

Facility Information Summary

Licence Register Number
 Name of site
 Site Location
 NACE Code
 Class of Activity
 RBME risk category
 National Grid Reference (6E, 6 N)

W0011-02
Ballymurtagh Landfill & Civic Amenity Facility
Tinnahinch, Avoca, Co. Wicklow
IESE
Disposal & Recovery of Non-Hazardous Waste
High
-6.22865,52.87457

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;

Ballymurtagh is a closed landfill (10 years) and now only operates a Recycling facility at 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	Robert Kelly	Date	17052012
Group/Facility manager			
(or nominated, suitably qualified and experienced deputy)			

AER summary template-AIR emissions

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 only need to complete table 1 fugitive emissions on site below

Additional information	
Yes	

Table 1 Fugitive emissions

Parameter /Substance	Annual fugitive emission (kg/annum)	Quantificaton method M/C/E
Methane (CH4)	238519	C
Carbon dioxide (CO2)	1043367	C

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	
Yes	

3 Was all monitoring carried out in accordance with EPA [Basic air monitoring](#) guidance note AG2 and using the basic air monitoring checklist? [checklist](#) [AGN2](#)

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
Flare	volumetric flow	23/01/2012	3000 m ³ /hr	100 % of values < ELV	161	Nm3/hour	yes	OTH		not applicable	
Flare	Carbon monoxide (CO)	23/01/2012	No limit		16.3	mg/Nm3	not applicable#	OTH	37.46	85	
Flare	Sulphur oxides (SOx/SO2)	23/01/2012	No limit		6.89	mg/Nm3	not applicable#	OTH	15.63	-92	
Flare	Nitrogen oxides (NOx/NO2)	23/1/12	<150mg/Nm ³	SELECT	56.2	mg/Nm3	yes	OTH	129.2	-19	

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

Continuous Monitoring

4 Does your site carry out continuous air emissions monitoring?

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

6 Do you have a proactive service agreement for each piece of continuous monitoring equipment?

7 Did your site experience any abatement system bypasses? If yes please detail them in table 4 below

Table 3: Summary of average emissions -continuous monitoring

Emission reference no:	Parameter/ Substance	ELV in licence or any revision thereof	Averaging Period	Compliance Criteria	Units of measurement	Annual Emission	Annual maximum	Monitoring Equipment downtime (hours)	% compliance current reporting year	Comments
Flare	Carbon monoxide (CO)	not applicable	not applicable	SELECT	mg/Nm3	37.46 kg	2.5	1030	100	

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

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

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** licensed emissions you **only** need to complete table 1 and /table 2 below for ambient monitoring and visual inspections

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

Additional information	
Yes	Suspended Solids
Yes	

Table 1 Ambient monitoring

Location reference	Location relative to site activities	PRTR Parameter	Licensed 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
SW1	upstream		Ammonia (as N)	Yearly Average	<1	All values < ELV	<0.08	mg/L	yes	
SW1	upstream		pH	Yearly Average	6 - 9	No pH value shall deviate from the specified range.	6.7	pH units	yes	
SW1	upstream		Suspended Solids	Yearly Average	35	All values < ELV	3	mg/L	yes	
SW1	upstream	Chlorides (as Cl)		Yearly Average	250	All values < ELV	8.5	mg/L	yes	
SW1	upstream		Dissolved Oxygen	Yearly Average	No abnormal change		10.7	mg/L	yes	
SW1	upstream		BOD	Yearly Average	5	All values < ELV	<2	mg/L	yes	
SW1	upstream		COD	Yearly Average	40	All values < ELV	13	mg/L	yes	
SW1	upstream		Conductivity	Yearly Average	1000	All values < ELV	67	µS/cm @20oC	yes	
SW1	upstream		Temperature	Yearly Average	25	All values < ELV	12	degrees C	yes	
SW1	upstream		Sulphate	Yearly Average	200	All values < ELV	9	mg/L	yes	
SW2	upstream		Ammonia (as N)	Yearly Average	<1	All values < ELV	<0.08	mg/L	yes	influenced by the Ballygahan mine drainage
SW2	upstream		pH	Yearly Average	6 - 9	No pH value shall deviate from the specified range.	6.6	pH units	yes	influenced by the Ballygahan mine drainage
SW2	upstream		Suspended Solids	Yearly Average	35	All values < ELV	4	mg/L	yes	influenced by the Ballygahan mine drainage
SW2	upstream	Chlorides (as Cl)		Yearly Average	250	All values < ELV	8.5	mg/L	yes	influenced by the Ballygahan mine drainage
SW2	upstream		Dissolved Oxygen	Yearly Average	No abnormal change		10.8	mg/L	yes	influenced by the Ballygahan mine drainage
SW2	upstream		BOD	Yearly Average	5	All values < ELV	<2	mg/L	yes	influenced by the Ballygahan mine drainage
SW2	upstream		COD	Yearly Average	40	All values < ELV	12	mg/L	yes	influenced by the Ballygahan mine drainage
SW2	upstream		Conductivity	Yearly Average	1000	All values < ELV	65	µS/cm @20oC	yes	influenced by the Ballygahan mine drainage
SW2	upstream		Temperature	Yearly Average	25	All values < ELV	12	degrees C	yes	influenced by the Ballygahan mine drainage
SW2	upstream		Sulphate	Yearly Average	200	All values < ELV	8	mg/L	yes	influenced by the Ballygahan mine drainage
SW3	downstream		Ammonia (as N)	Average for first three quarters of 2011.	<1	All values < ELV	9.3	mg/L	no (if no please enter details in comments box)	Contains acid mine drainage. This point changed to a groundwater monitoring point in new licence W0011-02 issued in August 2011. GW3 appears in Ground Water monitoring for Q4.
SW3	downstream		pH	Average for first three quarters of 2011.	6 - 9	No pH value shall deviate from the specified range.	4.3	pH units	no (if no please enter details in comments box)	Contains acid mine drainage. This point changed to a groundwater monitoring point in new licence W0011-02 issued in August 2011. GW3 appears in Ground Water monitoring for Q4.
SW3	downstream		Suspended Solids	Average for first three quarters of 2011.	35	All values < ELV	4	mg/L	yes	Contains acid mine drainage. This point changed to a groundwater monitoring point in new licence W0011-02 issued in August 2011. GW3 appears in Ground Water monitoring for Q4.
SW3	downstream	Chlorides (as Cl)		Average for first three quarters of 2011.	250	All values < ELV	30	mg/L	yes	Contains acid mine drainage. This point changed to a groundwater monitoring point in new licence W0011-02 issued in August 2011. GW3 appears in Ground Water monitoring for Q4.
SW3	downstream		Dissolved Oxygen	Average for first three quarters of 2011.	No abnormal change		7.2	mg/L	yes	Contains acid mine drainage. This point changed to a groundwater monitoring point in new licence W0011-02 issued in August 2011. GW3 appears in Ground Water monitoring for Q4.
SW3	downstream		BOD	Average for first three quarters of 2011.	5	All values < ELV	4	mg/L	yes	Contains acid mine drainage. This point changed to a groundwater monitoring point in new licence W0011-02 issued in August 2011. GW3 appears in Ground Water monitoring for Q4.

