Facility Information Summary

Licence Register Number	W0025-03
Name of site	Powerstown Landfill
Site Location	Powerstown, County Carlow
NACE Code	3821
Class of Activity	Class 1
RBME risk category	A2
National Grid Reference (6E, 6 N)	270862, 168952

A brief description of the activities/process at the site for the reporting year. This should include information such as production increases or decreases on site, any infrastructural changes, environmental performance improvements which were measured during the reporting year;

2011 activities consisted of the landfilling of 10,145 tonnes and the recovery of 1,533 tonnes.
Disposal tonnes continued to decrease from previous years.
No major infrastructural changes were carried out with the exception of minor amendments to the gas collection system in the active cells. In addition, three new groundwater monitoring boreholes were installed to the west of the site.

Declaration:

All the data and information presented in this report has been checked and certified as being accurate. The quality of the information is assured to meet licence requirements.

_____	_____
Signature Group/Facility manager (or nominated, suitably qualified and experienced deputy)	Date

AER summary template-AIR emissions

			Additional information
1	Does your site have licensed air emissions? If yes please complete table 1, 2 and 3 below for the current reporting year and answer further questions. If **you do not have** licenced emissions and **do not complete a solvent management plan** (table 5 and 6) you <u>only</u> need to complete table 1 fugitive emissions on site below	Yes	landfill gas flare emissions

Table 1 Fugitive emissions

Parameter /Substance	Annual fugitive emission (kg/annum)	Quantificaton method M/C/E
Carbon dioxide (CO2)	2,630,699	E
Methane (CH4)	874,936	E

Periodic/Non-Continuous Monitoring

2	Are there any results in breach of licence requirements? If yes please provide brief details in the comment section of Table 2 below	No	
3	Was all monitoring carried out in accordance with EPA guidance note AG2 and using the basic air monitoring checklist? Basic air monitoring checklist AGN2	Yes	

Table 2: Licensed Mass Emissions/Ambient data-periodic monitoring (non-continuous)

Emission reference no:	Parameter/ Substance	Date of Monitoring	ELV in licence or any revision therof	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence limit	Method of analysis	Annual mass load (kg)	% change in mass load from previous year +/-	Comments
W0025-3	Nitrogen oxides (NOx/NO2)	27/10/2011	< 150 mg/Nm3	100 % of values < ELV	43.27	mg/Nm3	yes	OTH	94.47		
W0025-3	Carbon Monoxide	27/10/2011	<50 mg/Nm3	100 % of values < ELV	1.76	mg/Nm3	yes	OTH	3.84		
W0025-3	Total Organic Carbon	27/10/2011	<`10 mg/Nm3	100 % of values < ELV	3.25	mg/Nm3	yes	OTH	7.09		
W0025-3	Hydrogen Chloride	27/10/2011	<50 mg/Nm3	100 % of values < ELV	0.31	mg/Nm3	yes	EN 1911-1 to 3:2003	0.67		
W0025-3	Hydrogen Fluoride	27/10/2011	<5 mg/Nm3	100 % of values < ELV	0.28	mg/Nm3	yes	ISO/DIS 15713:2004	0.61		
	SELECT			SELECT		SELECT	SELECT	SELECT			

Note 1: Volumetric flow shall be included as a reportable parameter

Continuous Monitoring

4	Does your site carry out continuous air emissions monitoring?	No	
	If yes please review your continuous monitoring data and report the required fields below in Table 3 and compare it to its relevant Emission Limit Value (ELV)		
5	Did continuous monitoring equipment experience downtime? If yes please record downtime in table 3 below	SELECT	
6	Do you have a proactive service agreement for each piece of continuous monitoring equipment?	SELECT	
7	Did your site experience any abatement system bypasses? If yes please detail them in table 4 below	SELECT	

Table 3: Summary of average emissions -continuous monitoring

Emission reference no:	Parameter/ Substance	ELV in licence or any revision therof	Averaging Period	Compliance Criteria	Units of measurement	Annual Emission	Annual maximum	Monitoring Equipment downtime (hours)	% compliance current reporting year	Comments
	SELECT			SELECT	SELECT					

note 1: Volumetric flow shall be included as a reportable parameter.

Table 4: Abatement system bypass reporting table

Bypass protocol

Date*	Duration** (hours)	Location	Reason for bypass	Corrective action

* this should include all dates that an abatement system bypass occurred

** an accurate record of time bypass beginning and end should be logged on site and maintained for future Agency inspections please refer to bypass protocol link

8 Do you have a total Emission Limit Value of direct and fugitive emissions on site? if yes please fill out table 5

SELECT	

Table 5: Solvent Management Plan Summary
Total VOC Emission limit value

Solvent regulations — Please refer to linked solvent regulations to complete table 5 and 6

Reporting year	Total solvent input on site (kg)	Total VOC emissions to Air from entire site (direct and fugitive)	Total VOC emissions as %of solvent input	Total Emission Limit Value (ELV) in licence or any revision therof	Compliance
					SELECT
					SELECT

Table 6: Solvent Mass Balance summary

	(I) Inputs (kg)	(O) Outputs (kg)						
Solvent	(I) Inputs (kg)	Organic solvent emission in waste gases(kg)	Solvents lost in water (kg)	Collected waste solvent (kg)	Fugitive Organic Solvent (kg)	Solvent released in other ways e.g. by-passes (kg)	Solvents destroyed onsite through physical reaction e.g. incineration(kg)	Total emission of Solvent to air (kg)
							Total	

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)

			Additional information
1	Does your site have licensed emissions direct to surface water or direct to sewer? If yes please complete table 3 and 4 below for the current reporting year and answer further questions. If **you do not have** licenced emissions you only need to complete table 1 and /table 2 below for ambient monitoring and visual inspections	Yes	Only licensed for Suspended Solids, tested in EPA Regional Lab Kilkenny , Quarterly samples
2	Was it a requirement of your licence to carry out visual inspections on any surface water discharges or watercourses on or near your site? If yes please complete table 2 below summarising only any evidence of contamination noted during visual inspections	Yes	

Table 1 Ambient monitoring

Location reference	Location relative to site activities	PRTR Parameter	Licenced Parameter	Monitoring date	ELV or trigger level in licence or any revision thereof*	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence	Comments
	SELECT	SELECT	SELECT			SELECT		SELECT	SELECT	

*trigger values may be agreed by the Agency outside of licence conditions

Table 2 Visual inspections-Please only enter details where contamination was observed.

