	Phenols (as total C)	71 - Phenols (as total C)
50	Polychlorinated biphenyls (PCBs)	50 - Polychlorinated biphenyls (PCBs)
72	Polycyclic aromatic hydrocarbons (PAHs)	72 - Polycyclic aromatic hydrocarbons (PAHs)
51	Simazine	51 - Simazine

10	Sulphur hexafluoride (SF6)	10 - Sulphur hexafluoride (SF6)
11	Sulphur oxides (SOx/SO2)	11 - Sulphur oxides (SOx/SO2)
52	Tetrachloroethylene (PER)	52 - Tetrachloroethylene (PER)
53	Tetrachloromethane (TCM)	53 - Tetrachloromethane (TCM)
73	Toluene	73 - Toluene
12	Total nitrogen	12 - Total nitrogen
76	Total organic carbon (TOC) (as total C or COD/3)	76 - Total organic carbon (TOC) (as total C or COD/3)
13	Total phosphorus	13 - Total phosphorus
59	Toxaphene	59 - Toxaphene
74	Tributyltin and compounds	74 - Tributyltin and compounds
54	Trichlorobenzenes (TCBs)(all isomers)	54 - Trichlorobenzenes (TCBs)(all isomers)
57	Trichloroethylene	57 - Trichloroethylene
58	Trichloromethane	58 - Trichloromethane
77	Trifluralin	77 - Trifluralin
75	Triphenyltin and compounds	75 - Triphenyltin and compounds
60	Vinyl chloride	60 - Vinyl chloride
78	Xylenes	78 - Xylenes
24	Zinc and compounds (as Zn)	24 - Zinc and compounds (as Zn)

Emission Type : Land

PRTR Pollutants

Pollutant_Number	Pollutant_Name	Pollutant_Lookup
55	1,1,1-trichloroethane	55 - 1,1,1-trichloroethane
56	1,1,2,2-tetrachloroethane	56 - 1,1,2,2-tetrachloroethane
44	1,2,3,4,5,6-hexachlorocyclohexane(HCH)	44 - 1,2,3,4,5,6-hexachlorocyclohexane(HCH)
34	1,2-dichloroethane (EDC)	34 - 1,2-dichloroethane (EDC)
25	Alachlor	25 - Alachlor
26	Aldrin	26 - Aldrin
06	Ammonia (NH3)	06 - Ammonia (NH3)
61	Anthracene	61 - Anthracene
17	Arsenic and compounds (as As)	17 - Arsenic and compounds (as As)
81	Asbestos	81 - Asbestos
27	Atrazine	27 - Atrazine
62	Benzene	62 - Benzene
91	Benzo(g,h,i)perylene	91 - Benzo(g,h,i)perylene
63	Brominated diphenylethers (PBDE)	63 - Brominated diphenylethers (PBDE)
18	Cadmium and compounds (as Cd)	18 - Cadmium and compounds (as Cd)
03	Carbon dioxide (CO2)	03 - Carbon dioxide (CO2)

02	Carbon monoxide (CO)	02 - Carbon monoxide (CO)
28	Chlordane	28 - Chlordane
29	Chlordecone	29 - Chlordecone
30	Chlorfenvinphos	30 - Chlorfenvinphos
79	Chlorides (as Cl)	79 - Chlorides (as Cl)
80	Chlorine and inorganic compounds (as HCl)	80 - Chlorine and inorganic compounds (as HCl)
31	Chloro-alkanes, C10-C13	31 - Chloro-alkanes, C10-C13
15	Chlorofluorocarbons (CFCs)	15 - Chlorofluorocarbons (CFCs)
32	Chlorpyrifos	32 - Chlorpyrifos
19	Chromium and compounds (as Cr)	19 - Chromium and compounds (as Cr)
20	Copper and compounds (as Cu)	20 - Copper and compounds (as Cu)
82	Cyanides (as total CN)	82 - Cyanides (as total CN)
33	DDT	33 - DDT
70	Di-(2-ethyl hexyl) phthalate (DEHP)	70 - Di-(2-ethyl hexyl) phthalate (DEHP)
35	Dichloromethane (DCM)	35 - Dichloromethane (DCM)
36	Dieldrin	36 - Dieldrin
37	Diuron	37 - Diuron
38	Endosulphan	38 - Endosulphan
39	Endrin	39 - Endrin
65	Ethyl benzene	65 - Ethyl benzene
66	Ethylene oxide	66 - Ethylene oxide
88	Fluoranthene	88 - Fluoranthene
83	Fluorides (as total F)	83 - Fluorides (as total F)
84	Fluorine and inorganic compounds (as HF)	84 - Fluorine and inorganic compounds (as HF)
40	Halogenated organic compounds (as AOX)	40 - Halogenated organic compounds (as AOX)
16	Halons	16 - Halons
41	Heptachlor	41 - Heptachlor
90	Hexabromobiphenyl	90 - Hexabromobiphenyl
42	Hexachlorobenzene (HCB)	42 - Hexachlorobenzene (HCB)
43	Hexachlorobutadiene (HCBD)	43 - Hexachlorobutadiene (HCBD)
04	Hydro-fluorocarbons (HFCs)	04 - Hydro-fluorocarbons (HFCs)
14	Hydrochlorofluorocarbons (HCFCs)	14 - Hydrochlorofluorocarbons (HCFCs)
85	Hydrogen cyanide (HCN)	85 - Hydrogen cyanide (HCN)
89	Isodrin	89 - Isodrin
67	Isoproturon	67 - Isoproturon
23	Lead and compounds (as Pb)	23 - Lead and compounds (as Pb)
45	Lindane	45 - Lindane
21	Mercury and compounds (as Hg)	21 - Mercury and compounds (as Hg)

01	Methane (CH4)	01 - Methane (CH4)
46	Mirex	46 - Mirex
68	Naphthalene	68 - Naphthalene
22	Nickel and compounds (as Ni)	22 - Nickel and compounds (as Ni)
08	Nitrogen oxides (NOx/NO2)	08 - Nitrogen oxides (NOx/NO2)
05	Nitrous oxide (N2O)	05 - Nitrous oxide (N2O)
07	Non-methane volatile organic compounds (NMVOC)	07 - Non-methane volatile organic compounds (NMVOC)
64	Nonylphenol and Nonylphenol ethoxylates (NP/NPEs)	64 - Nonylphenol and Nonylphenol ethoxylates (NP/NPEs)
87	Octylphenols and Octylphenol ethoxylates	87 - Octylphenols and Octylphenol ethoxylates
69	Organotin compounds (as total Sn)	69 - Organotin compounds (as total Sn)
86	Particulate matter (PM10)	86 - Particulate matter (PM10)
47	PCDD + PCDF (dioxins + furans)(as Teq)	47 - PCDD + PCDF (dioxins + furans)(as Teq)
48	Pentachlorobenzene	48 - Pentachlorobenzene
49	Pentachlorophenol (PCP)	49 - Pentachlorophenol (PCP)
09	Perfluorocarbons (PFCs)	09 - Perfluorocarbons (PFCs)
71	Phenols (as total C)	71 - Phenols (as total C)
50	Polychlorinated biphenyls (PCBs)	50 - Polychlorinated biphenyls (PCBs)
72	Polycyclic aromatic hydrocarbons (PAHs)	72 - Polycyclic aromatic hydrocarbons (PAHs)
51	Simazine	51 - Simazine
10	Sulphur hexafluoride (SF6)	10 - Sulphur hexafluoride (SF6)
11	Sulphur oxides (SOx/SO2)	11 - Sulphur oxides (SOx/SO2)
52	Tetrachloroethylene (PER)	52 - Tetrachloroethylene (PER)
53	Tetrachloromethane (TCM)	53 - Tetrachloromethane (TCM)
73	Toluene	73 - Toluene
12	Total nitrogen	12 - Total nitrogen
76	Total organic carbon (TOC) (as total C or COD/3)	76 - Total organic carbon (TOC) (as total C or COD/3)
13	Total phosphorus	13 - Total phosphorus
59	Toxaphene	59 - Toxaphene
74	Tributyltin and compounds	74 - Tributyltin and compounds
54	Trichlorobenzenes (TCBs)(all isomers)	54 - Trichlorobenzenes (TCBs)(all isomers)
57	Trichloroethylene	57 - Trichloroethylene
58	Trichloromethane	58 - Trichloromethane
77	Trifluralin	77 - Trifluralin
75	Triphenyltin and compounds	75 - Triphenyltin and compounds
60	Vinyl chloride	60 - Vinyl chloride
78	Xylenes	78 - Xylenes
24	Zinc and compounds (as Zn)	24 - Zinc and compounds (as Zn)

Licensed (Non-PRTR) Pollutants

Emission Type : Air

Pollutant_Number	Pollutant_Name	Pollutant_Lookup
201	1,2 trichloroethylen	201 - 1,2 trichloroeth
241	2-Chloroethanol	241 - 2-Chloroethanol
202	2-methyoxyethanol	202 - 2-methyoxyeth
301	Acetate	301 - Acetate
203	Acetic acid	203 - Acetic acid
361	Acrylates	361 - Acrylates
369	Alkyl Phenol Ethox	369 - Alkyl Phenol Ethoxylates
355	Aluminium	355 - Aluminium
204	Amines	204 - Amines
205	Antimony (as Sb)	205 - Antimony (as S
206	Benzene & toluene	206 - Benzene & tolu
243	cis-1,2-dichloroeth	243 - cis-1,2-dichloroethene
207	Class B organics	207 - Class B organi
356	Cobalt	356 - Cobalt
208	Condenseable vola	208 - Condenseable
310	Dimethylester	310 - Dimethylester
209	Dimethylformamide	209 - Dimethylformamide
245	Dimethylsulphate	245 - Dimethylsulphate
210	Dust	210 - Dust
211	Epichlorohydrin	211 - Epichlorohydrin
212	Formaldehyde	212 - Formaldehyde
315	Formaldehyde	315 - Formaldehyde
213	Formic acid	213 - Formic acid
316	Hydrazine	316 - Hydrazine
214	Hydrogen bromide	214 - Hydrogen bromide
317	Hydrogen peroxide	317 - Hydrogen peroxide
215	Hydrogen sulphide	215 - Hydrogen sulphide
318	Hydrogen sulphide	318 - Hydrogen sulphide
216	Indicator Microorga	216 - Indicator Microorganisms
319	Inorganic acids	319 - Inorganic acids
217	Iodinated compoun	217 - Iodinated compounds
357	Iron	357 - Iron
218	Isocyanate	218 - Isocyanate

Air Lookup	
From Row	4
To Row	87
Start Cell	3
Water Lookup	
From Row	91
To Row	163
Start Cell	90
Offsite Xfers Lookup	
From Row	167
To Row	216
Start Cell	166
Land Lookup	
From Row	220
To Row	220
Start Cell	219

320	Magnesium	320 - Magnesium
321	Manganese (as Mr	321 - Manganese (as Mn)
219	MDI	219 - MDI
322	MDI as NCO group	322 - MDI as NCO group
220	Mercaptans	220 - Mercaptans
323	Methanol	323 - Methanol
367	Methyl Methacrylat	367 - Methyl Methacrylate
368	Molybdenum	368 - Molybdenum
325	Monochloramine	325 - Monochloramine
326	n-hexene	326 - n-hexene
221	Nitric acid (HNO3)	221 - Nitric acid (HNO3)
330	Organic solvents	330 - Organic solvents
222	Organic substance	222 - Organic substances with photochemical ozone potential
331	Organohalogens	331 - Organohalogens
223	Ozone	223 - Ozone
333	Permethrin	333 - Permethrin
334	Pesticides	334 - Pesticides
337	Pharmaceutical act	337 - Pharmaceutical actives
338	Potassium	338 - Potassium
339	Preventol WB	339 - Preventol WB
370	Selenium	370 - Selenium
340	Semi-volatiles	340 - Semi-volatiles
354	Silver	354 - Silver
341	Sodium	341 - Sodium
342	Streptomycin	342 - Streptomycin
353	Sulphides	353 - Sulphides
239	Sulphuric Acid	239 - Sulphuric Acid
344	TA luft carcinogeni	344 - TA luft carcinogenic substance class 3
224	TA Luft carcinogen	224 - TA Luft carcinogenic substances Class 1
225	TA Luft carcinogen	225 - TA Luft carcinogenic substances Class 2
226	TA Luft carcinogen	226 - TA Luft carcinogenic substances Class 3
227	TA Luft inorganic d	227 - TA Luft inorganic dust particles class 1
228	TA Luft inorganic d	228 - TA Luft inorganic dust particles class 2
229	TA Luft inorganic d	229 - TA Luft inorganic dust particles class 3
230	TA Luft organic sut	230 - TA Luft organic substances class 1
231	TA Luft organic sut	231 - TA Luft organic substances class 2