SW3	downstream		COD	Average for first three quarters of 2011.	40	All values < ELV	11	mg/L	yes	Contains acid mine drainage. This point changed to a groundwater monitoring point in new licence W0011-02 issued in August 2011. GW3 appears in Ground Water monitoring for Q4.
SW3	downstream		Conductivity	Average for first three quarters of 2011.	1000	All values < ELV	1877	µS/cm @20oC	no (if no please enter details in comments box)	Contains acid mine drainage. This point changed to a groundwater monitoring point in new licence W0011-02 issued in August 2011. GW3 appears in Ground Water monitoring for Q4.
SW3	downstream		Temperature	Average for first three quarters of 2011.	25	All values < ELV	13	degrees C	yes	Contains acid mine drainage. This point changed to a groundwater monitoring point in new licence W0011-02 issued in August 2011. GW3 appears in Ground Water monitoring for Q4.
SW3	downstream		Sulphate	Average for first three quarters of 2011.	200	All values < ELV	1281	mg/L	no (if no please enter details in comments box)	Contains acid mine drainage. This point changed to a groundwater monitoring point in new licence W0011-02 issued in August 2011. GW3 appears in Ground Water monitoring for Q4.
SW4	downstream		Ammonia (as N)	Yearly Average	<1	All values < ELV	0.13	mg/L	yes	
SW4	downstream		pH	Yearly Average	6 - 9	No pH value shall deviate from the specified range.	6	pH units	yes	
SW4	downstream		Suspended Solids	Yearly Average	35	All values < ELV	14	mg/L	yes	
SW4	downstream		Chlorides (as Cl)	Yearly Average	250	All values < ELV	9	mg/L	yes	
SW4	downstream		Dissolved Oxygen	Yearly Average	No abnormal change		10.5	mg/L	yes	
SW4	downstream		BOD	Yearly Average	5	All values < ELV	<2	mg/L	yes	
SW4	downstream		COD	Yearly Average	40	All values < ELV	11	mg/L	yes	
SW4	downstream		Conductivity	Yearly Average	1000	All values < ELV	92	µS/cm @20oC	no (if no please enter details in comments box)	
SW4	downstream		Temperature	Yearly Average	25	All values < ELV	12	degrees C	yes	
SW4	downstream		Sulphate	Yearly Average	200	All values < ELV	18	mg/L	yes	
SW5	downstream		Ammonia (as N)	Yearly Average	<1	All values < ELV	<0.08	mg/L	yes	
SW5	downstream		pH	Yearly Average	6 - 9	No pH value shall deviate from the specified range.	6.3	pH units	yes	
SW5	downstream		Suspended Solids	Yearly Average	35	All values < ELV	3	mg/L	yes	
SW5	downstream		Chlorides (as Cl)	Yearly Average	250	All values < ELV	9	mg/L	yes	
SW5	downstream		Dissolved Oxygen	Yearly Average	No abnormal change		10.7	mg/L	yes	
SW5	downstream		BOD	Yearly Average	5	All values < ELV	<2	mg/L	yes	
SW5	downstream		COD	Yearly Average	40	All values < ELV	12	mg/L	yes	
SW5	downstream		Conductivity	Yearly Average	1000	All values < ELV	78	µS/cm @20oC	no (if no please enter details in comments box)	
SW5	downstream		Temperature	Yearly Average	25	All values < ELV	12	degrees C	yes	
SW5	downstream		Sulphate	Yearly Average	200	All values < ELV	13	mg/L	yes	

*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)

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	Additional information
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 thereof ^{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
SW6	Water	Ammonia (as N)	discrete	14/11/2011	30 minutes	<1	All values < ELV	<0.08	mg/L	yes	Spectrophotometry (Colorimetry)	Other (please specify)	SMEWW 4500F	data not available	New monitoring point established during 2011	Flowmeter to be installed during 2012