Location Reference	Date of inspection	Description of contamination	Source of contamination	Corrective action	Comments
			SELECT		
			SELECT		

Licensed Emissions to water and /or wastewater(sewer)-periodic monitoring (non-continuous)

			Additional information
3	Was there any result in breach of licence requirements? If yes please provide brief details in the comment section of Table 3 below	No	
4	Was all monitoring carried out in accordance with EPA guidance and checklists for Quality of Aqueous Monitoring Data Reported to the EPA? If no please detail what areas require improvement in additional information box (External /Internal Lab Quality checklist; Assessment of results checklist)	Yes	

Table 3: Licensed Emissions to water and /or wastewater (sewer)-periodic monitoring (non-continuous)

Emission reference no:	Emission released to	Parameter/ SubstanceNote 1	Type of sample	Date of Monitoring	Averaging period	ELV or trigger values in licence or any revision therof[Note 2]	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence	Method of analysis	Procedural reference source	Procedural reference standard number	Annual mass load (kg)	% change in mass load from previous year +/-	Comments
Suspended Solids	Water	LICENCED	discrete	08/03/2011	SELECT	35	All values < ELV	<5	mg/L	yes	Gravimetric analysis	Other (please specify)	EPA Rgional Kilkenr	788.384	-79	In 2010 AER there was a SS result of
				28/06/2011	grab sample											
				12/09/2011	grab sample											
				30/11/2011	grab sample											

Note 1: Volumetric flow shall be included as a reportable parameter

Note 2: Where Emission Limit Values (ELV) do not apply to your licence please compare results against EQS for Surface water or relevant receptor quality standards

Continuous monitoring

			Additional Information
5	Does your site carry out continuous emissions to water/sewer monitoring?	Yes	t this continous monitoring does not have any ELV set in licer

If yes please summarise your continuous monitoring data below in Table 4 and compare it to its relevant Emission Limit Value (ELV)

6	Did continuous monitoring equipment experience downtime? **If yes please record downtime in table 4 below**	No	
7	Do you have a proactive service contract for each piece of continuous monitoring equipment on site?	Yes	
8	Did abatement system bypass occur during the reporting year? **If yes please complete table 5 below**	No	

Table 4: Summary of average emissions -continuous monitoring

Emission reference no:	Emission released to	Parameter/ Substance	ELV or trigger values in licence or any revision thereof	Averaging Period	Compliance Criteria	Units of measurement	Annual Emission for current reporting year (kg)	% change +/- from previous reporting year	Monitoring Equipment downtime (hours)	% compliance current reporting year	Comments
	SELECT	SELECT		SELECT	SELECT	SELECT					License does not have an ELV specified
	SELECT	SELECT		SELECT	SELECT	SELECT					

note 1: Volumetric flow shall be included as a reportable parameter.

Table 5: Abatement system bypass reporting table

Date	Duration (hours)	Location	Resultant emissions	Reason for bypass	Corrective action*	Was a report submitted to the EPA?	When was this report submitted?
						SELECT	

*Measures taken or proposed to reduce or limit bypass frequency

Bund/pipe testing report summary ALL IPPC/WASTE licensed facilities | **Intensive agriculture facilities please use alternative template**

Bund testing | dropdown menu click to see options

			Additional information
1	Are you required by your licence to undertake integrity testing on bunds and containment structures ? if yes please fill out table 1 below listing all bunds and containment structures on site	Yes	
2	Please provide integrity testing frequency period	3 years	
3	Does the site maintain a register of bunds, underground pipelines (including stormwater and foul), Tanks, sumps and containers? (containers refers to "Chemstore" type units and mobile bunds)	Yes	

Table 1: Summary details of bund integrity test

Bund/Containment structure ID	Type	Specify Other type	Product containment	Actual capacity	Capacity required*	Type of integrity test	Other test type	Test date	Integrity reports maintained on site?	Results of test	Integrity test failure explanation <50 words	Corrective action taken	Scheduled date for retest	Results of retest(if in current reporting year)
Leachate Tank LT	reinforced concrete		Leachate	440m3	400m3	Structural assessment		19th Oct 2010	Yes	Pass		SELECT	Oct-13	
Leachate Lagoon LG	other (please specify)	Covered & Lined lagoon (2mmHD	Leachate	1221 m3 (approx)	N/A	Other (please specify)	BS8007 Still Well & Hook Gauge method	17th Nov 2010	Yes	Pass		SELECT	Nov-13	

* Capacity required should comply with 25% or 110% containment rule as detailed in your licence

			Commentary
4	Has integrity testing been carried out in accordance with licence requirements and are all structures tested in line with BS8007/EPA Guidance? bunding and storage guidelines	Yes	
5	Are channels/transfer systems to remote containment systems tested?	N/A	
6	Are channels/transfer systems compliant in both integrity and available volume?	N/A	
7	Do all sumps and chambers have high level liquid alarms?	Yes	
8	If yes to Q7 are these failsafe systems included in a maintenance and testing programme?	No	ome pumps/equipment have a scheduled maintenance programme with outside contractors

Pipeline/underground structure testing

1	Are you required by your licence to undertake integrity testing on underground structures e.g. pipelines or sumps etc ? if yes please fill out table 2 below listing all underground structures and pipelines on site	No	
2	Please provide integrity testing frequency period	SELECT	

Table 2: Summary details of underground structures/pipeline integrity test

Structure ID	Type system	Material of construction:	Does this structure have Secondary containment?	Type of secondary containment	Type integrity testing	Integrity reports maintained on site?	Results of test	Integrity test failure explanation <50 words	Corrective action taken	Scheduled date for retest	Results of retest(if in current reporting year)
	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT				SELECT

Please use commentary for additional details not answered by tables/ questions above

		Yes	No	N/A						
	a)invest in capital improveme	b) operational improvements	c)nothing	1	2	3	4	5	7	8
reinforced concrete	general purpose concrete	prefabricated	other (please specify)							
Pass	Fail									
Storm	Foul	Process								
steel	ceramic	concrete	pvc	polypropylene	other(please specify)	Mix (please specify)				
Double walled piping	Pipe in channel	Other (please specify)								
CCTV	Hydraulic	Air	Combination							
Replaced section	Relined	Repaired crack	Removed obstruction	Other (please describe)						
3 years	Other (please specify)									
Hydraulic test	Structural assessment	Other (please specify)								

Complaints

Have you received any environmental complaints in the current reporting year? If yes please complete summary details of complaints received on site in table 1 below		Additional information
	No	

Table 1 Complaints summary

Date	Category	Other type (please specify)	Brief description of complaint (Free txt <20 words)	Corrective action< 20 words	Resolution status	Resolution date	Further information
	SELECT				SELECT		
	SELECT				SELECT		
	SELECT				SELECT		
	SELECT				SELECT		
	SELECT				SELECT		

Total complaints open at start of reporting year	0
Total new complaints received during reporting year	0
Total complaints closed during reporting year	0
Balance of complaints end of reporting year	0

Incidents

Have any incidents occurred on site in the current reporting year? Please list all incidents for current reporting year in Table 2 below		Additional information
	Yes	