232	TA Luft organic sul	232 - TA Luft organic substances class 3
371	Tellurium	371 - Tellurium
233	Thallium compoun	233 - Thallium compounds
358	Tin	358 - Tin
234	Toluene di-isocyan	234 - Toluene di-isocyanate
235	Total acids	235 - Total acids
345	Total acids	345 - Total acids
242	Total Aldehydes (a	242 - Total Aldehydes (as C)
347	Total heavy metals	347 - Total heavy metals
351	Total Organic Carb	351 - Total Organic Carbon (as C)
352	Total Organic Carb	352 - Total Organic Carbon (as Toluene)
244	Total Particulates	244 - Total Particulates
350	Undenatured botuli	350 - Undenatured botulinum toxin
236	Vanadium (as V)	236 - Vanadium (as V)
237	Volatile organic co	237 - Volatile organic compounds (as TOC)

Emission Type : Water

Pollutant_Number	Pollutant_Name	Pollutant_Lookup
301	Acetate	301 - Acetate
203	Acetic acid	203 - Acetic acid
361	Acrylates	361 - Acrylates
369	Alkyl Phenol Ethox	369 - Alkyl Phenol Ethoxylates
355	Aluminium	355 - Aluminium
204	Amines	204 - Amines
238	Ammonia (as N)	238 - Ammonia (as N)
205	Antimony (as Sb)	205 - Antimony (as Sb)
206	Benzene & toluene	206 - Benzene & toluene & xylene (combined)
302	Biocides	302 - Biocides
303	BOD	303 - BOD
304	Bromide	304 - Bromide
305	Calcium	305 - Calcium
356	Cobalt	356 - Cobalt
306	COD	306 - COD
208	Condenseable vola	208 - Condenseable volatile organic compounds
308	Detergents (as MB	308 - Detergents (as MBAS)
309	Diesel range organ	309 - Diesel range organics

310	Dimethylester	310 - Dimethylester
245	Dimethylsulphate	245 - Dimethylsulphate
211	Epichlorohydrin	211 - Epichlorohydrin
314	Fats, Oils and Grea	314 - Fats, Oils and Greases
212	Formaldehyde	212 - Formaldehyde
315	Formaldehyde	315 - Formaldehyde
213	Formic acid	213 - Formic acid
316	Hydrazine	316 - Hydrazine
366	Hydrocarbons	366 - Hydrocarbons
214	Hydrogen bromide	214 - Hydrogen bromide
317	Hydrogen peroxide	317 - Hydrogen peroxide
318	Hydrogen sulphide	318 - Hydrogen sulphide
319	Inorganic acids	319 - Inorganic acids
357	Iron	357 - Iron
362	Kjeldahl Nitrogen	362 - Kjeldahl Nitrogen
320	Magnesium	320 - Magnesium
321	Manganese (as Mr	321 - Manganese (as Mn)
322	MDI as NCO group	322 - MDI as NCO group
323	Methanol	323 - Methanol
367	Methyl Methacrylat	367 - Methyl Methacrylate
324	Mineral oils	324 - Mineral oils
368	Molybdenum	368 - Molybdenum
325	Monochloramine	325 - Monochloramine
326	n-hexene	326 - n-hexene
327	Nitrate (as N)	327 - Nitrate (as N)
328	Non-purgeable org	328 - Non-purgeable organic compounds
329	Octafluropentanol	329 - Octafluropentanol
330	Organic solvents	330 - Organic solvents
331	Organohalogens	331 - Organohalogens
332	Ortho-phosphate (a	332 - Ortho-phosphate (as PO4)
333	Permethrin	333 - Permethrin
334	Pesticides	334 - Pesticides
335	Petrol range organi	335 - Petrol range organics
337	Pharmaceutical act	337 - Pharmaceutical actives
338	Potassium	338 - Potassium
339	Preventol WB	339 - Preventol WB

370	Selenium	370 - Selenium
340	Semi-volatiles	340 - Semi-volatiles
354	Silver	354 - Silver
341	Sodium	341 - Sodium
342	Streptomycin	342 - Streptomycin
343	Sulphate	343 - Sulphate
353	Sulphides	353 - Sulphides
364	Sulphites (as SO3)	364 - Sulphites (as SO3)
240	Suspended Solids	240 - Suspended Solids
371	Tellurium	371 - Tellurium
358	Tin	358 - Tin
345	Total acids	345 - Total acids
363	Total Dissolved So	363 - Total Dissolved Solids
347	Total heavy metals	347 - Total heavy metals
351	Total Organic Carb	351 - Total Organic Carbon (as C)
352	Total Organic Carb	352 - Total Organic Carbon (as Toluene)
348	Total petroleum hy	348 - Total petroleum hydrocarbons
350	Undenatured botuli	350 - Undenatured botulinum toxin
237	Volatile organic cor	237 - Volatile organic compounds (as TOC)

Emission Type : Offsite Transfers

Pollutant_Number	Pollutant_Name	Pollutant_Lookup
301	Acetate	301 - Acetate
203	Acetic acid	203 - Acetic acid
361	Acrylates	361 - Acrylates
369	Alkyl Phenol Ethox	369 - Alkyl Phenol Ethoxylates
355	Aluminium	355 - Aluminium
204	Amines	204 - Amines
205	Antimony (as Sb)	205 - Antimony (as Sb)
206	Benzene & toluene	206 - Benzene & toluene & xylene (combined)
356	Cobalt	356 - Cobalt
208	Condenseable vola	208 - Condenseable volatile organic compounds
310	Dimethylester	310 - Dimethylester
245	Dimethylsulphate	245 - Dimethylsulphate
211	Epichlorohydrin	211 - Epichlorohydrin
212	Formaldehyde	212 - Formaldehyde

315	Formaldehyde	315 - Formaldehyde
213	Formic acid	213 - Formic acid
316	Hydrazine	316 - Hydrazine
214	Hydrogen bromide	214 - Hydrogen bromide
317	Hydrogen peroxide	317 - Hydrogen peroxide
318	Hydrogen sulphide	318 - Hydrogen sulphide
319	Inorganic acids	319 - Inorganic acids
357	Iron	357 - Iron
320	Magnesium	320 - Magnesium
321	Manganese (as Mr	321 - Manganese (as Mn)
322	MDI as NCO group	322 - MDI as NCO group
323	Methanol	323 - Methanol
367	Methyl Methacrylat	367 - Methyl Methacrylate
368	Molybdenum	368 - Molybdenum
325	Monochloramine	325 - Monochloramine
326	n-hexene	326 - n-hexene
330	Organic solvents	330 - Organic solvents
331	Organohalogens	331 - Organohalogens
333	Permethrin	333 - Permethrin
334	Pesticides	334 - Pesticides
337	Pharmaceutical act	337 - Pharmaceutical actives
338	Potassium	338 - Potassium
339	Preventol WB	339 - Preventol WB
370	Selenium	370 - Selenium
340	Semi-volatiles	340 - Semi-volatiles
354	Silver	354 - Silver
341	Sodium	341 - Sodium
342	Streptomycin	342 - Streptomycin
353	Sulphides	353 - Sulphides
371	Tellurium	371 - Tellurium
358	Tin	358 - Tin
345	Total acids	345 - Total acids
347	Total heavy metals	347 - Total heavy metals
351	Total Organic Carb	351 - Total Organic Carbon (as C)
352	Total Organic Carb	352 - Total Organic Carbon (as Toluene)
237	Volatile organic cor	237 - Volatile organic compounds (as TOC)

Emission Type : Land

Pollutant_Number	Pollutant_Name	Pollutant_Lookup

GroupCode	Description	2
01	WASTE RESULTING FROM EXPLORATION, MINING, QUARRYING, AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS	21
02	WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING	24
03	WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD	134
04	WASTES FROM THE LEATHER, FUR AND TEXTILE INDUSTRIES	137
05	WASTES FROM PETROLEUM REFINING, NATURAL GAS PURIFICATION AND PYROLYTIC TREATMENT OF COAL	975
06	WASTES FROM INORGANIC CHEMICAL PROCESSES	936
07	WASTES FROM ORGANIC CHEMICAL PROCESSES	965
08	WASTES FORM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS,) ADHESIVES, SEALANTS AND PRINTING INKS	
09	WASTES FROM THE PHOTOGRAPHIC INDUSTRY	
10	WASTES FROM THERMAL PROCESSES	
11	WASTES FROM CHEMICAL SURFACE TREATMENT AND COATING OF METALS AND OTHER MATERIALS; NON-FERROUS HYDRO-METALLURGY	
12	WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS	
13	OIL WASTES AND WASTES OF LIQUID FUELS (except edible oils, and those in chapters 05, 12 and 19)	
14	WASTE ORGANIC SOLVENTS, REFRIGERANTS AND PROPELLANTS (except 07 and 08)	
15	WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED	
16	WASTES NOT OTHERWISE SPECIFIED IN THE LIST	
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)	
18	WASTES FROM HUMAN OR ANIMAL HEALTH CARE AND/OR RELATED RESEARCH (except kitchen and restaurant wastes not arising from immediate RESEARCH (except kitchen and restaurant wastes not	
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR	
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS	

GroupCode	SubGroupCode	Description
01	01	wastes from mineral excavation
01	03	wastes from physical and chemical processing of metalliferous minerals
01	04	wastes from physical and chemical processing of non-metalliferous minerals
01	05	drilling muds and other drilling wastes
02	01	wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing
02	02	wastes from the preparation and processing of meat, fish and other foods of animal origin
02	03	wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tabacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation
02	04	wastes from sugar processing
02	05	wastes from the dairy products industry
02	06	wastes from the baking and confectionery industry
02	07	wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)
03	01	wastes from wood processing and the production of panels and furniture
03	02	wastes from wood preservation
03	03	wastes from pulp, paper and cardboard production and processing
04	01	wastes from the leather and fur industry
04	02	wastes from the textile industry
05	01	wastes from petroleum refining
05	06	waste from the pyrolytic treatment of coal
05	07	waste from natural gas purification and transportation
06	01	wastes from the manufacture, formulation, supply and use (MFSU) of acids
06	02	wastes from the MFSU of bases
06	03	wastes from the MFSU of salts and their solutions and metallic oxides
06	04	metal-containing wastes other than those mentioned in 06 03
06	05	sludges from on-site effluent treatment
06	06	wastes from the MFSU of sulphur chemicals, sulphur chemical processes and desulphurisation processes
06	07	wastes from the MFSU of halogens and halogen chemical processes
06	08	wastes from the MFSU of silicon and silicon derivatives