SW6	Water	pH	discrete	14/11/2011	30 minutes	6 - 9	All values < ELV	7.9	pH units	yes	ISE (Ion Selective Electrode)	Other (please specify)	TP 003	data not available	New monitoring point established during 2011	Flowmeter to be installed during 2012
SW6	Water	Suspended Solids	discrete	14/11/2011	30 minutes	35	All values < ELV	7	mg/L	yes	Gravimetric analysis	Other (please specify)	SMEWW 2540D	data not available	New monitoring point established during 2011	Flowmeter to be installed during 2012
SW6	Water	Dissolved Oxygen	discrete	14/11/2011	30 minutes	No abnormal change	All values < ELV	10.7	mg/L	yes	Dissolved Oxygen Meter (Electrode)	Other (please specify)	MEWAM Book 16	data not available	New monitoring point established during 2011	Flowmeter to be installed during 2012
SW6	Water	BOD	discrete	14/11/2011	30 minutes	5	All values < ELV	<2	mg/L	yes	Dissolved Oxygen Meter (Electrode)	Other (please specify)	SMEWW 5210B	data not available	New monitoring point established during 2011	Flowmeter to be installed during 2012
SW6	Water	COD	discrete	14/11/2011	30 minutes	40	All values < ELV	7	mg/L	yes	Spectrophotometry (Colorimetry)	Other (please specify)	TP 006	data not available	New monitoring point established during 2011	Flowmeter to be installed during 2012
SW6	Water	Conductivity	discrete	14/11/2011	30 minutes	1000	All values < ELV	563	mg/L	yes	Conductivity Meter (Electrode)	Other (please specify)	TP 005	data not available	New monitoring point established during 2011	Flowmeter to be installed during 2012
SW6	Water	Temperature	discrete	14/11/2011	30 minutes	25	All values < ELV	12	degrees C	yes	Thermometer	Other (please specify)	On site	data not available	New monitoring point established during 2011	Flowmeter to be installed during 2012
SW6	Water	Sulphate	discrete	14/11/2011	30 minutes	200	All values < ELV	130	mg/L	yes	Spectrophotometry (Colorimetry)	Other (please specify)	TP 002	data not available	New monitoring point established during 2011	Flowmeter to be installed during 2012

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

5 Does your site carry out continuous emissions to water/sewer monitoring? Additional Information

No	
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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

SELECT	
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7 Do you have a proactive service contract for each piece of continuous monitoring equipment on site?

SELECT	
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8 Did abatement system bypass occur during the reporting year? If yes please complete table 5 below

SELECT	
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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					
	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 testing	dropdown menu click to see options	Additional information
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		
1 containment structures on site		
2 Please provide integrity testing frequency period		
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)		
3 type units and mobile bunds		Additional information
Yes		
3 years		
No		No concrete or other bunds on site

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)
	prefabricated					SELECT			SELECT	SELECT		SELECT		
	SELECT					SELECT			SELECT	SELECT		SELECT		

* Capacity required should comply with 25% or 150% containment rate as detailed in your licence

Has integrity testing been carried out in accordance with licence requirements and are all structures tested in line with BS8007/EPA Guidance?

4 line with BS8007/EPA Guidance? [bunding and storage guidelines](#)

5 Are channels/transfer systems to remote containment systems tested?

6 Are channels/transfer systems compliant in both integrity and available volume?

7 Do all sumps and chambers have high level liquid alarms?

8 If yes to Q7 are these failsafe systems included in a maintenance and testing programme?

SELECT
SELECT
SELECT
SELECT

Pipeline/underground structure testing

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

1 underground structures and pipelines on site

2 Please provide integrity testing frequency period

SELECT
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 | 1 | 2 | 3 | 4 | 5 | 7 | 8 |
| reinforced concrete | a)invest in capital improve | b) operational improvements | c)nothing | | | | | | | |
| Pass | general purpose concrete | prefabricated | other (please specify) | | | | | | | |
| Storm | Foul | Process concrete | pvc | polypropylene | other(please specify) | Mix (please specify) | | | | |
| steel | ceramic | concrete | | | | | | | | |
| 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) | | | | | | | | |

Groundwater /Contaminated land summary report

	Comments
1 Are you required to carry out groundwater monitoring as part of your licence requirements?	yes
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	no
5 Is the contamination related to operations at the facility (either current and/or historic)	yes Histroic contamination due to mine works in area.
6 Have actions been taken to address contamination issues?If yes please summarise remediation strategies proposed/undertaken for the site	no
7 Please specify the proposed time frame for the remediation strategy	SELECT
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
10 Has a Conceptual Site Model been developed for the site?	no
11 Have potential receptors been identified on and off site?	yes
12 Is there evidence that contamination is migrating offsite?	yes Acid mine drainage leaving site