*For information on how to report and what constitutes an incident	What is an incident

Table 2 Incidents summary

Date of occurrence	Incident nature	Location of occurrence	Incident category*please refer to guidance	Receptor	Cause of incident	Other cause(please specify)	Activity in progress at time of incident	Communication	Occurrence	Corrective action<20 words	Preventative action <20 words	Resolution status	Resolution date	Liklihood of reoccurence
21/01/2011	Flare shut down	Flare	1. Minor	Air	Adverse weather		Normal activities	EPA	New	Restarted flare	none(caused b	Complete	22/01/2011	Low
30/03/2011	Breach of ELV	Licenced discharge point (typ	1. Minor	Air	Not related to site	activities	Normal activities	EPA	New	none possible	none	Complete	30/03/2011	Medium
30/01/2011	Breach of ELV	6 Perimeter gas wells	1. Minor	Air	Other (add details	Results from old ar	Normal activities	EPA	Recurring	none possible	none	Complete	30/01/2011	Medium
28/02/2011	Breach of ELV	3 Perimeter gas wells	1. Minor	Air	Other (add details	Results from old ar	Normal activities	EPA	Recurring	none possible	none	Complete	28/02/2011	Low
10/03/2011	Breach of ELV	2 GW monitoring locations	1. Minor	No Uncontrolled release	Not related to site	activities	Normal activities	EPA	Recurring	none possible	none	Complete	10/03/2011	Medium
09/04/2011	Flare shut down	Flare	1. Minor	Air	Plant or equipment	issues	Non Routine maint	EPA	New	Reconnected gas pipe	none	Complete	10/04/2011	Low
07/04/2011	Flare shut down	Flare	1. Minor	Air	Disconnected gas pipe		Normal activities	EPA	New	Routine maintenance		Complete	07/04/2011	Low
02/04/2011	Flare shut down	Flare	1. Minor	Air	Electricial problem		Normal activities	EPA	New	Repairs carried out		Complete	05/04/2011	Low
18/05/2011	Breach of ELV	5 perimeter gas wells	1. Minor	Air	Other (add details	Results from old ar	Normal activities	EPA	New	none possible		Complete	18/05/2011	Low
08/06/2011	Breach of ELV	3 perimeter gas wells	1. Minor	Air	Other (add details	Results from old ar	Normal activities	EPA	New	none possible		Complete	08/06/2011	Low
21/07/2011	Breach of ELV	5 perimeter gas wells	1. Minor	Air	Other (add details	Results from old ar	Normal activities	EPA	Recurring	none possible		Complete	21/07/2011	Low
18/07/2011	Flare shut down	Flare	1. Minor	Air	Plant or equipment	issues	Routine maintenan	EPA	New	none possible		Complete	18/07/2011	Low
15/07/2011	Breach of ELV	2 GW monitoring locations	1. Minor	No Uncontrolled release	Not related to site	activities	Normal activities	EPA	Recurring	none possible		Complete	15/07/2011	Low
11/07/2011	Flare shut down	Flare	1. Minor	Air	Plant or equipment	issues	Normal activities	EPA	New	Repairs carried out		Complete	11/07/2011	Low
31/08/2011	Breach of ELV	6 Perimeter gas wells	1. Minor	Air	Other (add details	Results from old ar	Normal activities	EPA	Recurring	none possible		Complete	31/08/2011	Low
15/08/2011	Flare shut down	Flare	1. Minor	Air	Plant or equipment	issues	Normal activities	EPA	New	Repairs carried out		Complete	15/08/2011	Low
09/08/2011	Flare shut down	Flare	1. Minor	Air	Plant or equipment	issues	Normal activities	EPA	New	Repairs carried out		Complete	09/08/2011	Low
22/09/2011	Flare shut down	Flare	1. Minor	Air	Plant or equipment	issues	Normal activities	EPA	New	Repairs carried out		Complete	22/09/2011	Low
26/11/2011	Monitoring equipment offline	SCADA	1. Minor	No Uncontrolled release	Plant or equipment	issues	Normal activities	EPA	New	Repairs carried out		Complete	08/11/2011	Low
25/10/2011	Breach of ELV	2 GW monitoring locations	1. Minor	No Uncontrolled release	Not related to site	activities	Normal activities	EPA	Recurring	none possible		Complete	25/10/2011	Low
20/10/2011	Breach of ELV	4 PERIMETER gas wells	1. Minor	No Uncontrolled release	Not related to site	activities	Normal activities	EPA	New	none possible		Complete	20/10/2011	Low
03/10/2011	Breach of ELV	6 Perimeter gas wells	1. Minor	No Uncontrolled release	Not related to site	activities	Normal activities	EPA	Recurring	none possible		Complete	03/10/2011	Low

15/11/2011	Breach of ELV	4 PERIMETER gas wells	1. Minor	No Uncontrolled release	Not related to site activities		Normal activities	EPA	Recurring	none possible		Complete	15/11/2011	Low
05/12/2012	Breach of ELV	5 perimeter gas wells	1. Minor	No Uncontrolled release	Not related to site activities		Normal activities	EPA	Recurring	none possible		Complete	05/12/2011	Low

Total number of incidents current year	24
Total number of incidents previous year	14
% reduction/ increase	58%

Groundwater /Contaminated land summary report

			Comments
1	Are you required to carry out groundwater monitoring as part of your licence requirements?	yes	yes, trends are not possible for some parameters as results are expressed as "less than".
2	Are you required to carry out soil monitoring as part of your licence requirements?	no	
3	Do you extract groundwater for use on site? If yes please specify use in comment section	no	
4	Is there contaminated land and /or groundwater on site? If yes please answer q's 5-12	yes	
5	Is the contamination related to operations at the facility (either current and/or historic)	yes	
6	Have actions been taken to address contamination issues?If yes please summarise remediation strategies proposed/undertaken for the site	yes	capping works at unlined cells
7	Please specify the proposed time frame for the remediation strategy	yes	completed
8	Is there a licence condition to carry out/update ELRA for the site?	yes	
9	Has any type of risk assesment been carried out for the site?	yes	In progress at present
10	Has a Conceptual Site Model been developed for the site?	yes	
11	Have potential receptors been identified on and off site?	yes	
12	Is there evidence that contamination is migrating offsite?	yes	