06	09	wastes from the MFSU of phosphorus chemicals and phosphorous chemical processes
06	10	wastes from the MFSU of nitrogen chemicals, nitrogen chemical processes and fertiliser manufacture
06	11	wastes from the manufacture of inorganic pigments and opacificiers
06	13	wastes from inorganic chemical processes not otherwise specified
07	01	wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals
07	02	wastes from the MFSU of plastics, synthetic rubber and man-made fibres
07	03	wastes from the MFSU of organic dyes and pigments (except 06 11)
07	04	wastes from the MFSU of organic plant protection products (except 02 01 08 and 02 01 09), wood preserving agents (except 03 02) and other biocides
07	05	wastes from the MFSU of pharmaceuticals
07	06	wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics
07	07	wastes from the MFSU of fine chemicals and chemical products not otherwise specified
08	01	wastes from MFSU and removal of paint and varnish
08	02	wastes from MFSU of other coatings (including ceramic materials)
08	03	wastes from MFSU of printing inks
08	04	wastes from MFSU of adhesives and sealants (including waterproofing products)
08	05	wastes not otherwise specified in 08
09	01	wastes for the photographic industry
10	01	wastes from power stations and other combustion plants (except 19)
10	02	wastes from the iron and steel industry
10	03	wastes from aluminium thermal metallurgy
10	04	wastes from lead thermal metallurgy
10	05	wastes from zinc thermal metallurgy
10	06	wastes from copper thermal metallurgy
10	07	wastes from silver, gold and platinum thermal metalurgy
10	08	wastes from other non-ferous thermal metallurgy
10	09	wastes from casting of ferrous pieces
10	10	wastes from casting of non-ferrous pieces
10	11	wastes from manufacture of glass and glass products
10	12	wastes from manufacture of ceramic goods, bricks, tiles and construction products
10	13	wastes from manufacture of cement, lime and plaster and articles and products made from them
10	14	waste from crematoria
11	01	wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphating, alkalin
11	02	waste from non-ferrous hydrometallurgical processes
11	03	sludges and solids from tempering processes
11	05	wastes from hot galvanising processes
12	01	wastes from shaping and physical and mechanical surface treatment of metals and plastics
12	03	wastes from water and steam degreasing processes (except 11)
13	01	waste hydraulic oils
13	02	waste engine, gear and lubricating oils
13	03	waste insulating and heat transmission oils
13	04	bilge oils
13	05	oil/water separator contents
13	07	wastes of liquid fuels
13	08	oil wastes not otherwise specified
14	06	waste organic solvents, refrigerants and foam/aerosol propellants
15	01	packaging (including separately collected municipal packaging waste)
15	02	absorbents, filter materials, wiping cloths and protective clothing
16	01	end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16
16	02	wastes from electrical and electronic equipment
16	03	off-specification batches and unused products

16	04	waste explosives
16	05	gases in pressure containers and discarded chemicals
16	06	batteries and accumulators
16	07	wastes from transport tank, storage tank and barrel cleaning (except 05 and 13)
16	08	spent catalysts
16	09	oxidising substances
16	10	aqueous liquid wastes destined for off-site treatment
16	11	waste linings and refractories
17	01	concrete, bricks, tiles and ceramics
17	02	wood, glass and plastic
17	03	bituminous mixtures, coal tar and tarred products
17	04	metals (including their alloys)
17	05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17	06	insulation materials and asbestos-containing construction materials
17	08	gypsum-based construction material
17	09	other construction and demolition waste
18	01	wastes from natal care, diagnosis, treatment or prevention of disease in humans
18	02	wastes from research, diagnosis, treatment or prevention of disease involving animals
19	01	wastes from incineration or pyrolysis of waste
19	02	wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)
19	03	stabilised/solidified wastes (19)
19	04	vitrified waste and wastes from vitrification
19	05	wastes from aerobic treatment of solid wastes
19	06	wastes from anaerobic treatment of waste
19	07	landfill leachate
19	08	wastes from waste water treatment plants not otherwise specified
19	09	wastes from the preparation of water intended for human consumption or water for industrial use
19	10	wastes from shredding of metal-containing wastes
19	11	wastes from oil regeneration
19	12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19	13	wastes from soil and groundwater remediation
20	01	separately collected fractions (except 15 01)
20	02	garden and park wastes (including cemetery waste)
20	03	other municipal wastes

GroupCode	SubGroupCode	WasteCode	Description	Hazardous
01	01	01	wastes from mineral metalliferous excavation	No
01	01	02	wastes from mineral non-metalliferous excavation	No
01	03	04	acid-generating tailings from processing of sulphide ore	Yes
01	03	05	other tailings containing dangerous substances	Yes
01	03	06	tailings other than those mentioned in 01 03 04 and 01 03 05	No
01	03	07	other wastes containing dangerous substances from physical and chemical processing of metalliferous	Yes
01	03	08	dusty and powdery wastes other than those mentioned in 01 03 07	No
01	03	09	red mud from alumina production other than the wastes mentioned in 01 03 07	No
01	03	99	wastes not otherwise specified	No
01	04	07	waste containing dangerous substances from physical and chemical processing of nonmetalliferous m	Yes
01	04	08	waste gravel and crushed rocks other than those mentioned in 01 04 07	No
01	04	09	waste sand and clays	No
01	04	10	dusty and powdery wastes other than those mentioned in 01 04 07	No
01	04	11	wastes from potash and rock salt processing other than those mentioned in 01 04 07	No

01	04	12	tailings and other wastes from washing and cleaning of minerals other than those mentioned in 01 04 (	No
01	04	13	waste from stone cutting and sawing other than those mentioned in 01 04 07	No
01	04	99	waste not otherwise specified	No
01	05	04	freshwater drilling muds and wastes	No
01	05	05	oil-containing drilling muds and wastes	Yes
01	05	06	drilling muds and other drilling wastes containing dangerous substances	Yes
01	05	07	barite-containing drilling muds and wastes other than those mentioned in 01 05 05 and 0105 06	No
01	05	08	chloride-containing drilling muds and wastes other than those mentioned in 01 05 05 and 01 05 06	No
01	05	99	wastes not otherwise specified	No
02	01	01	sludges from washing and cleaning	No
02	01	02	animal-tissue waste	No
02	01	03	plant-tissue waste	No
02	01	04	waste plastics (except packaging)	No
02	01	06	animal faeces, urine and manure (including spoiled straw), effluent, collected separately and treated of	No
02	01	07	waste from forestry	No
02	01	08	agrochemical waste containing dangerous substances	Yes
02	01	09	agrochemical waste other than those mentioned in 02 01 08	No
02	01	10	waste metal	No
02	01	99	wastes not otherwise specified	No
02	02	01	sludges from washing and cleaning	No
02	02	02	animal-tissue waste	No
02	02	03	materials unsuitable for consumption or processing	No
02	02	04	sludges from on-site effluent treatment	No
02	02	99	waste not otherwise specified	No
02	03	01	sludges from washing, cleaning, peeling, centrifuging and separation	No
02	03	02	waste from preserving agents	No
02	03	03	wastes from solvent extraction	No
02	03	04	materials unsuitable for consumption or processing	No
02	03	05	sludges from on-site effluent treatment	No
02	03	99	wastes not otherwise specified	No
02	04	01	soil from cleaning and washing beet	No
02	04	02	off-specification calcium carbonate	No
02	04	03	sludges from on-site effluent treatment	No
02	04	99	wastes not otherwise specified	No
02	05	01	materials unsuitable for consumption or processing	No
02	05	02	sludges from on-site effluent treatment	No
02	05	99	wastes not otherwise specified	No
02	06	01	materials unsuitable for consumption or processing	No
02	06	02	wastes from preserving agents	No
02	06	03	sludges from on-site effluent treatment	No
02	06	99	waste not otherwise specified	No
02	07	01	wastes from washing, cleaning and mechanical reduction of raw materials	No
02	07	02	wastes from spirits distillation	No
02	07	03	wastes from chemical treatment	No
02	07	04	materials unsuitable for consumption or processing	No
02	07	05	sludges from on-site effluent treatment	No
02	07	99	waste not otherwise specified	No
03	01	01	waste bark and cork	No
03	01	04	sawdust, shavings, cuttings, wood, particle board and veneer containing dangerous substances	Yes
03	01	05	sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04	No

03	01	99	wastes not otherwise specified	No
03	02	01	non-halogenated organic wood preservatives	Yes
03	02	02	organochlorinated wood preservatives	Yes
03	02	03	organometallic wood preservatives	Yes
03	02	04	inorganic wood preservatives	Yes
03	02	05	other wood preservatives containing dangerous substances	Yes
03	02	99	wood preservatives not otherwise specified	No
03	03	01	waste bark and wood	No
03	03	02	green liquor sludge (from recovery of cooking liquor)	No
03	03	05	de-inking sludges from paper recycling	No
03	03	07	mechanically separated rejects from pulping of waste paper and cardboard	No
03	03	08	wastes from sorting of paper and cardboard destined for recycling	No
03	03	09	lime mud waste	No
03	03	10	fibre rejects, fibre-, filler- and coating-sludges from mechanical separation	No
03	03	11	sludges from on-site effluent treatment other than those mentioned in 03 03 10	No
03	03	99	wastes not otherwise specified	No
04	01	01	fleshings and lime split wastes	No
04	01	02	liming waste	No
04	01	03	degreasing wastes containing solvents without a liquid phase	Yes
04	01	04	tanning liquor containing chromium	No
04	01	05	tanning liquor free of chromium	No
04	01	06	sludges, in particular from on-site effluent treatment containing chromium	No
04	01	07	sludges , in particular from on-site effluent treatment free of chromium	No
04	01	08	waste tanned leather (blue sheetings, shavings, cuttings, buffing dust) containing chromium	No
04	01	09	wastes from dressing and finishing	No
04	01	99	wastes not otherwise specified	No
04	02	09	wastes from composite materials (impregnated textile, elastomer, plastomer)	No
04	02	10	organic matter from natural products (for example grease, wax)	No
04	02	14	wastes from finishing containing organic solvents	Yes
04	02	15	wastes from finishing other than those mentioned in 04 02 14	No
04	02	16	dyestuffs and pigments containing dangerous substances	Yes
04	02	17	dyestuffs and pigments other than those mentioned in 04 02 16	No
04	02	19	sludges from on-site effluent treatment containing dangerous substances	Yes
04	02	20	sludges from on-site effluent treatment other than those mentioned in 04 02 19	No
04	02	21	wastes from unprocessed textile fibres	No
04	02	22	wastes from processed textile fibres	No
04	02	99	wastes not otherwise specified	No
05	01	02	desalter sludges	Yes
05	01	03	tank bottom sludges	Yes
05	01	04	acid alkyl sludges	Yes
05	01	05	oil spills	Yes
05	01	06	oily sludges from maintenance operations of the plant or equipment	Yes
05	01	07	acid tars	Yes
05	01	08	other tars	Yes
05	01	09	sludges from on-site effluent treatment containing dangerous substances	Yes
05	01	10	sludges from on-site effluent treatment other than those mentioned in 05 01 09	No
05	01	11	wastes from cleaning of fuels with bases	Yes
05	01	12	oil containing acids	Yes
05	01	13	boiler feedwater sludges	No
05	01	14	wastes from cooling columns	No

05	01	15	spent filter clays	Yes
05	01	16	sulphur-containing wastes from petroleum desulphurisation	No
05	01	17	bitumen	No
05	01	99	wastes not otherwise specified	No
05	06	01	acid tars	Yes
05	06	03	other tars	Yes
05	06	04	waste from cooling columns	No
05	06	99	wastes not otherwise specified	No
05	07	01	wastes containing mercury	Yes
05	07	02	wastes containing sulphur	No
05	07	99	wastes not otherwise specified	No
06	01	01	sulphuric acid and sulphurous acid	Yes
06	01	02	hydrochloric acid	Yes
06	01	03	hydrochloric acid	Yes
06	01	04	phosphoric and phosphorous acid	Yes
06	01	05	nitric acid and nitrous acid	Yes
06	01	06	other acids	Yes
06	01	99	wastes not otherwise specified	No
06	02	01	calcium hydroxide	Yes
06	02	03	ammonium hydroxide	Yes
06	02	04	sodium and potassium hydroxide	Yes
06	02	05	other bases	Yes
06	02	99	wastes not otherwise specified	No
06	03	11	solid salts and solutions containing cyanides	Yes
06	03	13	solid salts and solutions containing heavy metals	Yes
06	03	14	solid salts and solution other than those mentioned in 06 03 11 and 06 03 13	No
06	03	15	metallic oxides containing heavy metals	Yes
06	03	16	metallic oxides other than those mentioned in 06 03 15	No
06	03	99	wastes not otherwise specified	No
06	04	03	wastes containing arsenic	Yes
06	04	04	wastes containing mercury	Yes
06	04	05	wastes containing other heavy metals	Yes
06	04	99	wastes not otherwise specified	No
06	05	02	sludges from on-site effluent treatment containing dangerous solutions	Yes
06	05	03	sludges from onsite effluent treatment other than those mentioned in 06 05 02	No
06	06	02	wastes containing dangerous sulphides	Yes
06	06	03	wastes containing sulphides other than those mentioned in 06 06 02	No
06	06	99	wastes not otherwise specified	No
06	07	01	wastes containing asbestos from electrolysis	Yes
06	07	02	activated carbon from chlorine production	Yes
06	07	03	barium sulphate sludge containing mercury	Yes
06	07	04	solutions and acids, for example contact acid	Yes
06	07	99	wastes not otherwise specified	No
06	08	02	waste containing dangerous silicones	Yes
06	08	99	wastes not otherwise specified	No
06	09	02	phosphorus slag	No
06	09	03	calcium-based reaction wastes containing or contaminated with dangerous substances	Yes
06	09	04	calcuim-based reaction wastes other than those mentioned in 06 09 03	No
06	09	99	wastes not otherwise specified	No
06	10	02	wastes containing dangerous substances	Yes