Table 1: Upgradient Groundwater monitoring results

Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration++	Average Concentration+	unit	GTV's*	IGV	% change in average concentration previous year +/-	Upward trend in pollutant concentration over last 5 years of monitoring data
Annual Average	G1/05	Ammonical Nitrogen	Colourimetric	Quarterly	<0.08	<0.08	mg/l	0.15	IGV	0	No
Annual Average	G1/05	Chloride	Ion Chromatography	Quarterly	16	15	mg/l	30	IGV	0	No
Annual Average	G1/05	Conductivity	Electrometry	Quarterly	1804	1646	uS/cm @20 degrees C	1000	IGV	17	No
Annual Average	G1/05	Dissolved Oxygen	DO Probe	Quarterly	8.6	7.05	mg/l	No Abnormal Change	IGV	8	No
Annual Average	G1/05	Iron	Direct Aspiration/ Flame AAS	Quarterly	1.76	0.69	mg/l	0.2	IGV	72	No
Annual Average	G1/05	Odour	On Site	Quarterly	Odourless	Odourless	not applicable	not applicable	IGV	not applicable	No
Annual Average	G1/05	pH	Hydrogen ion selective Electrode	Quarterly	4.1	3.9	pH units	6.5 - 9.5	IGV	8	No
Annual Average	G1/05	Potassium	Ion Chromatography	Quarterly	2	1.8	mg/l	5	IGV	-10	No
Annual Average	G1/05	Sodium	Ion Chromatography	Quarterly	11	11	mg/l	150	IGV	0	No
Annual Average	G1/05	Sulphate	Ion Chromatography	Quarterly	1367	1244	mg/l	200	IGV	11	No
Annual Average	G1/05	TOC	Heated Persulfate Oxidation	Quarterly	1.6	1.4	mg/l	No Abnormal Change	IGV	14	No
Annual Average	G1/05	Total Phenols	Distallation/ Colormetry	Quarterly	0.07	0.6	mg/l	0.5	IGV	84	No
Annual Average	G1/05	Faecal Coliforms	Membrane Filtration	Quarterly	0	0	cfu/100mls	0	IGV	0	No
Annual Average	G1/05	Total Coliforms	Membrane Filtration	Quarterly	0	0	cfu/100mls	0	IGV	0	No
Annual Average	G2/05	Ammonical Nitrogen	Colourimetric	Quarterly	<0.08	<0.08	mg/l	0.15	IGV	0	No
Annual Average	G2/05	Chloride	Ion Chromatography	Quarterly	18	17	mg/l	30	IGV	12	No
Annual Average	G2/05	Conductivity	Electrometry	Quarterly	1298	1252	uS/cm @20 degrees C	1000	IGV	3	No
Annual Average	G2/05	Dissolved Oxygen	DO Probe	Quarterly	9.7	8.8	mg/l	No Abnormal Change	IGV	1	No
Annual Average	G2/05	Iron	Direct Aspiration/ Flame AAS	Quarterly	0.22	0.2	mg/l	0.2	IGV	-61	No
Annual Average	G2/05	Odour	On Site	Quarterly	Odourless	Odourless	not applicable	not applicable	IGV	not applicable	No
Annual Average	G2/05	pH	Hydrogen ion selective Electrode	Quarterly	4.4	4.05	pH units	6.5 - 9.5	IGV	1	No
Annual Average	G2/05	Potassium	Ion Chromatography	Quarterly	2	1.75	mg/l	5	IGV	-13	No
Annual Average	G2/05	Sodium	Ion Chromatography	Quarterly	19	13	mg/l	150	IGV	23	No

Annual Average	G2/05	Sulphate	Ion Chromatography	Quarterly	879	832	mg/l	200	IGV	3	No
Annual Average	G2/05	TOC	Heated Persulfate Oxidation	Quarterly	1.4	1.2	mg/l	No Abnormal Change	IGV	8	No
Annual Average	G2/05	Total Phenols	Distillation/ Colormetry	Quarterly	0.05	0.05	mg/l	0.5	IGV	-50	No
Annual Average	G2/05	Faecal Coliforms	Membrane Filtration	Quarterly	0	0	cfu/100mls	0	IGV	-100	No
Annual Average	G2/05	Total Coliforms	Membrane Filtration	Quarterly	70	20	cfu/100mls	0	IGV	-56	No
Annual Average	Twin Shafts	Ammonical Nitrogen	Colourimetric	Quarterly	0.18	0.11	mg/l	0.15	IGV	18	No
Annual Average	Twin Shafts	Chloride	Ion Chromatography	Quarterly	25	24	mg/l	30	IGV	12	No
Annual Average	Twin Shafts	Conductivity	Electrometry	Quarterly	398	371	uS/cm @20 degrees C	1000	IGV	10	No
Annual Average	Twin Shafts	Dissolved Oxygen	DO Probe	Quarterly	11.2	10.2	mg/l	No Abnormal Change	IGV	-6	No
Annual Average	Twin Shafts	Iron	Direct Aspiration/ Flame AAS	Quarterly	0.13	0.11	mg/l	0.2	IGV	9	No
Annual Average	Twin Shafts	Odour	On Site	Quarterly	Odourless	Odourless	not applicable	not applicable	IGV	not applicable	No
Annual Average	Twin Shafts	pH	Hydrogen ion selective Electrode	Quarterly	7	6.9	pH units	6.5 - 9.5	IGV	-5	No
Annual Average	Twin Shafts	Potassium	Ion Chromatography	Quarterly	9	8.3	mg/l	5	IGV	-31	No
Annual Average	Twin Shafts	Sodium	Ion Chromatography	Quarterly	10	10	mg/l	150	IGV	0	No
Annual Average	Twin Shafts	Sulphate	Ion Chromatography	Quarterly	117	105	mg/l	200	IGV	11	No
Annual Average	Twin Shafts	TOC	Heated Persulfate Oxidation	Quarterly	2	1.8	mg/l	No Abnormal Change	IGV	6	No
Annual Average	Twin Shafts	Total Phenols	Distillation/ Colormetry	Quarterly	0.07	0.06	mg/l	0.5	IGV	17	No
Annual Average	Twin Shafts	Faecal Coliforms	Membrane Filtration	Quarterly	100	27	cfu/100mls	0	IGV	-73	No
Annual Average	Twin Shafts	Total Coliforms	Membrane Filtration	Quarterly	100	75	cfu/100mls	0	IGV	-25	No

.+ 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*	SELECT**	% change in average concentration previous year +/-	Upward trend in yearly average pollutant concentration over last 5 years of monitoring data
Annual Average	G1/04	Ammonical Nitrogen	Colourimetric	Quarterly	0.23	0.15	mg/l	0.15	IGV	-94	No
Annual Average	G1/04	Chloride	Ion Chromatography	Quarterly	33	25	mg/l	30	IGV	64	No
Annual Average	G1/04	Conductivity	Electrometry	Quarterly	9590	8963	uS/cm @20 degrees C	1000	IGV	-7	No
Annual Average	G1/04	Dissolved Oxygen	DO Probe	Quarterly	9.4	8.1	mg/l	No Abnormal Change	IGV	-6	No
Annual Average	G1/04	Iron	Direct Aspiration/ Flame AAS	Quarterly	62	57	mg/l	0.2	IGV	-12	No
Annual Average	G1/04	Odour	On Site	Quarterly	Odourless	Odourless	not applicable	not applicable	IGV	not applicable	No
Annual Average	G1/04	pH	Hydrogen ion selective Electrode	Quarterly	3.3	3.2	pH units	6.5 - 9.5	IGV	-5	No
Annual Average	G1/04	Potassium	Ion Chromatography	Quarterly	7	5	mg/l	5	IGV	0	No
Annual Average	G1/04	Sodium	Ion Chromatography	Quarterly	10	7	mg/l	150	IGV	29	No
Annual Average	G1/04	Sulphate	Ion Chromatography	Quarterly	13520	12154	mg/l	200	IGV	-2	No
Annual Average	G1/04	TOC	Heated Persulfate Oxidation	Quarterly	6.9	6.7	mg/l	No Abnormal Change	IGV	-2	No
Annual Average	G1/04	Total Phenols	Distillation/ Colormetry	Quarterly	0.17	0.08	mg/l	0.5	IGV	37	No
Annual Average	G1/04	Faecal Coliforms	Membrane Filtration	Quarterly	26	7	cfu/100mls	0	IGV	14	No