Table 1: Upgradient Groundwater monitoring results

Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration++	Average Concentration+	unit	GTV's*	SW EQS	% change in average concentration previous year +/-	Upward trend in pollutant concentration over last 5 years of monitoring data
2011	RCA2	Temp		Quarterly	11	10.73	mg/l			0	SELECT
2011	RCA2	DO		Quarterly	76	74.8	mg/l			0	yes
2011	RCA2	PH		Quarterly	7.4	7.4	mg/l			10	no
2011	RCA2	Cond.		Quarterly	782	769	mg/l	1,875		-3	yes
2011	RCA2	Ammonia		Quarterly	0.02	0.015	mg/l	0.175		0%	no
2011	RCA2	Chloride		Quarterly	18	17	mg/l	187.5		0%	no
2011	RCA2	O-P		Annually	0.03		mg/l			40%	
2011	RCA2	TON		Annually	9.5		mg/l			0%	
2011	RCA2	Fluoride		Annually	0		mg/l		0.5		
2011	RCA2	Sulphate		Annually	37		mg/l	187.5			
2011	RCA2	Alkalinity		Annually	317		mg/l				
2011	RCA2	TOC		Annually	NM		mg/l				
2011	RCA2	Calcium		Annually	140		mg/l				
2011	RCA2	Magnesium		Annually	17		mg/l				
2011	RCA2	Potassium		Annually	2.2		mg/l				
2011	RCA2	Sodium		Annually	9.8		mg/l	150			
2011	RCA2	Cyanide		Annually	0		mg/l	0.0375			
2011	RCA2	Aluminium		Annually	270		ug/l	150			
2011	RCA2	Antimony		Annually	0		ug/l				
2011	RCA2	Arsenic		Annually	1		ug/l	7.5			
2011	RCA2	Barium		Annually	15		ug/l				
2011	RCA2	Beryllium		Annually	0		ug/l				
2011	RCA2	Boron		Annually	100		ug/l	750			
2011	RCA2	Cadmium		Annually	0		ug/l	3.75			
2011	RCA2	Chromium		Annually	0		ug/l	37.5			
2011	RCA2	Cobalt		Annually	0.5		ug/l				
2011	RCA2	Copper		Annually	0.9		ug/l	1500			
2011	RCA2	Iron		Annually	580		ug/l				
2011	RCA2	Lead		Annually	0		ug/l	18.75			
2011	RCA2	Manganese		Annually	35		ug/l				
2011	RCA2	Mercury		Annually	0		ug/l	0.75			
2011	RCA2	Molybdenum		Annually	0		ug/l				
2011	RCA2	Nickel		Annually	1.2		ug/l	15			
2011	RCA2	Selenium		Annually	2.2		ug/l				
2011	RCA2	Thallium		Annually	0		ug/l				
2011	RCA2	Tin		Annually	0		ug/l				
2011	RCA2	Uranium		Annually	6		ug/l			-17%	
2011	RCA2	Vanadium		Annually	0.8		ug/l				
2011	RCA2	Zinc		Annually	22		ug/l		100		
2011	RCA2	VOC		Annually	nd		ug/l				
2011	RCA2						SELECT				SELECT

.+ where average indicates arithmetic mean

.++ maximum concentration indicates the maximum measured concentration from all monitoring results produced during the reporting year

Table 2: Downgradient Groundwater monitoring results

Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration	Average Concentration	unit	GTV's*	SW EQS	% change in average concentration previous year +/-	Upward trend in yearly average pollutant concentration over last 5 years of monitoring data
2011	GW8	Temp		Quarterly		11.6	SELECT			0	yes
2011	GW8	DO		Quarterly		20				11	no
2011	GW8	PH		Quarterly		7.2				0	no
2011	GW8	Cond.		Quarterly		777		1,875		0.4	no
2011	GW8	Ammonia		Quarterly	0.91	0.515	mg/l	0.175		-122%	no
2011	GW8	Chloride		Quarterly	28	24.5	mg/l	187.5		0%	no
2011	GW8	O-P		Annually	0.03		mg/l				
2011	GW8	TON		Annually	9.03		mg/l				
2011	GW8	Fluoride		Annually	<0.25		mg/l		0.5		
2011	GW8	Sulphate		Annually	37		mg/l	187.5			
2011	GW8	Alkalinity		Annually	291		mg/l				
2011	GW8	TOC		Annually	nm		mg/l				
2011	GW8	Calcium		Annually	120		mg/l				
2011	GW8	Magnesium		Annually	18		mg/l				
2011	GW8	Potassium		Annually	4.6		mg/l				
2011	GW8	Sodium		Annually	13		mg/l	150			
2011	GW8	Cyanide		Annually	<0.05		mg/l	0.0375			
2011	GW8	Aluminium		Annually	42		ug/l	150			
2011	GW8	Antimony		Annually	<0.05		ug/l				
2011	GW8	Arsenic		Annually	<0.05		ug/l	7.5			
2011	GW8	Barium		Annually	29		ug/l				
2011	GW8	Beryllium		Annually	<0.05		ug/l				
2011	GW8	Boron		Annually	96		ug/l	750			
2011	GW8	Cadmium		Annually	<0.05		ug/l	3.75			
2011	GW8	Chromium		Annually	<0.05		ug/l	37.5			
2011	GW8	Cobalt		Annually	<0.05		ug/l				
2011	GW8	Copper		Annually	<0.05		ug/l	1500			
2011	GW8	Iron		Annually	87		ug/l				
2011	GW8	Lead		Annually	<0.05		ug/l	18.75			
2011	GW8	Manganese		Annually	<25		ug/l				
2011	GW8	Mercury		Annually	<0.05		ug/l	0.75			
2011	GW8	Molybdenum		Annually	<0.05		ug/l				
2011	GW8	Nickel		Annually	2.3		ug/l	15			
2011	GW8	Selenium		Annually	0.9		ug/l				
2011	GW8	Thallium		Annually	<0.5		ug/l				
2011	GW8	Tin		Annually	<1		ug/l				
2011	GW8	Uranium		Annually	3.8		ug/l				
2011	GW8	Vanadium		Annually	<0.5		ug/l				
2011	GW8	Zinc		Annually	18		ug/l		100		
2011	GW8	VOC		Annually	ND		ug/l				SELECT

* please note exceedance of a relevant Groundwater threshold value (GTV) at a representative monitoring point does not indicate non compliance, an exceedance triggers further investigation to confirm whether the criteria for poor groundwater chemical status are being met.