06	10	99	wastes not otherwise specified	No
06	11	01	calcium-based reaction wastes from titanium dioxide production	No
06	11	99	wastes not otherwise specified	No
06	13	01	inorganic plant protection products, wood-preserving agents and other biocides	Yes
06	13	02	spent activated carbon (except 06 07 02)	Yes
06	13	03	carbon black	No
06	13	04	wastes from asbestos processing	Yes
06	13	05	soot	Yes
06	13	99	wastes not otherwise specified	No
07	01	01	aqueous washing liquids and mother liquors	Yes
07	01	03	organic halogenated solvents, washing liquids and mother liquors	Yes
07	01	04	other organic solvents, washing liquids and mother liquors	Yes
07	01	07	halogenated still bottoms and reaction residues	Yes
07	01	08	other still bottoms and reaction residues	Yes
07	01	09	halogenated filter cakes and spent absorbents	Yes
07	01	10	other filter cakes and spent absorbents	Yes
07	01	11	sludges from on-site effluent treatment containing dangerous substances	Yes
07	01	12	sludges from on-site effluent treatment other than those mentioned in 07 01 11	No
07	01	99	wastes not otherwise specified	No
07	02	01	aqueous washing liquids and mother liquors	Yes
07	02	03	organic halogenated solvents, washing liquids and mother liquors	Yes
07	02	04	other organic solvents, washing liquids and mother liquors	Yes
07	02	07	halogenated still bottoms and reaction residues	Yes
07	02	08	other still bottoms and reaction residues	Yes
07	02	09	halogenated filter cakes and spent absorbents	Yes
07	02	10	other filter cakes and spent absorbents	Yes
07	02	11	sludges from on-site effluent treatment containing dangerous substances	Yes
07	02	12	sludges from on-site effluent treatment other than those mentioned in 07 02 11	No
07	02	13	waste plastic	No
07	02	14	wastes from additives containing dangerous substances	Yes
07	02	15	wastes from additives other than those mentioned in 07 02 14	No
07	02	16	waste containing dangerous silicones	Yes
07	02	17	waste containing silicones other than those mentioned in 07 02 16	No
07	02	99	wastes not otherwise specified	No
07	03	01	aqueous washing liquids and mother liquors	Yes
07	03	03	organic halogenated solvents, washing liquids and mother liquors	Yes
07	03	04	other organic solvents, washing liquids and mother liquors	Yes
07	03	07	halogenated still bottoms and reaction residues	Yes
07	03	08	other still bottoms and reaction residues	Yes
07	03	09	halogenated filter cakes and spent absorbents	Yes
07	03	10	other filter cakes and spent absorbents	Yes
07	03	11	sludges from on-site effluent treatment containing dangerous substances	Yes
07	03	12	sludges from on-site effluent treatment other than those mentioned in 07 03 11	No
07	03	99	wastes not otherwise specified	No
07	04	01	aqueous washing liquids and mother liquors	Yes
07	04	03	organic halogenated solvents, washing liquids and mother liquors	Yes
07	04	04	other organic solvents, washing liquids and mother liquids	Yes
07	04	07	halogenated still bottoms and reaction residues	Yes
07	04	08	other still bottoms and reaction residues	Yes
07	04	09	halogenated filter cakes and spent absorbents	Yes

07	04	10	other filter cakes and spent absorbents	Yes
07	04	11	sludges from on-site effluent treatment containing dangerous substances	Yes
07	04	12	sludges from on-site effluent treatment other than those mentioned in 07 04 11	No
07	04	13	solid wastes containing dangerous substances	Yes
07	04	99	wastes not otherwise specified	No
07	05	01	aqueous washing liquids and mother liquors	Yes
07	05	03	organic halogenated solvents, washing liquids and mother liquors	Yes
07	05	04	other organic solvents, washing liquids and mother liquors	Yes
07	05	07	halogenated still bottoms and reaction residues	Yes
07	05	08	other still bottoms and reaction residues	Yes
07	05	09	halogenated filter cakes and spent absorbents	Yes
07	05	10	other filter cakes and spent absorbents	Yes
07	05	11	sludges from on-site effluent treatment containing dangerous substances	Yes
07	05	12	sludges from on-site effluent treatment other than those mentioned in 07 05 11	No
07	05	13	solid wastes containing dangerous substances	Yes
07	05	14	solid wastes other than those mentioned in 07 05 13	No
07	05	99	wastes not otherwise specified	No
07	06	01	aqueous washing liquids and mother liquors	Yes
07	06	03	organic halogenated solvents, washing liquids and mother liquors	Yes
07	06	04	other organic solvents, washing liquids and mother liquors	Yes
07	06	07	halogenated still bottoms and reaction residues	Yes
07	06	08	other sill bottoms and reaction residues	Yes
07	06	09	halogenated filter cakes and spent absorbents	Yes
07	06	10	other filter cakes and spent absorbents	Yes
07	06	11	sludges from on-site effluent treatment containing dangerous substances	Yes
07	06	12	sludges from on-site effluent treatment other than those mentioned in 07 06 11	No
07	06	99	wastes not otherwise specified	No
07	07	01	aqueous washing liquids and mother liquors	Yes
07	07	03	organic halogenated solvents, washing liquids and mother liquors	Yes
07	07	04	other organic solvents, washing liquids and mother liquors	Yes
07	07	07	halogenated still bottoms and reaction residues	Yes
07	07	08	other still bottoms and reaction residues	Yes
07	07	09	halogenated filter cakes and spent absorbents	Yes
07	07	10	other filter cakes and spent sbsorbents	Yes
07	07	11	sludges from on-site effluent treatment containing dangerous substances	Yes
07	07	12	sludges from on-site effluent treatment other than those mentioned in 07 07 11	No
07	07	99	wastes not otherwise specified	No
08	01	11	waste paint and varnish containing organic solvents or other dangerous substances	Yes
08	01	12	waste paint and varnish other than those mentioned in 08 01 11	No
08	01	13	sludges from paint or varnish containing organic solvents or other dangerous substances	Yes
08	01	14	sludges from paint or varnish other than those mentioned in 08 01 13	No
08	01	15	aqueous sludges containing paint or varnish containing organic solvents or other dangerous substanc	Yes
08	01	16	aqueous sludges containing paint or varnish other than those mentioned in 08 01 15	No
08	01	17	wastes from paint or varnish removal containing organic solvents or other dangerous substances	Yes
08	01	18	wastes from paint or varnish removal other than those mentioned in 08 01 17	No
08	01	19	aqueous suspensions containing paint or varnish containing organic solvents or other dangerous subs	Yes
08	01	20	aqueous suspensions containing paint or varnish other than those mentioned in 08 01 19	No
08	01	21	waste paint or varnish remover	Yes
08	01	99	wastes not otherwise specified	No
08	02	01	waste coating powders	No

08	02	02	aqueous sludges containing ceramic materials	No
08	02	03	aqueous suspensions containing ceramic materials	No
08	02	99	wastes not otherwise specified	No
08	03	07	aqueous sludges containing ink	No
08	03	08	aqueous liquid waste containing ink	No
08	03	12	waste ink containing dangerous substances	Yes
08	03	13	waste ink other than those mentioned in 08 03 12	No
08	03	14	ink sludges containing dangerous substances	Yes
08	03	15	ink sludges other than those mentioned in 08 03 14	No
08	03	16	waste etching solutions	Yes
08	03	17	waste printing toner containing dangerous substances	Yes
08	03	18	waste printing toner other than those mentioned in 08 03 17	No
08	03	19	disperse oil	Yes
08	03	99	wastes not otherwise specified	No
08	04	09	waste adhesives and sealants containing organic solvents or other dangerous substances	Yes
08	04	10	waste adhesives and sealants other than those mentioned in 08 04 09	No
08	04	11	adhesive and sealant sludges containing organic solvents or other dangerous substances	Yes
08	04	12	adhesive and sealant sludges other than those mentioned in 08 04 11	No
08	04	13	aqueous sludges containing adhesives or sealants containing organic solvents or other dangerous sut	Yes
08	04	14	aqueous sludges containing adhesives or sealants other than those mentioned in 08 04 13	No
08	04	15	aqueous liquid waste containing adhesives or sealants containing organic solvents or other dangerous	Yes
08	04	16	aqueous liquid waste containing adhesives or sealants other than those mentioned in 08 04 15	No
08	04	17	rosin oil	Yes
08	04	99	wastes not otherwise specified	No
08	05	01	waste isocyanates	Yes
09	01	01	water-based developer and activator solutions	Yes
09	01	02	water-based offset plate developer solutions	Yes
09	01	03	solvent-based developer solutions	Yes
09	01	04	fixed solutions	Yes
09	01	05	bleach solutions and bleach fixer solutions	Yes
09	01	06	wastes containing silver from on-site treatment of photographic wastes	Yes
09	01	07	photographic film and paper containing silver or silver compounds	No
09	01	08	photographic film and paper free of silver or silver compounds	No
09	01	10	single-use cameras without batteries	No
09	01	11	single-use cameras containing batteries included in 16 06 01, 16 06 02 or 16 06 03	Yes
09	01	12	single-use cameras containing batteries other than those mentioned in 09 01 11	No
09	01	13	aqueous liquid waste from on-site reclamation of silver other than those mentioned in 09 01 06	Yes
09	01	99	wastes not otherwise specified	No
10	01	01	bottom ash, slag and boiler dust (excluding boiler dust mentioned in 10 01 04)	No
10	01	02	coal fly ash	No
10	01	03	fly ash from peat and untreated wood	No
10	01	04	oil fly ash and boiler dust	Yes
10	01	05	calcium-based reaction wastes from flue-gas desulphurisation in solid form	No
10	01	07	calcium-based reaction wastes from flue-gas desulphurisation in sludge form	No
10	01	09	sulphuric acid	Yes
10	01	13	fly ash from emulsified hydrocarbons used as fuel	Yes
10	01	14	bottom ash, slag and boiler dust from co-incineration containing dangerous substances	Yes
10	01	15	bottom ash, slag and boiler dust from co-incineration other than those mentioned in 10 01 14	No
10	01	16	fly ash from co-incineration containing dangerous substances	Yes
10	01	17	fly ash from co-incineration other than those mentioned in 10 01 16	No