Annual Average	G1/04	Total Coliforms	Membrane Filtration	Quarterly	32	19	cfu/100mls	0	IGV	-81	No
First Three quarters of 2011. Well not monitored in new licence.	BH96/3	Ammonical Nitrogen	Colourimetric	Quarterly	209	182	mg/l	0.15	IGV	7	No
First Three quarters of 2011. Well not monitored in new licence.	BH96/3	Chloride	Ion Chromatography	Quarterly	99	92	mg/l	30	IGV	42	No
First Three quarters of 2011. Well not monitored in new licence.	BH96/3	Conductivity	Electrometry	Quarterly	3810	3627	uS/cm @20 degrees C	1000	IGV	2	No
First Three quarters of 2011. Well not monitored in new licence.	BH96/3	Dissolved Oxygen	DO Probe	Quarterly	5.2	5	mg/l	No Abnormal Change	IGV	20	No
First Three quarters of 2011. Well not monitored in new licence.	BH96/3	Iron	Direct Aspiration/ Flame AAS	Quarterly	1.05	0.75	mg/l	0.2	IGV	72	No
First Three quarters of 2011. Well not monitored in new licence.	BH96/3	Odour	On Site	Quarterly	Odourless	Odourless	not applicable	not applicable	IGV	not applicable	No
First Three quarters of 2011. Well not monitored in new licence.	BH96/3	pH	Hydrogen ion selective Electrode	Quarterly	7.9	7.5	pH units	6.5 - 9.5	IGV	-5	No
First Three quarters of 2011. Well not monitored in new licence.	BH96/3	Potassium	Ion Chromatography	Quarterly	85	79	mg/l	5	IGV	32	No
First Three quarters of 2011. Well not monitored in new licence.	BH96/3	Sodium	Ion Chromatography	Quarterly	62	60	mg/l	150	IGV	72	No
First Three quarters of 2011. Well not monitored in new licence.	BH96/3	Sulphate	Ion Chromatography	Quarterly	1203	1132	mg/l	200	IGV	-7	No
First Three quarters of 2011. Well not monitored in new licence.	BH96/3	TOC	Heated Persulfate Oxidation	Quarterly	24	21	mg/l	No Abnormal Change	IGV	29	No
First Three quarters of 2011. Well not monitored in new licence.	BH96/3	Total Phenols	Distillation/ Colormetry	Quarterly	0.55	0.22	mg/l	0.5	IGV	77	No
First Three quarters of 2011. Well not monitored in new licence.	BH96/3	Faecal Coliforms	Membrane Filtration	Quarterly	0	0	cfu/100mls	0	IGV	0	No
First Three quarters of 2011. Well not monitored in new licence.	BH96/3	Total Coliforms	Membrane Filtration	Quarterly	100	95	cfu/100mls	0	IGV	-5	No
New monitoring well. Began monitoring in last quarter of 2011.	RC6	Ammonical Nitrogen	Colourimetric	Quarterly	0.19	0.19	mg/l	0.15	IGV	New Well	New Well
New monitoring well. Began monitoring in last quarter of 2011.	RC6	Chloride	Ion Chromatography	Quarterly	18	18	mg/l	30	IGV	New Well	New Well
New monitoring well. Began monitoring in last quarter of 2011.	RC6	Conductivity	Electrometry	Quarterly	5280	5280	uS/cm @20 degrees C	1000	IGV	New Well	New Well
New monitoring well. Began monitoring in last quarter of 2011.	RC6	Dissolved Oxygen	DO Probe	Quarterly	10.4	10.4	mg/l	No Abnormal Change	IGV	New Well	New Well
New monitoring well. Began monitoring in last quarter of 2011.	RC6	Iron	Direct Aspiration/ Flame AAS	Quarterly	19	19	mg/l	0.2	IGV	New Well	New Well
New monitoring well. Began monitoring in last quarter of 2011.	RC6	Odour	On Site	Quarterly	Odourless	Odourless	not applicable	not applicable	IGV	New Well	New Well
New monitoring well. Began monitoring in last quarter of 2011.	RC6	pH	Hydrogen ion selective Electrode	Quarterly	3.1	3.1	pH units	6.5 - 9.5	IGV	New Well	New Well
New monitoring well. Began monitoring in last quarter of 2011.	RC6	Potassium	Ion Chromatography	Quarterly	<1	<1	mg/l	5	IGV	New Well	New Well
New monitoring well. Began monitoring in last quarter of 2011.	RC6	Sodium	Ion Chromatography	Quarterly	9	9	mg/l	150	IGV	New Well	New Well