**Depending on location of the site and proximity to other sensitive receptors alternative Receptor based Water Quality standards should be used in addition to the GTV e.g. if the site is close to surface water compare to Surface Water Environmental Quality Standards (SWEQS), If the site is close to a drinking water supply compare results to the Drinking Water Standards (DWS)

Surface water EQS | Groundwater regulations GTV's | Drinking water (private supply) standards | Drinking water (public supply) standards | Interim Guideline Values (IGV)

Table 3: Soil results

Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration	Average Concentration	unit
							SELECT
							SELECT

Where additional detail is required please enter it here in 200 words or less

Environmental Liability Risk Assessment

			Commentary
1	Is it a requirement of your licence to complete an ELRA?	Yes	
2	Has an initial ELRA been submitted to and approved by the Agency?	Yes	
3	Please enter the date of submission of the initial ELRA	May-11	
4	Date of most recent substantial ELRA update	May-11	
5	What financial instrument/s do you have in place to cover unknown liabilities?	Other	
6	Has this financial instrument/s been verified by the Agency?	Yes	
7	What is the date of expiry of this financial instrument?	Not Applicable	
8	Date of next required review of the ELRA?	May-14	

9 Please list the top 10 risks assessed on your site in table 1 below

Table 1 ELRA summary information

Click here to access EPA guidance on ELRA	Operational Risk Assessment Category	SELECT

				Mitigation measures to reduce risk			ELRA		
Risk ID	Potential hazards	Environmental effect	Previous risk score	Action	Date of implementation of mitigation measures	Comment	Revised Risk score for current reporting year	ELRA costing	Does the current financial provision (FP) cover the risk score?
e.g Landfill	Leachate hazard from Phase 1	groundwater contamination	16	Infrastructural improvements	31/012/2006	capping works	16	€26,250	Yes
Landfill	Leachate contamination from Phase 2 liner install.	groundwater contamination	16	Operational controls	31/12/2012	Risk Assesssment Study	16	€26,250	Yes
Landfill	Leachate contamination from Phase 3 liner install.	groundwater contamination	8	Infrastructural improvements	31/12/2006	High liner specification	8	€5,625	Yes
Landfill	Leachate contamination from liner due to age	groundwater contamination	8	Operational controls	N/A		8	€5,625	Yes
Landfill	Leachate breakout Phase 1 due to cap failure	groundwater contamination	8	Operational controls	N/A		8	€5,625	Yes
Landfill	Leachate breakout Phase 2,3 due to cap failure	groundwater contamination	8	Operational controls	N/A		8	€5,625	Yes
Landfill	Cracking of cap due to settlement	gas release	8	Operational controls	N/A		8	€5,625	Yes
Landfill	Uncontrolled release of landfill gas (Odour)	gas release	8	Infrastructural improvements	ongoing		8	€1,925	Yes
Landfill	Uncontrolled release of landfill gas	gas release	6	Infrastructural improvements	ongoing		6	€825	Yes
Landfill	Malfunction of flare etc.	gas release	6	Operational controls	ongoing		6	€825	Yes
Landfill			SELECT	SELECT			SELECT		SELECT
SELECT			SELECT	SELECT			SELECT		SELECT
Total			SELECT	SELECT			SELECT		SELECT

Closure Restoration Aftercare Management Plan/ Restoration plan (CRAMP/RP)

1	Was a closure or restoration plan a requirement of the licence?	Yes	
2	Has a closure plan submission been approved by the Agency?	Yes	
3	What is the timescale for submission?		
4	What financial instrument do you have in place to cover known liabilities?	Other	
5	What is the date of expiry of this financial instrument?	Not applicable	
6	What is the status of implementation of the plan?	No commenced	

Table 2 CRAMP summary information (NON Landfill)

Date of submission of plan	Risk category	Closure plan in place	Clean closure	Restoration Aftercare Management Plan	Change in Risk category since previous year	Increase in risk category	Does the current financial provision cover the risk score?	Value of current financial provision for site
	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	

Environmental Management Programme (EMP)/Continuous Improvement Programme

	Highlighted cells contain dropdown menu click to view		Additional Information
1	Do you maintain an Environmental Mangement System for the site. If yes, please detail in additional information	Yes	
2	Does the EMS reference the most significant environmental aspects and associated impacts on-site	Yes	
3	Does the EMS maintain an Environmental Management Programme (EMP) as required in accordance with the licence requirements	Yes	
4	Do you maintain an environmental documentation/communication system to inform the public on environmental performance of the facility, as required by the licence	Yes	

Environmental Management Programme (EMP) report					
Objective Category	Target	Status (% completed)	How target was progressed	Responsibility	Intermediate outcomes
Groundwater protection	carry out risk assessment of groundwater monitoring results	70	New boreholes installed	Individual	Installation of infrastructure
Reduction of emissions to Air	carry out risk assessment of landfill gas monitoring results	50	Additional monitoring done	Individual	Improved Environmental Management Practices
Reduction of emissions to Water	isolate cells 17, 18 from active cells	100	Additional infrastructure	Individual	Installation of infrastructure
Reduction of emissions to Air	reduce gas emissions from active cells	80	Additional wells	Individual	Installation of infrastructure
Reduction of emissions to Air	reduce gas emissions from active cells	70	additional temporary cap	Individual	Installation of infrastructure
Reduction of emissions to Air	reduce gas emissions from capped cells	100	repair gas well seals	Individual	Installation of infrastructure

Noise Monitoring Report Summary

1	Was noise monitoring a licence requirement for the AER period? If yes please fill in table 1 noise summary below	Yes
2	Was noise monitoring carried out using the EPA Guidance note including completion of the "Checklist for noise measurement report" included in the guidance note as table 6? Draft Noise Guidance	Yes
3	Does your site have a noise reduction plan	No
4	When was the noise reduction plan last updated?	
5	Have there been changes relevant to site noise emissions (e.g. plant or operational changes) since the last noise survey?	No

Table 1: Noise monitoring summary

Date of monitoring	Time period	Noise location (on site)	Noise sensitive location -NSL (if applicable)	LA_{eq}	LA_{90}	LA_{10}	LA_{max}	Tonal or Impulsive noise* (Y/N)	If tonal /impulsive noise was identified was 5dB penalty applied?	Comments (ex. main noise sources on site, & extraneous noise ex. road traffic)	Is site compliant with noise limits (day/evening/night)?
09/12/2011	30 mins	N4		58	51	62	67	No	SELECT	No noise from landfill, Located at old entrance at main road.Main noise source is due to passing traffic.Bir	Yes
09/12/2011	30 mins	N5		55	47	54	77	No		Passing traffic and machinery noise in adjacent quarry	Yes
09/12/2011	30 mins	N6		55	47	55	75	No		Significant noise activity from adjacent quarry	Yes
09/12/2011	30 mins	S1		69	56	73	82	No		No noise from landfill, passing traffic only	Yes
09/12/2011	30 mins	S2		66	51	64	91	No		No noise from landfill, passing traffic and quarry activities only	Yes

*Please ensure that a tonal analysis has been carried out as per guidance note NG4. These records must be maintained onsite for future inspection

If noise limits exceeded as a result of noise attributed to site activities, please choose the corrective action from the following options? SELECT

** please explain the reason for not taking action/resolution of noise issues?

Noise levels at N4 ,S1 & S2 exceed the 55dbB(A) limit,but source of noise was due to outside influence, quarry activities & road traffic, not landfill activities.Powerstown landfill is located beside 2 active quarries and the m9 motorway.Landfill operations audible at N5 only, and this was equal to the