10	01	18	wastes from gas cleaning containing dangerous substances	Yes
10	01	19	wastes from gas cleaning other than those mentioned in 10 01 05, 10 01 07 and 10 01 18	No
10	01	20	sludges from on-site effluent treatment containing dangerous substances	Yes
10	01	21	sluges from on-site effluent treatment other than those mentioned in 10 01 20	No
10	01	22	aqueous sludges from boiler cleansing containing dangerous substances	Yes
10	01	23	aqueous sludges from boiler cleansing other than those mentioned in 10 01 22	No
10	01	24	sands from fluidised beds	No
10	01	25	wastes from fuel storage and preparation of coal-fired power plants	No
10	01	26	wastes from cooling-water treatment	No
10	01	99	wastes not otherwise specified	No
10	02	01	wastes from the processing of slag	No
10	02	02	unprocessed slag	No
10	02	07	solid wastes from gas treatment containing dangerous substances	Yes
10	02	08	solid wastes from gas treatment other than those mentioned in 10 02 07	No
10	02	10	mill scales	No
10	02	11	wastes from cooling-water treatment containing oil	Yes
10	02	12	waste from cooling-water treatment other than those mentioned in 10 02 11	No
10	02	13	sludges and filter cakes from gas treatment containing dangerous substances	Yes
10	02	14	sludges and filter cakes from gas treatment other than those mentioned in 10 02 13	No
10	02	15	other sludges and filter cakes	No
10	02	99	wastes not otherwise specified	No
10	03	02	anode scraps	No
10	03	04	primary production slags	Yes
10	03	05	waste alumina	No
10	03	08	salt slags from secondary production	Yes
10	03	09	black drosses from secondary production	Yes
10	03	15	skimmings that are flammable or emit, upon contact with water, flammable gases in dangerous quantit	Yes
10	03	16	skimming other than those mentioned in 10 03 15	No
10	03	17	tar-containing wastes from anode manufacture	Yes
10	03	18	carbon-containing waste from anode manufacture other than those mentioned in 10 03 17	No
10	03	19	flue-gas dust containing dangerous substances	Yes
10	03	20	flue-gas dust other than those mentioned in 10 03 19	No
10	03	21	other particulates and dust (including ball-mill dust) containing dangerous substances	Yes
10	03	22	other particulates and dust (including ball-mill dust) other than those mentioned in 10 03 21	No
10	03	23	solid wastes from gas treatment containing dangerous substances	Yes
10	03	24	solid wastes from gas treatment other than those mentioned in 10 03 23	No
10	03	25	sludges and filter cakes from gas treatment containing dangerous substances	Yes
10	03	26	sludges and filter cakes from gas treatment other than those mentioned in 10 03 25	No
10	03	27	wastes from cooling-water treatment containing oil	Yes
10	03	28	wastes from cooling-water treatment other than those mentioned in 10 03 27	No
10	03	29	waste from treatment of salt slags and black drosses containing dangerous substances	Yes
10	03	30	wastes from treatment of salt slags and black drosses other than those mentioned in 10 03 29	No
10	03	99	wastes not otherwise specified	No
10	04	01	slags from primary and secondary production	Yes
10	04	02	dross and skimmings from primary and secondary production	Yes
10	04	03	calcium arsenate	Yes
10	04	04	flue-gas dust	Yes
10	04	05	other particulates and dust	Yes
10	04	06	solid wastes from gas treatment	Yes
10	04	07	sludges and filter cakes from gas treatment	Yes

10	04	09	wastes from cooling-water treatment containing oil	Yes
10	04	10	waste from cooling-water treatment other than those mentioned in 10 04 09	No
10	04	99	wastes not otherwise specified	No
10	05	01	slags from primary and secondary production	No
10	05	03	flue-gas dust	Yes
10	05	04	other particulates and dust	No
10	05	05	solid waste from gas treatment	Yes
10	05	06	sludges and filter cakes from gas treatment	Yes
10	05	08	wastes from cooling-water treatment containing oil	Yes
10	05	09	wastes from cooling-water treatment other than those mentioned in 10 05 08	No
10	05	10	dross and skimmings that are flammable or emit, upon contact with water, flammable gases in danger	Yes
10	05	11	dross and skimmings other than those mentioned in 10 05 10	No
10	05	99	wastes not otherwise specified	No
10	06	01	slags from primary and secondary production	No
10	06	02	dross and skimmings from primary and secondary production	No
10	06	03	flue-gas dust	Yes
10	06	04	other particulates and dust	No
10	06	06	solid wastes from gas treatment	Yes
10	06	07	sludges and filter cakes from has treatment	Yes
10	06	09	wastes from cooling-water treatment containing oil	Yes
10	06	10	waste from cooling-water treatment other than those mentioned in 10 06 09	No
10	06	99	wastes not otherwise specified	No
10	07	01	slags from primary and secondary production	No
10	07	02	dross and skimmings from primary and secondary production	No
10	07	03	solid wastes from gas treatment	No
10	07	04	other particultes and dust	No
10	07	05	sludges and filter cakes from gas treatment	No
10	07	07	wastes from cooling-water treatment containing oil	Yes
10	07	08	wastes from cooling-water treatment other than those mentioned in 10 07 07	No
10	07	99	wastes not otherwise specified	No
10	08	04	particulates and dust	No
10	08	08	salt slag from primary and secondary production	Yes
10	08	09	other slags	No
10	08	10	dross and skimming that are flammable or emit, upon the contact with water, flammable gases in dang	Yes
10	08	11	dross and skimmings other than those mentioned in 10 08 10	No
10	08	12	tar-containing waste from anode manufacture	Yes
10	08	13	carbon-containing wastes from anode manufacture other than those mentioned in 10 08 12	No
10	08	14	anode scrap	No
10	08	15	flue-gas dust containing dangerous substances	Yes
10	08	16	flue-gas dust other than those mentioned in 10 08 15	No
10	08	17	sludges and filter cakes from flue-gas treatment containing dangerous substances	Yes
10	08	18	sludges and filter cakes from flue-gas treatment other than those mentioned in 10 08 17	No
10	08	19	wastes from cooling-water treatment containing oil	Yes
10	08	20	wastes from cooling-water treatment other than those mentioned in 10 08 19	No
10	08	99	wastes not otherwise specified	No
10	09	03	furnace slag	No
10	09	05	casting cores and moulds which have not undergone pouring containing dangerous substances	Yes
10	09	06	casting cores and moulds which have not undergone pouring other than those mentioned in 10 09 05	No
10	09	07	casting cores and moulds which have undergone pouring containing dangerous substances	Yes
10	09	08	casting cores and moulds have undergone pouring other than those mentioned in 10 09 07	No

10	09	09	flue-gas dust containing dangerous substances	Yes
10	09	10	flue-gas dust other than those mentioned in 10 09 09	No
10	09	11	other particulates containing dangerous substances	Yes
10	09	12	other particulates other than those mentioned in 10 09 11	No
10	09	13	waste binders containing dangerous substances	Yes
10	09	14	waste binders other than those mentioned in 10 09 13	No
10	09	15	waste crack-indicating agent containing dangerous substances	Yes
10	09	16	waste crack-indicating agent other than those mentioned in 10 09 15	No
10	09	99	wastes not otherwise specified	No
10	10	03	furnace slag	No
10	10	05	casting cores and moulds which have not undergone pouring, containing dangerous substances	Yes
10	10	06	casting cores and moulds which have not undergone pouring, other than those mentioned in 10 10 05	No
10	10	07	casting cores and moulds which have undergone pouring, containing dangerous substances	Yes
10	10	08	casting cores and moulds which have undergone pouring, other than those mentioned in 10 10 07	No
10	10	09	flue-gas dust containing dangerous substances	Yes
10	10	10	flue-gas dust other than those mentioned in 10 10 09	No
10	10	11	other particulates containing dangerous substances	Yes
10	10	12	other particulates other than those mentioned in 10 10 11	No
10	10	13	waste binders containing dangerous substances	Yes
10	10	14	waste binders other than those mentioned in 10 10 13	No
10	10	15	waste crack-indicating agent containing dangerous substances	Yes
10	10	16	waste crack-indicating agent other than those mentioned in 10 10 15	No
10	10	99	wastes not otherwise specified	No
10	11	03	waste glass-based fibrous materials	No
10	11	05	particulates and dust	No
10	11	09	waste preparation mixture before thermal processing, containing dangerous substances	Yes
10	11	10	waste preparation mixture before thermal processing, other than those mentioned in 10 11 9	No
10	11	11	waste glass in small particles and glass powder containing heavy metals (for example from cathode ra	Yes
10	11	12	waste glass other than those mentioned in 10 11 11	No
10	11	13	glass-polishing and -grinding sludge containing dangerous substances	Yes
10	11	14	glass-polishing and -grinding sludge other than those mentioned in 10 11 13	No
10	11	15	solid wastes from flue-gas treatment containing dangerous substances	Yes
10	11	16	solid wastes from flue-gas treatment other than those mentioned in 10 11 15	No
10	11	17	sludges and filter cakes from flue-gas treatment containing dangerous substances	Yes
10	11	18	sludges and filter cakes from flue-gas treatment other than those mentioned in 10 11 17	No
10	11	19	solid wastes from on-site effluent treatment containing dangerous substances	Yes
10	11	20	solid wastes from on-site effluent treatment other than those mentioned in 10 11 19	No
10	11	99	wastes not otherwise specified	No
10	12	01	waste preparation mixture before thermal processing	No
10	12	03	particulates and dust	No
10	12	05	sludges and filter cakes from gas treatment	No
10	12	06	discarded moulds	No
10	12	08	waste ceramics, bricks, tiles and construction products (after thermal processing)	No
10	12	09	solid wastes from gas treatment containing dangerous substances	Yes
10	12	10	solid wastes from gas treatment other than those mentioned in 10 12 09	No
10	12	11	wastes from glazing containing heavy metals	Yes
10	12	12	wastes from glazing other than those mentioned in 10 12 11	No
10	12	13	sludge from on-site effluent treatment	No
10	12	99	wastes not otherwise specified	No
10	13	01	waste preparation mixture before thermal processing	No

10	13	04	wastes from calcination and hydration of lime	No
10	13	06	particulates and dust (except 10 13 12 and 10 13 13)	No
10	13	07	sludges and filter cakes from gas treatment	No
10	13	09	wastes from asbestos-cement manufacture containing asbestos	Yes
10	13	10	wastes from asbestos-cement manufacture other than those mentioned in 10 13 09	No
10	13	11	wastes from cement-based composite materials other than those mentioned in 10 13 09 and 10 13 10	No
10	13	12	solid wastes from gas treatment containing dangerous substances	Yes
10	13	13	solid wastes from gas treatment other than those mentioned in 10 13 12	No
10	13	14	waste concrete and concrete sludge	No
10	13	99	wastes not otherwise specified	No
10	14	01	waste from gas cleaning containing mercury	Yes
11	01	05	pickling acids	Yes
11	01	06	acids not otherwise specified	Yes
11	01	07	pickling bases	Yes
11	01	08	phosphatising sludges	Yes
11	01	09	sludges and filter cakes containing dangerous substances	Yes
11	01	10	sludges and filter cakes other than those mentioned in 11 01 09	No
11	01	11	aqueous rinsing liquids containing dangerous substances	Yes
11	01	12	aqueous rinsing liquids other than those mentioned in 11 01 11	No
11	01	13	degreasing wastes containing dangerous substances	Yes
11	01	14	degreasing wastes other than those mentioned in 11 01 13	No
11	01	15	eluate and sludges from membrane systems or ion exchange systems containing dangerous substanc	Yes
11	01	16	saturated or spent ion exchange resins	Yes
11	01	98	other wastes containing dangerous substances	Yes
11	01	99	wastes not otherwise specified	No
11	02	02	sludges from zinc hydrometallurgy (including jarosite, goethite)	Yes
11	02	03	wastes from the production of anodes for aqueous electrolytical processes	No
11	02	05	wastes from copper hydrometallurgical processes containing dangerous substances	Yes
11	02	06	wastes from copper hydrometallurgical processes other than those mentioned in 11 02 05	No
11	02	07	other wastes containing dangerous substances	Yes
11	02	99	wastes not otherwise specified	No
11	03	01	waste containing cyanide	Yes
11	03	02	other wastes	Yes
11	05	01	hard zinc	No
11	05	02	zinc ash	No
11	05	03	solid wastes from gas treatment	Yes
11	05	04	spent flux	Yes
11	05	99	wastes not otherwise specified	No
12	01	01	ferrous metal filings and turnings	No
12	01	02	ferrous metal dust and particles	No
12	01	03	non-ferrous metal filings and turnings	No
12	01	04	non-ferrous metal dust and particles	No
12	01	05	plastics shavings and turnings	No
12	01	06	mineral-based machining oils containing halogens (except emulsions and solutions)	Yes
12	01	07	mineral-based machining oils free of halogens (except emulsions and solutions)	Yes
12	01	08	machining emulsions and solutions containing halogens	Yes
12	01	09	machining emulsions and solutions free of halogens	Yes
12	01	10	synthetic machining oils	Yes
12	01	12	spent waxes and fats	Yes
12	01	13	welding wastes	No