New monitoring well. Began monitoring in last quarter of 2011.	RC6	Sulphate	Ion Chromatography	Quarterly	5828	5828	mg/l	200	IGV	New Well	New Well
New monitoring well. Began monitoring in last quarter of 2011.	RC6	TOC	Heated Persulfate Oxidation	Quarterly	4.2	4.2	mg/l	No Abnormal Change	IGV	New Well	New Well
New monitoring well. Began monitoring in last quarter of 2011.	RC6	Total Phenols	Distillation/ Colormetry	Quarterly	0.09	0.09	mg/l	0.5	IGV	New Well	New Well
New monitoring well. Began monitoring in last quarter of 2011.	RC6	Faecal Coliforms	Membrane Filtration	Quarterly	35	35	cfu/100mls	0	IGV	New Well	New Well
New monitoring well. Began monitoring in last quarter of 2011.	RC6	Total Coliforms	Membrane Filtration	Quarterly	0	0	cfu/100mls	0	IGV	New Well	New Well
New monitoring well. Began monitoring in last quarter of 2011.	SW3	Ammonical Nitrogen	Colourimetric	Quarterly	7.8	7.8	mg/l	0.15	IGV	New Well	New Well
New monitoring well. Began monitoring in last quarter of 2011.	SW3	Chloride	Ion Chromatography	Quarterly	15	15	mg/l	30	IGV	New Well	New Well
New monitoring well. Began monitoring in last quarter of 2011.	SW3	Conductivity	Electrometry	Quarterly	2020	2020	uS/cm @20 degrees C	1000	IGV	New Well	New Well
New monitoring well. Began monitoring in last quarter of 2011.	SW3	Dissolved Oxygen	DO Probe	Quarterly	9.7	9.7	mg/l	No Abnormal Change	IGV	New Well	New Well
New monitoring well. Began monitoring in last quarter of 2011.	SW3	Iron	Direct Aspiration/ Flame AAS	Quarterly	111	111	mg/l	0.2	IGV	New Well	New Well
New monitoring well. Began monitoring in last quarter of 2011.	SW3	Odour	On Site	Quarterly	Odourless	Odourless	not applicable	not applicable	IGV	New Well	New Well
New monitoring well. Began monitoring in last quarter of 2011.	SW3	pH	Hydrogen ion selective Electrode	Quarterly	4.4	4.4	pH units	6.5 - 9.5	IGV	New Well	New Well
New monitoring well. Began monitoring in last quarter of 2011.	SW3	Potassium	Ion Chromatography	Quarterly	10	10	mg/l	5	IGV	New Well	New Well
New monitoring well. Began monitoring in last quarter of 2011.	SW3	Sodium	Ion Chromatography	Quarterly	20	20	mg/l	150	IGV	New Well	New Well
New monitoring well. Began monitoring in last quarter of 2011.	SW3	Sulphate	Ion Chromatography	Quarterly	1413	1413	mg/l	200	IGV	New Well	New Well
New monitoring well. Began monitoring in last quarter of 2011.	SW3	TOC	Heated Persulfate Oxidation	Quarterly	<1	<1	mg/l	No Abnormal Change	IGV	New Well	New Well
New monitoring well. Began monitoring in last quarter of 2011.	SW3	Total Phenols	Distillation/ Colormetry	Quarterly	0.05	0.05	mg/l	0.5	IGV	New Well	New Well
New monitoring well. Began monitoring in last quarter of 2011.	SW3	Faecal Coliforms	Membrane Filtration	Quarterly	0	0	cfu/100mls	0	IGV	New Well	New Well
New monitoring well. Began monitoring in last quarter of 2011.	SW3	Total Coliforms	Membrane Filtration	Quarterly	0	0	cfu/100mls	0	IGV	New Well	New Well

* 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)

[Groundwater regulations](#) [Drinking water \(private supply\) standards](#) [Drinking water \(public supply\) standards](#) [Interim Guideline Values \(IGV\)](#)
[Surface water EQS](#) [GTV's](#)

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 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	No
2	Does the EMS reference the most significant environmental aspects and associated impacts on-site	No
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
Reduction of emissions to Air	Increase run time of flare	80	Daily balancing of Gas field	Individual	Reduced emissions
Additional improvements	Improve Surface water run off from capped area of landfill	100	New SW drains installed on site	Individual	Improved Environmental Management Practices
Materials Handling/Storage/Bunding	Install weighing mechanism in Civic Amenity Area	90	Purchase and Calibrate weighing system	Individual	Installation of infrastructure
Additional improvements	Install an LEMP at the facility	40	Define Objectives and Targets and specify action dates	Individual	Improved Environmental Management Practices
Additional improvements	Implement a condensate management program for LFG	80	Reduce all small diameter piping to flare, include on daily checklist	Individual	Improved Environmental Management Practices
Reduction of emissions to Air	Carry out independent assessment of gas field and implement recommendations	50	Independent Assesment now complete	Individual	Improved Environmental Management Practices
Additional improvements	Carry out indepenedant assessment of landfill capping performance	10	To be submitted before Feb. 2013	Individual	Increased compliance with licence conditions
Energy Efficiency/Utility conservation	Carry out Energy Efficency inspection	10	To be submitted before August 2012	Individual	Improved Environmental Management Practices
Additional improvements	Write an Accident Prevention procedure for Facility	90	Risk assesment carried out for the site.	Individual	Improved Environmental Management Practices
Additional improvements	Complete an Environmental Liabilities and Risk Assessment Report (ELRA)	100	Completed for submission with this AER	Individual	Improved Environmental Management Practices
Reduction of emissions to Water	Install Petrol/ Oil Interceptor on SW discharge to river	10	To be installed during 2012	Individual	Reduced emissions

Noise Monitoring Report Summary

- 1 Was noise monitoring a licence requirement for the AER period? Yes
 If yes please fill in table 1 noise summary below
- 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? Yes [Draft Noise Guidance](#)
- 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)?
13/10/2011	30 min		NSL1	48.4	27.9	36.6	76.9	No	SELECT	Birdsong, distant traffic No site noise	Yes
13/10/2011	30 min		NSL4	50.5	38.6	55.1	70.3	No		Heavy road traffic. No site noise	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?