Resource usage/ Energy Efficiency

			Additional information
1	When did the site carry out the most recent energy efficiency audit? Please list the recommendations in table 3 below	2006	
2	Is the site a member of any accredited programmes for reducing energy usage/water conservation such as the SEAI programme linked to the right? If yes please list them in additional information	no	SEAI - Large Industry Energy Network (LIEN)
3	Where Fuel Oil is used in boilers on site is the sulphur content compliant with licence conditions? Please state percentage in additional information		N/A

Table 1 Energy usage on site

Energy Use	Previous year kWh	Current year kWh	Production +/- % compared to previous reporting year**	Energy Consumption +/- % vs overall site production*
Total				
Electricity	91,932	82,469	-10.30%	
Fossil Fuels:				
Heavy Fuel Oil	0	0		
Light Fuel Oil	489,479	350,000		
Natural gas	0	0		
Coal/Solid fuel	0	0		
Renewable energy generated on site	0	0		

* where consumption of energy can be compared to overall site production please enter this information as percentage increase or decrease compared to the previous reporting year.
** where site production information is available please enter percentage increase or decrease compared to previous year

Table 2 Water usage on site

Water use	Previous year m3/yr.	Current year m3/yr.	Production +/- % compared to previous reporting year**	Energy Consumption +/- % vs overall site production*
Groundwater	0	0		
Surface water	0	0		
Public supply	172	101	-41.30%	
Total	172	101		

* where consumption of water can be compared to overall site production please enter this information as percentage increase or decrease compared to the previous reporting year.
** where site production information is available please enter percentage increase or decrease compared to previous year

Table 3: Energy Audit finding recommendations

Date of audit	Recommendations	Description of Measures proposed	Origin of measures	Predicted energy savings %	Implementation date	Responsibility	Completion date	Status and comments
2006	Instal timers on leachate pumps	Use off-peak pumping	energy audit		Not completed to date	landfill manager		
2006	instal SCADA system to track power usage	2007	energy audit		2007	landfill manager	2007	
2006	fit an inverter to the flare	reduce power consumption	energy audit		Not completed to date	landfill manager		
2006	track contractor fuel usage	include condition in tender docs.	energy audit		2012	landfill manager	2012	
		update the energy audit			2012	landfill manager	2012	
			other initiative (please specify)					

SECTION A-PRTR WASTE TRANSFERS TAB- TO BE COMPLETED BY ALL IPPC AND WASTE FACILITIES

PRTR facility logon

dropdown list click to see options

SECTION B- WASTE ACCEPTED ONTO SITE-TO BE COMPLETED BY ALL IPPC AND WASTE FACILITIES

			Additional Information
1	Were any wastes accepted onto your site for recovery or disposal or treatment prior to recovery or disposal within the boundaries of your facility ?; (waste generated within your boundaries is to be captured through PRTR reporting)	Yes	
	If yes please enter details in table 1 below		
2	Did your site have any rejected consignments of waste in the current reporting year? If yes please give a brief explanation in the additional information	No	
3	Was waste accepted onto your site that was generated outside the Republic of Ireland? If yes please state the quantity in tonnes in additional information	No	

Table 1 Details of waste accepted onto your site for recovery, disposal or treatment (do not include wastes generated at your site, as these will have been reported in your PRTR workbook)

	Licenced annual tonnage limit for your site (total tonnes/annum)	EWC code (European Waste Catalogue EWC codes)	Source of waste accepted	Description of waste accepted **Please enter an accurate and detailed description - which** European Waste Catalogue EWC codes	Quantity of waste accepted in current reporting year (tonnes)	Quantity of waste accepted in previous reporting year (tonnes)	Reduction/Increase over previous year +/ - %	Reason for reduction/increase from previous reporting year	Packaging Content (%)- only applies if the waste has a packaging component	Disposal/Recovery or treatment operation carried out at your site and the description of this operation	Quantity of waste remaining on site at the end of reporting year (tonnes)	Comments -
E.g.	*37,000*	*200301*	*mixed municipal waste*		*3,433*	*4,717*	*-27%*	*CCC does not collect waste, No control on how*		*D1-Deposit into or onto land*	*0*	
E.g.		*200201*	*garden and park waste*		*817*	*444*	*84%*		*0%*	*D1-Deposit into or onto land*	*0*	
		200303	*street cleaning residues*		*3,200*	*7,376*	*-57%*			*D1-Deposit into or onto land*	*0*	
	1,000	*170107*	*mixture of concrete etc.*		*14*	*0*				*D1-Deposit into or onto land*	*0*	
		170904	*mixed construction waste*		*723*	*300*				*D1-Deposit into or onto land*	*0*	
	1,500	*190802*	*waste from desanding*		*1,562*	*545*				*D1-Deposit into or onto land*	*0*	
	500	190699	*waste not specified*		397	*313*				*D1-Deposit into or onto land*	*0*	
							#DIV/0!			*SELECT*		

SECTION C-TO BE COMPLETED BY ALL WASTE FACILITIES (waste transfer stations, Composters, Material recovery facilities etc) EXCEPT LANDFILL SITES

4	Is all waste processing infrastructure as required by your licence and approved by the Agency in place? If no please list waste processing infrastructure required onsite	Yes	
		SELECT	
5	Is all waste storage infrastructure as required by your licence and approved by the Agency in place? If no please list waste storage infrastructure required on site	Yes	
6	Does your facility have relevant nuisance controls in place?	Yes	
7	Do you have an odour management system in place for your facility? If no why?	Yes	
8	Do you maintain a sludge register on site?	No	

SECTION D-TO BE COMPLETED BY LANDFILL SITES ONLY

Table 2 Waste types permitted-landfill only

	Waste types permitted for disposal	Authorised/licenced annual intake for disposal (tpa)	Actual intake for disposal in reporting year (tpa)	Remaining licensed capacity at end of reporting year (m3)	Comments
e.g.	Household (residual)	37,000	10,146		This figure includes commercial waste, household waste,cleansing waste and counccil waste
e.g.	Industrial non hazardous solids	1,500	1,562	165,000	
	Sewage sludge	500	381		
	C&D	1,000	0		

Table 3 General information-Landfill only

Area ID	Date landfilling commenced	Date landfilling ceased	Currently landfilling	Private or Public Operated	Inert or non-hazardous	Predicted date to cease landfilling	Licence permits asbestos	Is there a separate cell for asbestos?	Accepted asbestos in reporting year	Total disposal area occupied by waste	Lined disposal area occupied by waste	Unlined area	Comments on liner type
										SELECT UNIT	SELECT UNIT	SELECT UNIT	
Cell 15-16	2006	N/A	No	Public	Non Hazardous	N/A	No	No	No	99,000 m sq.	59,000 m sq.	40,000 m sq.	varies