12	01	14	machining sludges containing dangerous substances	Yes
12	01	15	machining sludges other than those mentioned in 12 01 14	No
12	01	16	waste blasting material containing dangerous substances	Yes
12	01	17	waste blasting material other than those mentioned in 12 01 16	No
12	01	18	metal sludge (grinding, honing and lapping sludge) containing oil	Yes
12	01	19	readily biodegradable machining oil	Yes
12	01	20	spent grinding bodies and grinding materials containing dangerous substances	Yes
12	01	21	spent grinding bodies and grinding materials other than those mentioned in 12 01 20	No
12	01	99	wastes not otherwise specified	No
12	03	01	aqueous washing liquids	Yes
12	03	02	steam degreasing wastes	Yes
13	01	01	hydraulic oils, containing PCBs (15)	Yes
13	01	04	chlorinated emulsions	Yes
13	01	05	non-chlorinated emulsions	Yes
13	01	09	mineral-based chlorinated hydraulic oils	Yes
13	01	10	mineral-based non-chlorinated hydraulic oils	Yes
13	01	11	synthetic hydraulic oils	Yes
13	01	12	readily biodegradable hydraulic oils	Yes
13	01	13	other hydraulic oils	Yes
13	02	04	mineral-based chlorinated engine, gear and lubricating oils	Yes
13	02	05	mineral-based non-chlorinated engine, gear and lubricating oils	Yes
13	02	06	synthetic engine, gear and lubricating oils	Yes
13	02	07	readily biodegradable engine, gear and lubricating oils	Yes
13	02	08	other engine, gear and lubricating oils	Yes
13	03	01	insulating or heat transmission oils containing PCBs	Yes
13	03	06	mineral-based chlorinated insulating and heat transmission oils other than those mentioned in 13 03 0	Yes
13	03	07	mineral-based non-chlorinated insulating and heat transmission oils	Yes
13	03	08	synthetic insulating and heat transmission oils	Yes
13	03	09	readily biodegradable insulating and heat transmission oils	Yes
13	03	10	other insulating and heat transmission oils	Yes
13	04	01	bilge oils from inland navigation	Yes
13	04	02	bilge oils from jetty sewers	Yes
13	04	03	bilge oils from other navigation	Yes
13	05	01	solids from grit chambers and oil/water separators	Yes
13	05	02	sludges from oil/water separators	Yes
13	05	03	interceptor sludges	Yes
13	05	06	oil from oil/water separators	Yes
13	05	07	oily water from oil/water separators	Yes
13	05	08	mixtures of wastes from grit chambers and oil/water separators	Yes
13	07	01	fuel oil and diesel	Yes
13	07	02	petrol	Yes
13	07	03	other fuels (including mixtures)	Yes
13	08	01	desalter sludges or emulsions	Yes
13	08	02	other emulsions	Yes
13	08	99	wastes not otherwise specified	Yes
14	06	01	chlorofluorocarbons, HCFC, HFC	Yes
14	06	02	other halogenated solvents and solvent mixtures	Yes
14	06	03	other solvents and solvent mixtures	Yes
14	06	04	sludges or solid wastes containing halogenated solvents	Yes
14	06	05	sludges or solid wastes containing other solvents	Yes

15	01	01	paper and cardboard packaging	No
15	01	02	plastic packaging	No
15	01	03	wooden packaging	No
15	01	04	metallic packaging	No
15	01	05	composite packaging	No
15	01	06	mixed packaging	No
15	01	07	glass packaging	No
15	01	09	textile packaging	No
15	01	10	packaging containing residues of or contaminated by dangerous substances	Yes
15	01	11	metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empt	Yes
15	02	02	absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothir	Yes
15	02	03	absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 (	No
16	01	03	end-of-life tyres	No
16	01	04	end-of-life vehicles	Yes
16	01	06	end-of-life vehicles, containing neither liquids nor other hazardous components	No
16	01	07	oil filters	Yes
16	01	08	components containing mercury	Yes
16	01	09	components containing PCBs	Yes
16	01	10	explosive components (for example air bags)	Yes
16	01	11	brake pads containing asbestos	Yes
16	01	12	brake pads other than those mentioned in 16 01 11	No
16	01	13	brake fluids	Yes
16	01	14	antifreeze fluids containing dangerous substances	Yes
16	01	15	antifreeze fluids other than those mentioned in 16 01 14	No
16	01	16	tanks for liquefied gas	No
16	01	17	ferrous metal	No
16	01	18	non-ferrous metal	No
16	01	19	plastic	No
16	01	20	glass	No
16	01	21	hazardous components other than those mentioned in 16 01 07 to 16 01 11 and 16 01 13 and 16 01 1	Yes
16	01	22	components not otherwise specified	No
16	01	99	wastes not otherwise specified	No
16	02	09	transformers and capacitors containing PCBs	Yes
16	02	10	discarded equipment containing or contaminated by PCBs other than those mentioned in 16 02 09	Yes
16	02	11	discarded equipment containing chlorofluorocarbons, HCFC, HFC	Yes
16	02	12	discarded equipment containing free asbestos	Yes
16	02	13	discarded equipment containing hazardous components (16) other than those mentioned in 16 02 09 t	Yes
16	02	14	discarded equipment other than those mentioned in 16 02 09 to 16 02 13	No
16	02	15	hazardous components removed from discarded equipment	Yes
16	02	16	components removed from discarded equipment other than those mentioned in 16 02 15	No
16	03	03	inorganic wastes containing dangerous substances	Yes
16	03	04	inorganic wastes other than those mentioned in 16 03 03	No
16	03	05	organic wastes containing dangerous substances	Yes
16	03	06	organic wastes other than those mentioned in 16 03 05	No
16	04	01	waste ammunition	Yes
16	04	02	fireworks wastes	Yes
16	04	03	other waste explosives	Yes
16	05	04	gases in pressure containers (including halons) containing dangerous substances	Yes
16	05	05	gases in pressure containers other than those mentioned in 16 05 04	No
16	05	06	laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laborato	Yes

16	05	07	discarded inorganic chemicals consisting of or containing dangerous substances	Yes
16	05	08	discarded organic chemicals consisting of or containing dangerous substances	Yes
16	05	09	discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08	No
16	06	01	lead batteries	Yes
16	06	02	Ni-Cd batteries	Yes
16	06	03	mercury-containing batteries	Yes
16	06	04	alkaline batteries (except 16 06 03)	No
16	06	05	other batteries and accumulators	No
16	06	06	separately collected electrolyte from batteries and accumulators	Yes
16	07	08	wastes containing oil	Yes
16	07	09	wastes containing other dangerous substances	Yes
16	07	99	wastes not otherwise specified	No
16	08	01	spent catalysts containing gold, silver, rhenium, rhodium, palladium, iridium or platinum (except 16 08	No
16	08	02	spent catalysts containing dangerous transition metals (17) or dangerous transition metal compounds	Yes
16	08	03	spent catalysts containing transition metals or transition metal compounds not otherwise specified	No
16	08	04	spent fluid catalytic cracking catalysts (except 16 08 07)	No
16	08	05	spent catalysts containing phosphoric acid	Yes
16	08	06	spent liquids used as catalysts	Yes
16	08	07	spent catalysts contaminated with dangerous substances	Yes
16	09	01	permanganates, for example potassium permanganate	Yes
16	09	02	chromates, for example potassium chromate, potassium or sodium dichromate	Yes
16	09	03	peroxides, for example hydrogen peroxide	Yes
16	09	04	oxidising substances, not otherwise specified	Yes
16	10	01	aqueous liquid wastes containing dangerous substances	Yes
16	10	02	aqueous liquid wastes other than those mentioned in 16 10 01	No
16	10	03	aqueous concentrates containing dangerous substances	Yes
16	10	04	aqueous concentrates other than those mentioned in 16 10 03	No
16	11	01	carbon-based linings and refractories from metallurgical processes containing dangerous substances	Yes
16	11	02	carbon-based linings and refractories fronm metallurgical processes other than those mentioned in 16	No
16	11	03	other linings and refractories from metallurgical processes containing dangerous substances	Yes
16	11	04	other linings and refractories from metallurgical processes other than those mentioned in 16 11 03	No
16	11	05	linings and refractories from non-metallurgical processes containing dangerous substances	Yes
16	11	06	linings and refractories from non-metallurgical processes other than those mentioned in 16 11 05	No
17	01	01	concrete	No
17	01	02	bricks	No
17	01	03	tiles and ceramics	No
17	01	06	mixtures of, or separate fractions of concrete, bricks, tiles and ceramics containing dangerous substan	Yes
17	01	07	mixture of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	No
17	02	01	wood	No
17	02	02	glass	No
17	02	03	plastic	No
17	02	04	glass, plastic and wood containing or contaminated with dangerous substances	Yes
17	03	01	bituminous mixtures containing coal tar	Yes
17	03	02	bituminous mixtures containing other than those mentioned in 17 03 01	No
17	03	03	coal tar and tarred products	Yes
17	04	01	copper, bronze, brass	No
17	04	02	aluminium	No
17	04	03	lead	No
17	04	04	zinc	No
17	04	05	iron and steel	No

17	04	06	tin	No
17	04	07	mixed metals	No
17	04	09	metal waste contaminated with dangerous substances	Yes
17	04	10	cables containing oil, coal tar and other dangerous substances	Yes
17	04	11	cables other than those mentioned in 17 04 10	No
17	05	03	soil and stones containing dangerous substances	Yes
17	05	04	soil and stones other than those mentioned in 17 05 03	No
17	05	05	dredging spoil containing dangerous substances	Yes
17	05	06	dredging spoil other than those mentioned 17 05 05	No
17	05	07	track ballast containing dangerous substances	Yes
17	05	08	track ballast other than those mentioned in 17 05 07	No
17	06	01	insulation materials containing asbestos	Yes
17	06	03	other insulation materials consisting of or containing dangerous substances	Yes
17	06	04	insulation materials other than those mentioned in 17 06 01 and 17 06 03	No
17	06	05	construction materials containing asbestos (18)	Yes
17	08	01	gypsum-based construction materials contaminated with dangerous substances	Yes
17	08	02	gypsum-based construction materials other than those mentioned in 17 08 01	No
17	09	01	construction and demolition wastes containing mercury	Yes
17	09	02	construction and demolition wastes containing pcb (for example pcb-containing sealants, pcb-containir	Yes
17	09	03	other construction and demolition wastes (including mixed wastes) containing dangerous substances	Yes
17	09	04	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 0	No
18	01	01	sharps (except 18 01 03)	No
18	01	02	body parts and organs including blood bags and blood preserves (except 18 01 03)	No
18	01	03	wastes whose collection and disposal is subject to special requirements in order to prevent infection	Yes
18	01	04	wastes whose collection and disposal is not subject to special requirements in order to prevent infectio	No
18	01	06	chemicals consisting of or containing dangerous substances	Yes
18	01	07	chemicals other than those mentioned in 18 01 06	No
18	01	08	cytotoxic and cytostatic medicines	Yes
18	01	09	medicines other than those mentioned in 18 01 08	No
18	01	10	amalgam waste from dental care	Yes
18	02	01	sharps except (18 02 02)	No
18	02	02	wastes whose collection and disposal is subject to special requirements in order to prevent infection	Yes
18	02	03	wastes whose collection and disposal is not subject to special requirements in order to prevent infectio	No
18	02	05	chemicals consisting of or containing dangerous substances	Yes
18	02	06	chemicals other than those mentioned in 18 02 05	No
18	02	07	cytotoxic and cytostatic medicines	Yes
18	02	08	medicines other than those mentioned in 18 02 07	No
19	01	02	ferrous materials removed from bottom ash	No
19	01	05	filter cake from gas treatment	Yes
19	01	06	aqueous liquid wastes from gas treatment and other aqueous liquid wastes	Yes
19	01	07	solid wastes from gas treatment	Yes
19	01	10	spent activated carbon from flue-gas treatment	Yes
19	01	11	bottom ash and slag containing dangerous substances	Yes
19	01	12	bottom ash and slag other than those mentioned in 19 01 11	No
19	01	13	fly ash containing dangerous substances	Yes
19	01	14	fly ash other than those mentioned in 19 01 13	No
19	01	15	boiler dust containing dangerous substances	Yes
19	01	16	boiler dust other than those mentioned in 19 01 15	No
19	01	17	pyrolysis wastes containing dangerous substances	Yes
19	01	18	pyrolysis wastes other than those mentioned in 19 01 17	No