Any additional comments? (less than 200 words)

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
- 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
- 3 Where Fuel Oil is used in boilers on site is the sulphur content compliant with licence conditions? Please state percentage in additional information

[SEAI - Large Industry Energy Network \(LIEN\)](#)

To be done before Aug-12	
no	
SELECT	Not used

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	62189	54196	-13	not applicable
Fossil Fuels:				
Heavy Fuel Oil				
Light Fuel Oil	4800 litres	4650 litres	-3	not applicable
Natural gas				
Coal/Solid fuel				
Renewable energy generated on site				

* 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				
Surface water				
Public supply	8300	8670	4	
Total				

* 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
			SELECT					
			SELECT					
			SELECT					

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

PRTR Facility logos

dropdown list click to see options

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

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)
If yes please enter details in table 1 below

Additional Information

Yes

No

No

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
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

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)

Licensed annual tonnage limit for your site (total tonnes/annum)	EWC code	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 -
	15 01 01	General Avoca Catchment area	paper and cardboard packaging	87.0	86	-1.2	Economic factors		R3	2	
	20 01 01	General Avoca Catchment area	paper and cardboard	144.0	145	-0.7	Economic factors		R3	5	
	15 01 07	General Avoca Catchment area	glass packaging	83.0	83	0	Economic factors		R3	4	
	15 01 04	General Avoca Catchment area	metallic packaging	18.0	16	11	Economic factors		R5	0.3	
	20 01 40	General Avoca Catchment area	metals	37.0	32	15	Economic factors		R4	1	
	15 01 02	General Avoca Catchment area	plastic packaging	49.0	45	8	Economic factors		R4	1	
	15 01 05	General Avoca Catchment area	composite packaging	6.0	9	-33	Economic factors		R3	0.2	
	20 01 11	General Avoca Catchment area	textiles	11.0	21	-47	Economic factors		R3	1	
	16 06 01	General Avoca Catchment area	lead batteries	2.33	5.6	-59	Economic factors		R3	0.5	
	16 06 04	General Avoca Catchment area	alkaline batteries (except 16 06 03)	1.453	2.4	-42	Economic factors		R4	0.1	
	13 02 05	General Avoca Catchment area	mineral-based non-chlorinated engine, gear and lubricating oils	2.9	1.8	62	Economic factors		R4	1	
	20 01 25	General Avoca Catchment area	edible oil and fat	0.3	0.5	60	Economic factors		R9	0.1	

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
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
6 Does your facility have relevant nuisance controls in place?
7 Do you have an odour management system in place for your facility? If no why?
8 Do you maintain a sludge register on site?

Yes R4

Yes

Yes

Yes

No Only dry recyclable material accepted

No

SECTION D-TO BE COMPLETED BY LANDFILL SITES ONLY

Table 2 Waste type and tonnage-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)				
e.g. Industrial non hazardous solids				

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	
Landfill Area	1989	2002	No	Public	Non Hazardous	Closed	No	No		6 acre	0	0	Area is unlined but is capped

Table 4 Environmental monitoring-landfill only [Landfill Manual-Monitoring Standards](#)

Was meteorological 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 SSX(A)(5) of WMA been submitted in reporting year	Comments
Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	

-> please refer to Landfill Manual linked above for relevant Landfill Directive monitoring standards

Table 5 Capping-Landfill only

Area uncapped*	Area with temporary cap	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
6 acres	0	6 acres	0	6 acres	As agreed with Agency	

*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?
10 Is leachate released to surface water? If yes please complete leachate mass load information below

No

Yes Mixed with Acid mine drainage

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

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
2284521	0	not applicable	Yes	

[Guidance to completing the PRTR workbook](#)

AER Returns Workbook

Version 1.1.13

REFERENCE YEAR	2011
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1. FACILITY IDENTIFICATION

Parent Company Name	Wicklow County Council
Facility Name	Ballymurtagh Landfill Facility
PRTR Identification Number	W0011
Licence Number	W0011-02

Waste or IPPC Classes of Activity

No.	class_name
4.11	Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule.
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.
3.2	Land treatment, including biodegradation of liquid or sludge discards in soils.
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.
4.10	The treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system.
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	Ballymurtagh, Ballygahan Upper, Ballygahan Lower
Address 2	Tinnahinch
Address 3	Co. Wicklow
Address 4	
	Wicklow
Country	Ireland
Coordinates of Location	-6.22452 52.8711
River Basin District	IEEA
NACE Code	3832
Main Economic Activity	Recovery of sorted materials
AER Returns Contact Name	Robert Kelly
AER Returns Contact Email Address	rkelly@wicklowcoco.ie
AER Returns Contact Position	Landfill Manager
AER Returns Contact Telephone Number	0596481717
AER Returns Contact Mobile Phone Number	0868517617
AER Returns Contact Fax Number	040467792
Production Volume	0.0
Production Volume Units	0
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	0
User Feedback/Comments	0
Web Address	0

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
50.1	General
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 ?	
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

[Link to previous years emissions data](#)

[PRTR# : W0011 | Facility Name : Ballymurtagh Landfill Facility | Filename : Copy of W0011_2011_A01.xls | Return Year : 2011]

12/08/2012 15:17

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

POLLUTANT		METHOD			Please enter all quantities in this section in KGs			
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
01	Methane (CH4)	C	OTH	Gas Sim 2 & SITE DATA	4758.102	243277.863959184	0.0	238519.761959184
03	Carbon dioxide (CO2)	C	OTH	Gas Sim 2 & SITE DATA	19575.287	1062942.29432	0.0	1043367.00732