Table 4 Environmental monitoring-landfill onl Landfill Manual-Monitoring Standards

Was meterological monitoring in compliance with Landfill Directive (LD) standard in reporting year +	Was leachate monitored in compliance with LD standard in reporting year	Was Landfill Gas monitored in compliance with LD standard in reporting year	Was SW monitored in compliance with LD standard in reporting year	Have GW trigger levels been established	Were emission limit values agreed with the Agency (ELVs)	Was topography of the site surveyed in reporting year	Has the statement under S53(A)(5) of WMA been submitted in reporting year	Comments
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

.+ please refer to Landfill Manual linked above for relevant Landfill Directive monitoring standards

Table 5 Capping-Landfill only

Area uncapped* SELECT UNIT	Area with temporary cap SELECT UNIT	Area with final cap to LD Standard m2 ha, a	Area capped other	Area with waste that should be permanently capped to date under licence	What materials are used in the cap	Comments
0 m sq.	15,000 m sq.	84,000 m sq.		0	gas geocomposite LLDPE liner drainage geocomposite 1 metre clay	

*please note this includes daily cover area

Table 6 Leachate-Landfill only

9	Is leachate from your site treated in a Waste Water Treatment Plant?	Yes
10	Is leachate released to surface water? If yes please complete leachate mass load information below	No

Volume of leachate in reporting year(m3)	Leachate (BOD) mass load (kg/annum)	Leachate (COD) mass load (kg/annum)	Leachate (NH4) mass load (kg/annum)	Leachate (Chloride) mass load kg/annum	Leachate treatment on-site	Specify type of leachate treatment	Comments
16,675.74	800.4	12006.5	7170.6	13057	No	wwtp	

Please ensure that all information reported in the landfill gas section is consistent with the Landfill Gas Survey submitted in conjunction with PRTR returns

Table 7 Landfill Gas-Landfill only

Gas Captured&Treated by LFG System m3	Power generated (MW / KWh)	Used on-site or to national grid	Was surface emissions monitoring performed during the reporting year?	Comments
180 to 360 m cu./hour	0	0	Yes	

Environmental Protection Agency

Guidance to completing the PRTR workbook

AER Returns Workbook

Version 1.1.13

REFERENCE YEAR	2011

1. FACILITY IDENTIFICATION

Parent Company Name	Carlow County Council
Facility Name	Powerstown Landfill Site
PRTR Identification Number	W0025
Licence Number	W0025-03

Waste or IPPC Classes of Activity

No.	class_name
3.5	Specially engineered landfill, including placement into lined discrete cells which are capped and isolated from one another and the environment.
3.1	Deposit on, in or under land (including landfill).
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.
3.4	Surface impoundment, including placement of liquid or sludge discards into pits, ponds or lagoons.
3.6	Biological treatment not referred to elsewhere in this Schedule which results in final compounds or mixtures which are disposed of by means of any activity referred to in paragraphs 1. to 10. of this Schedule.
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 this Schedule.
4.11	Use of waste obtained from 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.
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.

Address 1	Kilkenny Rd.
Address 2	Co Carlow
Address 3	
Address 4	
	Carlow
Country	Ireland
Coordinates of Location	-6.15456 53.5062
River Basin District	IESE
NACE Code	3821
Main Economic Activity	Treatment and disposal of non-hazardous waste
AER Returns Contact Name	Fergus Mulhare
AER Returns Contact Email Address	fmulhare@carlowcoco.ie
AER Returns Contact Position	Environmental Technician
AER Returns Contact Telephone Number	059 9172402
AER Returns Contact Mobile Phone Number	
AER Returns Contact Fax Number	059 9146356
Production Volume	0.0
Production Volume Units	0
Number of Installations	1
Number of Operating Hours in Year	8554
Number of Employees	0
User Feedback/Comments	Releases to air results in Section A, B, C were calculated using oxygen corrected results (3%). Discharges to surface water were calculated using a flow rate of 5l/sec for discharge from the SW pond to receiving waters
Web Address	0

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
5(d)	Landfills
5(c)	Installations for the disposal of non-hazardous waste
5(d)	Landfills
50.1	General

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 ?	

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

RELEASES TO AIR					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			QUANTITY			
			Method Used		Flare 1			
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
02	Carbon monoxide (CO)	M	PER	Flue gas analyser, Testo 350/454 MXL	3.84265728	3.84265728	0.0	0.0
08	Nitrogen oxides (NOx/NO2)	M	PER	Flue gas analyser, Testo 350/454 MXL	94.47260256	94.47260256	0.0	0.0
11	Sulphur oxides (SOx/SO2)	M	PER	Flue gas analyser, Testo 350/454 MXL	288.9634608	288.9634608	0.0	0.0
01	Methane (CH4)	M	MAB	LandGEM calculation used	0.0	874936.0	0.0	874936.0

* 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					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			QUANTITY			
			Method Used		Flare 1			
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
80	Chlorine and inorganic compounds (as HCl)	M	PER	Impinger train containing 0.10 molar sodium hydroxide and deionised water solution in accordance EN1911 & EPA 26A	0.67683168	0.67683168	0.0	0.0
84	Fluorine and inorganic compounds (as HF)	M	PER	Impinger train containing 0.10 molar sodium hydroxide and deionised water solution in accordance EN1911 & EPA 26A	0.61133184	0.61133184	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					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			QUANTITY			
			Method Used		Flare 1			
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
351	Total Organic Carbon (as C)	M	PER	FID na non-methane hydrocarbon cutter	7.095816	7.095816	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: Powerstown Landfill Site

Please enter summary data on the quantities of methane flared and / or utilised	**T (Total) kg/Year**	**M/C/E**	**Method Used: Method Code**	**Method Used: Designation or Description**	**Facility Total Capacity m3 per hour**	
Total estimated methane generation (as per site model)	1256000.0	C	GasSim / Landgem	Model calculation	N/A	
Methane flared	381064.0	M	-	Calculated based on flare flow and recorded run-time	0.0	(Total Flaring Capacity)
Methane utilised in engine/s	0.0	M	-		0.0	(Total Utilising Capacity)
Net methane emission (as reported in Section A above)	874936.0	C	Calculated	Calculated	N/A	