19	01	19	sands from fluidised beds	No
19	01	99	wastes not otherwise specified	No
19	02	03	premixed wastes composed only of non-hazardous wastes	No
19	02	04	premixed wastes composed of at least one hazardous waste	Yes
19	02	05	sludges from physico/chemical treatment containing dangerous substances	Yes
19	02	06	sludges from physico/chemical treatment other than those mentioned in 19 02 05	No
19	02	07	oil and concentrates from separation	Yes
19	02	08	liquid combustible wastes containing dangerous substances	Yes
19	02	09	solid combustible wastes containing dangerous substances	Yes
19	02	10	combustible wastes other than those mentioned in 19 02 08 and 19 02 09	No
19	02	11	other wastes containing dangerous substances	Yes
19	02	99	wastes not otherwise specified	No
19	03	04	wastes marked as hazardous, partly (20) stabilised	Yes
19	03	05	stabilised wastes other than those mentioned in 19 03 04	No
19	03	06	wastes marked as hazardous, solidified	Yes
19	03	07	solidified wastes other than those mentioned in 19 03 06	No
19	04	01	vitrified waste	No
19	04	02	fly ash and other flue-gas treatment wastes	Yes
19	04	03	non-vitrified solid phase	Yes
19	04	04	aqueous liquid wastes from vitrified waste tempering	No
19	05	01	non-composted fraction of municipal and similar wastes	No
19	05	02	non-composted fraction of animal and vegetable waste	No
19	05	03	off-specification compost	No
19	05	99	wastes not otherwise specified	No
19	06	03	liquor from anaerobic treatment of municipal waste	No
19	06	04	digestate from anaerobic treatment of municipal waste	No
19	06	05	liquor from anaerobic treatment of animal and vegetable waste	No
19	06	06	digestate from anaerobic treatment of animal and vegetable waste	No
19	06	99	wastes not otherwise specified	No
19	07	02	landfill leachate containing dangerous substances	Yes
19	07	03	landfill leachate other than those mentioned in 19 07 02	No
19	08	01	screenings	No
19	08	02	waste from desanding	No
19	08	05	sludges from treatment of urban waste water	No
19	08	06	saturated or spent ion exchange resins	Yes
19	08	07	solutions and sludges from regeneration of ion exchangers	Yes
19	08	08	membrane system waste containing heavy metals	Yes
19	08	09	grease and oil mixture from oil/water separation containing only edible oil and fats	No
19	08	10	grease and oil mixture from oil/water separation other than those mentioned in 19 08 09	Yes
19	08	11	sludges containing dangerous substances from biological treatment of industrial waste water	Yes
19	08	12	sludges from biological treatment of industrial waste water other than those mentioned in 19 08 11	No
19	08	13	sludges containing dangerous substances from other treatment of industrial waste water	Yes
19	08	14	sludges from other treatment of industrial waste water other than those mentioned in 19 08 13	No
19	08	99	wastes not otherwise specified	No
19	09	01	solid waste from primary filtration and screenings	No
19	09	02	sludges from water clarification	No
19	09	03	sludges from decarbonation	No
19	09	04	spent activated carbon	No
19	09	05	saturated or spent ion exchange resins	No
19	09	06	solutions and sludges from regeneration of ion exchangers	No

19	09	99	wastes not otherwise specified	No
19	10	01	iron and steel waste	No
19	10	02	non-ferrous waste	No
19	10	03	fluff-light fraction and dust containing dangerous substances	Yes
19	10	04	fluff-light fraction and dust other than those mentioned in 19 10 03	No
19	10	05	other fractions containing dangerous substances	Yes
19	10	06	other fractions other than those mentioned in 19 10 05	No
19	11	01	spent filter clays	Yes
19	11	02	acid tars	Yes
19	11	03	aqueous liquid wastes	Yes
19	11	04	wastes from cleaning of fuel with bases	Yes
19	11	05	sludges from on-site effluent treatment containing dangerous substances	Yes
19	11	06	sludges from on-site effluent treatment other than those mentioned in 19 11 05	No
19	11	07	wastes from flue-gas cleaning	Yes
19	11	99	wastes not otherwise specified	No
19	12	01	paper and cardboard	No
19	12	02	ferrous metal	No
19	12	03	non-ferrous metal	No
19	12	04	plastic and rubber	No
19	12	05	glass	No
19	12	06	wood containing dangerous substances	Yes
19	12	07	wood other than that mentioned in 19 12 06	No
19	12	08	textiles	No
19	12	09	minerals (for example sand, stones)	No
19	12	10	combustible waste (refuse derived fuel)	No
19	12	11	other wastes (including mixtures of materials) from mechanical treatment of waste containing dangero	Yes
19	12	12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those m	No
19	13	01	solid wastes from soil remediation containing dangerous substances	Yes
19	13	02	solid wastes from soil remediation other than those mentioned in 19 13 01	No
19	13	03	sludges from soil remediation containing dangerous substances	Yes
19	13	04	sludges from soil remediation other than those mentioned in 19 13 03	No
19	13	05	sludges from groundwater remediation containing dangerous substances	Yes
19	13	06	sludges from groundwater remediation other than those mentioned in 19 13 05	No
19	13	07	aqueous liquid wastes and aqueous concentrates from groundwater remediation containing dangerous	Yes
19	13	08	aqueous liquid wastes and aqueous concentrates from groundwater remediation other than those men	No
20	01	01	paper and cardboard	No
20	01	02	glass	No
20	01	08	biodegradable kitchen and canteen waste	No
20	01	10	clothes	No
20	01	11	textiles	No
20	01	13	solvents	Yes
20	01	14	acids	Yes
20	01	15	alkalines	Yes
20	01	17	photochemicals	Yes
20	01	19	pesticides	Yes
20	01	21	fluorescent tubes and other mercury-containing waste	Yes
20	01	23	discarded equipment containing chlorofluorocarbons	Yes
20	01	25	edible oil and fat	No
20	01	26	oil and fat other than those mentioned in 20 01 25	Yes
20	01	27	paint, inks, adhesives and resins containing dangerous substances	Yes

20	01	28	paint, inks, adhesives and resins other than those mentioned in 20 01 27	No
20	01	29	detergents containing dangerous substances	Yes
20	01	30	detergents other than those mentioned in 20 01 29	No
20	01	31	cytotoxic and cytostatic medicines	Yes
20	01	32	medicines other than those mentioned in 20 01 31	No
20	01	33	batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and acc	Yes
20	01	34	batteries and accumulators other than those mentioned in 20 01 33	No
20	01	35	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and and 20 01 2	Yes
20	01	36	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 2(	No
20	01	37	wood containing dangerous substances	Yes
20	01	38	wood other than that mentioned in 20 01 37	No
20	01	39	plastics	No
20	01	40	metals	No
20	01	41	wastes from chimney sweeping	No
20	01	99	other fractions not otherwise specified	No
20	02	01	biodegradable waste	No
20	02	02	soil and stones	No
20	02	03	other non-biodegradable wastes	No
20	03	01	mixed municipal waste	No
20	03	02	waste from markets	No
20	03	03	street-cleaning residues	No
20	03	04	septic tank sludge	No
20	03	06	waste from sewage cleaning	No
20	03	07	bulky waste	No
20	03	99	municipal wastes not otherwise specified	No

RD_Code	RD_Description	RD_Type
D1	Deposit into or onto land (e.g. landfill etc)	Disposal
D10	Incineration on land	Disposal
D11	Incineration at sea	Disposal
D12	Permanent storage (e.g., emplacement of containers in a mine, etc.)	Disposal
D13	Blending or mixing prior to submission to any of the operations numbered D1 to D12	Disposal
D14	Repackaging prior to submission to any of the operations numbered D1 to D13	Disposal
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending cc	Disposal
D2	Land treatment (e.g. biodegradation of liquid or sludgy discards in soils, etc.)	Disposal
D3	Deep injection (e.g. injection of pumpable discards into wells, salt domes or naturally occurring reposit	Disposal
D4	Surface impoundment (e.g. placement of liquid or sludge discards into pits, ponds or lagoons etc.)	Disposal
D5	Specially engineered landfill (e.g. placement into lined discrete cells which are capped and isolated fro	Disposal
D6	Release into a water body except seas/oceans	Disposal
D7	Release into seas/oceans including sea-bed insertion	Disposal
D8	Biological treatment not specified elsewhere in this list which results in final compounds or mixtures wl	Disposal
D9	Physico chemical treatment not specified elsewhere in this list which results in final compounds or mix	Disposal
R1	Use principally as a fuel or other means to generate energy	Recovery
R10	Land treatment resulting in benefit to agriculture or ecological improvement	Recovery
R11	Uses of wastes obtained from any of the operations numbered R1 to R10	Recovery
R12	Exchange of wastes for submission to any of the operations numbered R1 to R11	Recovery
R13	Accumulation of material intended for any operation numbered R1 to R12 (excluding temporary storag	Recovery
R2	Solvent reclamation/regeneration	Recovery
R3	Recycling/reclamation of organic substances which are not used as solvents (including composting an	Recovery
R4	Recycling/reclamation of metals and metal compounds	Recovery
R5	Recycling/reclamation of other inorganic materials	Recovery
R6	Regeneration of acids or bases	Recovery
R7	Recovery of components used for pollution abatement	Recovery
R8	Recovery of components from catalysts	Recovery
R9	Used oil re-refining or other reuses of oil	Recovery

Methods used for determination of releases to air, water, waste water or sewer: Method Identification Codes

See also the relevant sections of EPA AER Guidance Document and EPA Guidance Note Annex on AER / PRTR Reporting

For each parameter, where this applies…	Please enter **Method Category (M/C/E)**, **Method Code** and **Method Designation or Description** according to this table.		
Category of Method Used		**Method Used**	
	M/C/E	Method Code	**Designation or Description**
Measurement methodologies **If you used…**	**Then please enter…**		
Internationally approved measurement standard	**M**	**short designation of the relevant standard (e.g. EN 14385:2004)**	**Leave this cell blank**
Measurement methodology already prescribed by the competent authority in a licence or an operating permit for that facility	**M**	**PER**	**Enter brief description of method you used**
National or regional binding measurement methodology prescribed by legal act for the pollutant and facility concerned	**M**	**NRB**	**Enter brief description of method you used**
Alternative measurement method in accordance with existing CEN/ISO measurement standards	**M**	**ALT**	**Enter brief description of method you used**
Measurement methodology the performance of which is demonstrated by means of certified reference materials and accepted by competent authority	**M**	**CRM**	**Enter brief description of method you used**
Other measurement methodology	**M**	**OTH**	**Enter brief description of method you used**
Calculation methodologies **If you used…**	**Then please enter…**		
Internationally approved calculation method	**C**	**short designation of the method used: ETS, IPCC, UNECE/EMEP**	**Leave this cell blank**
Calculation methodology already prescribed by the competent authority in a licence or an operating permit for that facility	**C**	**PER**	**Enter brief description of method you used**
National or regional binding calculation methodology prescribed by legal act for the pollutant and facility concerned	**C**	**NRB**	**Enter brief description of method you used**
Mass balance method which is accepted by the competent authority	**C**	**MAB**	**Enter brief description of method you used**
European-wide sector specific calculation method	**C**	**SSC**	**Enter brief description of method you used**
Other calculation methodology	**C**	**OTH**	**Enter brief description of method you used**
Estimation methodologies **If you used…**	**Then please enter…**		

A non-standardised estimation procedure	**E**	**ESTIMATE**	**Leave this cell blank, but please ensure that you enter a brief description of method you used for this estimation as a footnote in your paper AER**

"**E**" and **"ESTIMATE"** 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.