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

SECTION B : REMAINING PRTR POLLUTANTS

POLLUTANT		METHOD			Please enter all quantities in this section in KGs			
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
15	Chlorofluorocarbons (CFCs)	C	OTH	Gas Sim 2 - PI Report	0.0	0.55	0.0	0.55
14	Hydrochlorofluorocarbons (HCFCs)	C	OTH	Gas Sim 2 - PI Report	0.0	0.523	0.0	0.523

* 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)

POLLUTANT		METHOD			Please enter all quantities in this section in KGs			
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

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: Please enter summary data on the quantities of methane flared and / or utilised	Ballymurtagh Landfill Facility				
	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)	476424.864	C	SSC	Gas Sim 2 - Statistics	N/A
Methane flared	233147.0	M	OTH	Site data	500.0 (Total Flaring Capacity)
Methane utilised in engine/s	0.0				0.0 (Total Utilising Capacity)
Net methane emission (as reported in Section A above)	243277.864	C	OTH	Gas Sim 2 Statistics - Site data	N/A

4.2 RELEASES TO WATERS

[Link to previous years emissions data](#)

[PRTR# : W0011 | Facility Name : Ballymurtagh Landfill Facility | Filename : Copy of W0011_2011_A01.xls | Return Year : 2011 |

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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

POLLUTANT		RELEASURES TO WATERS			Please enter all quantities in this section in KGs			
No. Annex II	Name	M/C/E	Method Code	Method Used 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

POLLUTANT		RELEASURES TO WATERS			Please enter all quantities in this section in KGs			
No. Annex II	Name	M/C/E	Method Code	Method Used 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)

POLLUTANT		RELEASURES TO WATERS			Please enter all quantities in this section in KGs			
Pollutant No.	Name	M/C/E	Method Code	Method Used Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
240	Suspended Solids	C	OTH	Flowrate * Conc.		3109.0	3109.0	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](#)

| PRTR# : W0011 | Facility Name : Ballymurtagh Landfill Facility | Filename : Copy of W0011_2011_

12/06/2012 15:17

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			
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			
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](#)

| PRTR# : W0011 | Facility Name : Ballymurtagh Landfill Facility | Filename : Copy of W0011_2011_A01.xls | Return Year : 2011 |

12/06/2012 15:17

SECTION A : PRTR POLLUTANTS

RELEASES TO LAND			Please enter all quantities in this section in KGs				
POLLUTANT		METHOD		QUANTITY			
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			
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

| PRTR#: W0011 | Facility Name : Ballymurtagh Landfill Facility | Filename : Copy of W0011_2011_A01.xls | Return Year : 2011 |

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Please enter all quantities on this sheet in Tonnes

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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	20 03 01	No	12.0	mixed municipal waste	D1	M	Weighed	Offsite in Ireland	Wicklow Co.Co.,W0066-03	Rampere Landfill,0 Baltinglass,Co.Wicklow,Ireland		
Within the Country	15 01 01	No	87.0	paper and cardboard packaging	R3	M	Weighed	Offsite in Ireland	Greenstar/ Bailey Waste,WPT94	Est,0,Blanchardstown,Dublin 15,Ireland		
Within the Country	20 01 01	No	144.0	paper and cardboard	R3	M	Weighed	Offsite in Ireland	Greenstar/ Bailey Waste,WPT94	Est,0,Blanchardstown,Dublin 15,Ireland		
Within the Country	15 01 07	No	83.0	glass packaging	R5	M	Weighed	Offsite in Ireland	Glassco Ltd.,WP247/2006	...,Naas,Co. Kildare,Ireland		
Within the Country	15 01 04	No	18.0	metallic packaging	R4	M	Weighed	Offsite in Ireland	Glassco Ltd.,WP247/2006	...,Naas,Co. Kildare,Ireland		
Within the Country	20 01 40	No	37.0	metals	R4	M	Weighed	Offsite in Ireland	Leon Recycling,WP/ESS/15/8/12	Estate,.,Arklow,Co.Wicklow,Ireland		
Within the Country	15 01 02	No	49.0	plastic packaging	R13	C	Volume Calculation	Offsite in Ireland	Wicklow Co. Co.,Cert of Reg. 1497	Arklow Recycling Centre,Croghan Industrial Estate,Arklow ,Co.Wicklow,Ireland		
Within the Country	15 01 05	No	6.0	composite packaging	R13	C	Volume Calculation	Offsite in Ireland	Wicklow Co. Co.,Cert of Reg. 1497	Arklow Recycling Centre,Croghan Industrial Estate,Arklow ,Co.Wicklow,Ireland		
Within the Country	20 01 11	No	11.0	textiles	R3	M	Weighed	Offsite in Ireland	National Council for the Blind of Ireland,WP214/2005	...,Dublin,.,Ireland		
Within the Country	16 06 01	Yes	2.33	lead batteries	R4	M	Weighed	Offsite in Ireland	Recycling Village,WP 2007/20	...,Monisterboice,Co.Louth,Ireland	Recycling Village,WP 2007/20,.,Monisterboice,Co. ,.,Monisterboice,Co.Louth,Ireland	
Within the Country	16 06 04	No	1.453	alkaline batteries (except 16 06 03)	R4	M	Weighed	Offsite in Ireland	Recycling Village,WP 2007/20	...,Monisterboice,Co.Louth,Ireland		
Within the Country	13 02 05	Yes	2.9	mineral-based non-chlorinated engine, gear and lubricating oils	R9	M	Weighed	Offsite in Ireland	ENVA,W184-01	Clonmannon Industrial Estate,.,Portlaoise,Co.Laois,Ireland	Enva,W184-01,Clonmannon Industrial Est,.,Portlaoise,Co.Laois,Ireland	Clonmannon Industrial Est,.,Portlaoise,Co.Laois,Ireland
To Other Countries	20 01 25	No	0.3	edible oil and fat	R1	M	Volume Calculation	Abroad	Frylite,.	...,Belfast,United Kingdom		

* 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](#)