4.2 RELEASES TO WATERS

Link to previous years emissions data

0

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					Please enter all quantities in this section in KGs								
POLLUTANT			Method Used		SWL0						QUANTITY		
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	Emission Point 2	Emission Point 3	Emission Point 4	Emission Point 5	Emission Point 6	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
79	Chlorides (as Cl)	M	ALT	EPA Laboratory Kilkenny	2838.24	0.0	0.0	0.0	0.0	0.0	2838.24	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					Please enter all quantities in this section in KGs			
POLLUTANT			Method Used		SWL0	QUANTITY		
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					Please enter all quantities in this section in KGs			
POLLUTANT			Method Used		SWL0	QUANTITY		
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
238	Ammonia (as N)	M	ALT	EPA Laboratory Kilkenny	36.2664	36.2664	0.0	0.0
240	Suspended Solids	M	ALT	EPA Laboratory Kilkenny	788.384	788.384	0.0	0.0
332	Ortho-phosphate (as PO4)	M	ALT	EPA Laboratory Kilkenny	6.3072	6.3072	0.0	0.0
305	Calcium	M	ALT	EPA Laboratory Kilkenny	204898.4	204898.4	0.0	0.0
320	Magnesium	M	ALT	EPA Laboratory Kilkenny	2207.52	2207.52	0.0	0.0
341	Sodium	M	ALT	EPA Laboratory Kilkenny	1561.032	1561.032	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

Link to previous years emissions data

SECTION A : PRTR POLLUTANTS

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER					Please enter all quantities in this section in KGs			
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					Please enter all quantities in this section in KGs			
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

Link to previous years emissions data

SECTION A : PRTR POLLUTANTS

RELEASES TO LAND					Please enter all quantities in this section in KGs		
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					Please enter all quantities in this section in KGs		
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

Please enter all quantities on this sheet in Tonnes

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
Within the Country	19 07 03	No	16675.74	landfill leachate other than those mentioned in 19 07 02	D15	M	Weighed	Offsite in Ireland	Mortarstown Waste Water Treatment Plant, D-0028	Carlow,,,,,,Ireland		
Within the Country	20 01 08	No	30	biodegradable kitchen and canteen waste	D15	M	Weighed	Offsite in Ireland	O'Toole Composting,WFP-CW-10-0003-01	Balintrane,Fenagh,Co. Carlow,-,Ireland		
Within the Country	20 02 01	No	331	biodegradable waste	D15	M	Weighed	Offsite in Ireland	Greenstar,WFP -KK-09-0003-01	-,-,-,Kilkenny,Ireland		
Within the Country	15 01 01	No	80	paper and cardboard packaging	D15	M	Weighed	Offsite in Ireland	Greenstar,WFP -KK-09-0003-01	-,-,-,Kilkenny,Ireland		
Within the Country	20 01 01	No	112	paper and cardboard	D15	M	Weighed	Offsite in Ireland	Greenstar,WFP -KK-09-0003-01	-,-,-,Kilkenny,Ireland		
Within the Country	15 01 07	No	70	glass packaging	D15	M	Weighed	Offsite in Ireland	Rehab Glasco Ltd.,WFP-KE-08-0357-01	-,-,Naas,Co. Kildare,Ireland		
Within the Country	20 01 02	No	43	glass	D15	M	Weighed	Offsite in Ireland	Greenstar,WFP -KK-09-0003-01	-,-,-,Kilkenny,Ireland		
Within the Country	15 01 04	No	3	metallic packaging	D15	M	Weighed	Offsite in Ireland	Rehab Glasco Ltd.,WFP-KE-08-0357-01	-,-,Naas,Co. Kildare,Ireland		
Within the Country	15 01 04	No	10	metallic packaging	D15	M	Weighed	Offsite in Ireland	Danelle Recycling,WP01/08	-,-,-,-,Ireland		
Within the Country	20 01 40	No	152	metals	D15	M	Weighed	Offsite in Ireland	Greenstar,WFP -KK-09-0003-01	-,-,-,Kilkenny,Ireland		
Within the Country	15 01 02	No	66	plastic packaging	D15	M	Weighed	Offsite in Ireland	Greenstar,WFP -KK-09-0003-01	-,-,-,Kilkenny,Ireland		
Within the Country	15 01 02	No	10	plastic packaging	D15	M	Weighed	Offsite in Ireland	Danelle Recycling,WP01/08	-,-,-,-,Ireland		
Within the Country	15 01 05	No	6	composite packaging	D15	M	Weighed	Offsite in Ireland	Greenstar,WFP -KK-09-0003-01	-,-,-,Kilkenny,Ireland		
Within the Country	20 01 11	No	10	textiles	D15	M	Weighed	Offsite in Ireland	Mrs Quinns Charity Shop,-	-,-,-,-,Ireland		
Within the Country	15 01 03	No	323	wooden packaging	D15	M	Weighed	Offsite in Ireland	Greenstar,WFP -KK-09-0003-01	-,-,-,Kilkenny,Ireland		
Within the Country	16 06 01	Yes	10	lead batteries	D15	M	Weighed	Offsite in Ireland	ENVA Ireland,W0181-01	-,-,Portlaoise,Co. Laois,Ireland		
Within the Country	16 06 04	No	3.18	alkaline batteries (except 16 06 03)	D15	M	Weighed	Offsite in Ireland	The Recycling Village,WFP-LH-10-0010-01	-,-,-,Co. Louth,Ireland		
Within the Country	13 02 05	Yes	8.26	mineral-based non-chlorinated engine, gear and lubricating oils	D15	M	Weighed	Offsite in Ireland	ENVA Ireland,W0181-01	-,-,Portlaoise,Co. Laois,Ireland		
Within the Country	20 01 25	No	1.66	edible oil and fat	D15	M	Weighed	Offsite in Ireland	Pure Oil,KK/288/05	-,-,Barntown,Co. Wexford,Ireland		
Within the Country	20 03 99	No		municipal wastes not otherwise specified (waste paint and varnish including containers)	D15	M	Weighed	Offsite in Ireland	ENVA Ireland,W0181-01	-,-,Portlaoise,Co. Laois,Ireland		
Within the Country	16 01 03	No		end-of-life tyres	D15	M	Weighed	Offsite in Ireland	Laois Tyre Recycling,WCP-OY-10-636-01	-,-,Mountmellick,Co Laois,Ireland		
Within the Country	**17 08 02**	**No**	20	gypsum-based construction materials other than those mentioned in 17 08 01	D15	M	Weighed	Offsite in Ireland	Greenstar,WFP -KK-09-0003-01	-,-,-,Kilkenny,Ireland		
Within the Country	20 03 99	No	0.72	municipal wastes not otherwise specified (fluorescent lights)	D15	M	Weighed	Offsite in Ireland	KMK Metals,-	-,-,Tullamore,Co. Offaly,Ireland		
Within the Country	20 03 99	No	0.3	municipal wastes not otherwise specified (filament only no EWC)	D15	M	Weighed	Offsite in Ireland	Irish Lamp Recycling ,WFP-KE-08-0348-01	-,-,-,-,Ireland		

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

Link to previous years waste data
Link to previous years waste summary data & percentage change