Completed Example: this example illustrates how the information should be entered for a representative case

Releases to air						
Pollutant		Method			Quantity	
No. Annex II	Name	M/C/E	Method used		T (total) (kg/year)	A (accidental) kg/year
			Code	Designation or description		
1	CH_4	**C**	**NRB**	regional binding measurement methodology using specific gas chromatography	125,000	0
3	CO_2	**C**	**ETS**		244,000,000	0
14	HCFCs	**E**	**ESTIMATE**		1.28	1.28
18	Cd	**M**	**EN 14385:2004**		12.5	0
72	PAH	**M**	**NRB**	**VDI 3873**	122	0

Method Codes
M
C
E

Lookups Configured
Y

Water Types
Freshwater
Seawater
Estuary

Transfer Destination
Within the Country
To Other Countries

Waste Treatment Operation
Recovery
Disposal

Waste Method Used
Weighed
None
Volume Calculation

Treatment Location
Onsite in Ireland
Offsite in Ireland
Abroad

Yes/No
Yes
No

General Help
This Excel workbook is divided into numerous worksheets
The first group of worksheets form the AER return once filled in by the licensee
The remaining worksheets provide reference material to assist in the filling out of the data
Quick help on filling out each sheet can also be found by hovering your mouse over the red triangle in cells that include help

Printing
The AER return data from each sheet can be printed by clicking on the PRINT THIS SHEET button

Creating & Submitting an AER Return Back to top
Once all relevant data has been entered click the CREATE AER XML RETURN & UPLOAD button on the Facilities worksheet
This will validate the workbook and prompt you to enter a location for creating the XML AER Return file (C:\ by default)
You can either accept the default path or enter a different path where the file will be created, then click the OK button
Once the file has been created a message will be displayed containing further instructions (Make a note of the XML file at this point)
You will then be redirected to the AER returns website where you must first login and then attach your XML file for uploading
It is therefore important to ensure you have internet access from the computer you are making a return from
Follow the instructions on the website to complete the AER return

Facility ID & Activities Back to top
This worksheet contains Licensee-specific information about the facility making the return
The following areas should be filled out on this worksheet :
Production Volume
Number of Installations
Number of Operating Hours in Year
Number of Employees
User Feedback/Comments
Web Address

You should also fill out section 3 - Solvents Directive
Please examine all pre-entered data to ensure that it is correct. You will need to inform the EPA if anything should be altered

Releases to Air Back to top
This worksheet allows you to enter any pollutants that are released to air
Based on your Class Activities the PRTR pollutants list will be divided into two sections (Section A and B)
Section A represents sector-specific pollutants which apply to air and are based on your class activities
Section B represents all remaining pollutants that could be released to air but are not contained in Section A
This division of pollutants allows for quicker and more intuitive filling out of the worksheet as pollutants are grouped by priority
The third section (Section C) provides an area to fill in Licensed pollutants

An additional section for Landfill operators must be filled out also
Enter a Total KG/Year, Method used details and the Facility Total Capacity as appropriate

Each section is filled in the same manner

Begin by selecting a pollutant from the dropdown list under the pollutant section
When you select a pollutant the pollutant number and name will appear in the corresponding cells
Next, fill in the method used section of the worksheet by selecting a method from the dropdown list
Only Measured, Calculated or Estimated are the values that can be entered here
Fill in a Method Code and Designation or Description (For further help please refer to the Methods Used worksheet) Click here for Methods Used Reference
Next, enter the quantities of release for this pollutant under Emission Point 1
This will appear in the Total Quantity cell also
If any Accidental or Fugitive releases for this pollutant are applicable then enter these under the Accidental or Fugitive section
If you have releases from more than one Emission Point then you can add additional points by clicking on the Add Emission Point button
This will add an additional Emission Point column to the right of the last one (A maximum of 9 points can be used)
The Accidental and Fugitive quantities represent the totals for ALL emission points and not one particular point

You can also enter comments or a description of each emission point in the grey cell over the emission point

In order to add another pollutant in a particular section you must click the ADD NEW ROW button
If you have made a mistake and wish to remove the last row entered then click the DELETE LAST ROW button in the relevant section
If you have no releases for a particular section then do not enter any pollutant or related data into the section - leave it blank

Releases to Waters Back to top
This worksheet allows you to enter any pollutants that are released to water
Based on your Class Activities the PRTR pollutants list will be divided into two sections (Section A and B)
Section A represents sector-specific pollutants which apply to water and are based on your class activities
Section B represents all remaining pollutants that could be released to water but are not contained in Section A
This division of pollutants allows for quicker and more intuitive filling out of the worksheet as pollutants are grouped by priority
The third section (Section C) provides an area to fill in Licensed pollutants

Each section is filled in the same manner
Begin by selecting a pollutant from the dropdown list under the pollutant section
When you select a pollutant the pollutant number and name will appear in the corresponding cells
Next, fill in the method used section of the worksheet by selecting a method from the dropdown list
Only Measured, Calculated or Estimated are the values that can be entered here
Fill in a Method Code and Designation or Description (For further help please refer to the Methods Used worksheet) Click here for Methods Used Reference
Next, enter the quantities of release for this pollutant under Emission Point 1
This will appear in the Total Quantity cell also
If any Accidental or Fugitive releases for this pollutant are applicable then enter these under the Accidental or Fugitive section
If you have releases from more than one Emission Point then you can add additional points by clicking on the Add Emission Point button
This will add an additional Emission Point column to the right of the last one (A maximum of 9 points can be used)
The Accidental and Fugitive quantities represent the totals for ALL emission points and not one particular point

You can also enter comments or a description of each emission point in the grey cell over the emission point

In order to add another pollutant in a particular section you must click the ADD NEW ROW button
If you have made a mistake and wish to remove the last row entered then click the DELETE LAST ROW button in the relevant section
If you have no releases for a particular section then do not enter any pollutant or related data into the section - leave it blank

Offsite Transfers of Pollutants Back to top

This worksheet allows you to enter any pollutants that are transferred offsite and are destined for waste-water treatment or sewer
This worksheet is divided into two sections (Section A and B)
Section A represents PRTR pollutants while section B represents Licensed pollutants

Each section is filled in the same manner
Begin by selecting a pollutant from the dropdown list under the pollutant section
When you select a pollutant the pollutant number and name will appear in the corresponding cells
Next, fill in the method used section of the worksheet by selecting a method from the dropdown list
Only Measured, Calculated or Estimated are the values that can be entered here
Fill in a Method Code and Designation or Description (For further help please refer to the Methods Used worksheet) Click here for Methods Used Reference
Next, enter the quantities of release for this pollutant under Emission Point 1
This will appear in the Total Quantity cell also
If any Accidental or Fugitive releases for this pollutant are applicable then enter these under the Accidental or Fugitive section
If you have releases from more than one Emission Point then you can add additional points by clicking on the Add Emission Point button
This will add an additional Emission Point column to the right of the last one (A maximum of 9 points can be used)
The Accidental and Fugitive quantities represent the totals for ALL emission points and not one particular point

You can also enter comments or a description of each emission point in the grey cell over the emission point

In order to add another pollutant in a particular section you must click the ADD NEW ROW button
If you have made a mistake and wish to remove the last row entered then click the DELETE LAST ROW button in the relevant section
If you have no releases for a particular section then do not enter any pollutant or related data into the section - leave it blank

Releases to Land Back to top

This worksheet allows you to enter any pollutants that are released to land
This worksheet is divided into two sections (Section A and B)
Section A represents PRTR pollutants while section B represents Licensed pollutants

Each section is filled in the same manner
Begin by selecting a pollutant from the dropdown list under the pollutant section
When you select a pollutant the pollutant number and name will appear in the corresponding cells
Next, fill in the method used section of the worksheet by selecting a method from the dropdown list
Only Measured, Calculated or Estimated are the values that can be entered here
Fill in a Method Code and Designation or Description (For further help please refer to the Methods Used worksheet) Click here for Methods Used Reference
Next, enter the quantities of release for this pollutant under Emission Point 1
This will appear in the Total Quantity cell also
If any Accidental releases for this pollutant are applicable then enter these under the Accidental section
If you have releases from more than one Emission Point then you can add additional points by clicking on the Add Emission Point button
This will add an additional Emission Point column to the right of the last one (A maximum of 9 points can be used)
The Accidental quantities represent the totals for ALL emission points and not one particular point

You can also enter comments or a description of each emission point in the grey cell over the emission point

In order to add another pollutant in a particular section you must click the ADD NEW ROW button

If you have made a mistake and wish to remove the last row entered then click the DELETE LAST ROW button in the relevant section
If you have no releases for a particular section then do not enter any pollutant or related data into the section - leave it blank

Treatment & Transfers of Waste Back to top

This worksheet allows you to enter onsite treatment and offsite transfers of waste
Begin by selecting the transfer destination from the dropdown list (valid entries are Within the Country or To Other Countries)
Next, select the EWC (European Waste Code) by double-clicking on the EWC cell for the record you are filling out
The EWC reference worksheet will be displayed
Select the appropriate chapters to build the waste code (These are broken into Group, SubGroup and Code on the reference sheet)
To select a code double-click on it where you will then be brought to the next section of codes under the selected one
Appropriate codes for the selected values will be highlighted in blue
Repeat this for the subsequent levels to retrieve the full six-digit Waste Code
The code will then be returned to the Treatment & Transfers of Waste sheet that is being filled out
If you already know the full six digit EWC then just scroll down the Waste Reference sheet and double click on the six-digit code
The Hazardous value for the entered EWC will be displayed
Enter a quantity for the particular EWC (Tonnes/year)
Enter a description for the waste
Next, select a Waste Treatment Operation by double-clicking on the cell under this section
The Waste Treatment Operation reference worksheet will be displayed
Select the appropriate code by double-clicking on it
The code will then be returned to the Treatment & Transfers of Waste sheet that is being filled out
Select a method used from the dropdown lists in the Method Used section of the sheet
Select a Location of Treatment from the dropdown list (valid values are Onsite in Ireland, Offsite in Ireland and Abroad)
Enter the name of the recoverer/disposer
Enter the address of the recoverer/disposer
Enter the final address of the recovery/disposal site
Enter the Licence / Permit No. of the final recovery/disposal site
In order to add another waste code record you must click the ADD NEW ROW button
If you have made a mistake and wish to remove the last row entered then click the DELETE LAST ROW button in the relevant section
If you have no waste data to enter then do not enter any waste or related data into this worksheet - leave it blank

Ref. - NACE Codes Back to top
This worksheet contains reference information for NACE codes Click here for NACE Codes Reference

Ref. PRTR Activities Back to top
This worksheet contains reference information for PRTR Class Activities Click here for PRTR Class Activities Reference

Ref. PRTR Pollutants Back to top
This worksheet contains reference information for PRTR Pollutants Click here for PRTR Pollutants Reference

Ref. Licensed Pollutants Back to top
This worksheet contains reference information for Licensed Pollutants Click here for Licensed Pollutants Reference

Ref. Waste Codes Back to top
This worksheet contains reference information for EWC (European Waste Codes) Click here for Waste Codes Reference

Ref. RecovererDisposer Codes
This worksheet contains reference information for Recoverer and Disposer Codes

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Click here for Recoverer/Disposer Codes Reference

Ref. Methods Used
This worksheet contains reference information for Methods Used

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Click here for Methods Used Reference

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