

SELECT cells that are highlighted blue contain a dropdown menu click to select one option from the list

[guidance document link](#) cells that contain underlined text click to access relevant guidance documents for this section

Table heading * table headings followed by a symbol have an associated footnote or instructions

Cells with red indicator in top right corner cells that have a red indicator in the top right corner contain a comment box with further instructions or clarification

Please note an interpretation of results is still required. This should be entered in the additional information/comments boxes within the templates. Please size these boxes appropriately to fit your interpretation, if additional space is required please include an appendix to the AER template and merge it as part of the AER PDF document. The excel template should have all cells sized appropriately so that all text is readable before it is converted to PDF document.

Facility Information Summary	
AER Reporting Year	2016
Licence Register Number	W0289--01
Name of site	The East Tip
Site Location	Haulbowline Island, Co. Cork
NACE Code	3900
Class/Classes of Activity	D1, D4, D7, D13, D15, R4, R5, R12, R13
National Grid Reference (6E, 6 N)	E79532, N65455
A description of the activities/processes at the site for the reporting year. This should include information such as production increases or decreases on site, any infrastructural changes, environmental performance which was measured during the reporting year and an overview of compliance with your licence listing all exceedances of licence limits (where applicable) and what they relate to e.g. air, water, noise.	<p>The Waste Licence covers the proposed to remediation of the East Tip site through the following:</p> <ol style="list-style-type: none"> 1. Constructing an engineered capping system over the surface of the waste body and installing a surface water drainage system to limit surface water infiltration. 2. Constructing a Perimeter Engineered Structure (PES) to limit tidal inundation to the site. 3. Re-profiling and landscaping the site to facilitate the provision of a public park (including grassland, wetland, paths, playing pitch, car park for 54 no. cars, bicycle parking area, future overflow parking area, entrance feature, boundary and other fencing, bird viewing areas, bird roosting ledge, and all associated landscaping works). <p>The licensed activity is due to commence circa June 2017 and there were no licensed activities carried out on the site in the 2016 calendar year. As such, there is no monitoring data, complaints, incidents, liability assessment, etc. carried out in 2016 and these elements of this AER contain no data. The 2017 AER will contain the relevant information on the licensed activity.</p>

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 <small>(or nominated, suitably qualified and experienced deputy)</small>	7th April 2017 Date
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AIR-summary template Lic No: W0289-01 Year 2016

Answer all questions and complete all tables where relevant

1 Does your site have licensed air emissions? If yes please complete table A1 and A2 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 A4 and A5) you do not need to complete the tables

SELECT	Additional information
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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 TableA1 below

SELECT	
--------	--

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](#)

SELECT	
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Table A1: Licensed Mass Emissions/Ambient data-periodic monitoring (non-continuous)

Emission reference no:	Parameter/ Substance	Frequency of Monitoring	ELV in licence or any revision thereof	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence limit	Method of analysis	Annual mass load (kg)	Comments - reason for change in % mass load from previous year if applicable
	SELECT			SELECT		SELECT	SELECT	SELECT		
	SELECT			SELECT		SELECT	SELECT	SELECT		
	SELECT			SELECT		SELECT	SELECT	SELECT		
	SELECT			SELECT		SELECT	SELECT	SELECT		

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

AIR-summary template	Lic No:	W0289-01	Year	2016
Continuous Monitoring				

<p>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 A2 and compare it to its relevant Emission Limit Value (ELV)</p>	SELECT	
<p>5 Did continuous monitoring equipment experience downtime? If yes please record downtime in table A2 below</p>	SELECT	
<p>6 Do you have a proactive service agreement for each piece of continuous monitoring equipment?</p>	SELECT	
<p>7 Did your site experience any abatement system bypasses? If yes please detail them in table A3 below</p>	SELECT	

Table A2: 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)	Number of ELV exceedences in current reporting year	Comments
	SELECT			SELECT	SELECT					
	SELECT				SELECT					
	SELECT				SELECT					
	SELECT				SELECT					
	SELECT				SELECT					

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

Table A3: Abatement system bypass reporting table [Bypass protocol](#)

Date*	Duration** (hours)	Location	Reason for bypass	Impact magnitude	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

Solvent use and management on site

8 Do you have a total Emission Limit Value of direct and fugitive emissions on site? if yes please fill out tables A4 and A5

SELECT

Table A4: Solvent Management Plan Summary	Solvent regulations Please refer to linked solvent regulations to complete table 5 and 6
Total VOC Emission limit value	

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 thereof	Compliance
					SELECT
					SELECT

Table A5: Solvent Mass Balance summary

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

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

Lic No:

W0289-01

Year

2016

1 Does your site have licensed emissions direct to surface water or direct to sewer? If yes please complete table W2 and W3 below for the current reporting year and answer further questions. If **you do not have** licenced emissions you only need to complete table W1 and or W2 for storm water analysis 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 W2 below summarising only any evidence of contamination noted during visual inspections

Additional information	
SELECT	
SELECT	

Table W1 Storm water 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
SELECT	SELECT	SELECT	SELECT			SELECT		SELECT	SELECT	
SELECT	SELECT	SELECT	SELECT			SELECT		SELECT	SELECT	

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

Table W2 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 W3 below

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 Assessment of results checklist](#)

Additional information	
SELECT	
SELECT	

Table W3: Licensed Emissions to water and /or wastewater (sewer)-periodic monitoring (non-continuous)

Emission reference no:	Emission released to	Parameter/ SubstanceNote 1	Type of sample	Frequency 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)	Comments
	SELECT	SELECT	SELECT		SELECT		SELECT		SELECT	SELECT	SELECT	SELECT			

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?

If yes please summarise your continuous monitoring data below in Table W4 and compare it to its relevant Emission Limit Value (ELV)

6 Did continuous monitoring equipment experience downtime? If yes please record downtime in table W4 below

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

8 Did abatement system bypass occur during the reporting year? If yes please complete table W5 below

Table W4: 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)	Number of ELV exceedences in reporting year	Comments
	<input type="text" value="SELECT"/>	<input type="text" value="SELECT"/>		<input type="text" value="SELECT"/>	<input type="text" value="SELECT"/>	<input type="text" value="SELECT"/>					
	<input type="text" value="SELECT"/>	<input type="text" value="SELECT"/>		<input type="text" value="SELECT"/>	<input type="text" value="SELECT"/>	<input type="text" value="SELECT"/>					

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

Table W5: 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?
						<input type="text" value="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 B1 below listing all **new bunds and containment structures** on site, in addition to **all bunds which failed the integrity test-all bunding structures which failed including mobile bunds must be listed in the table below, please include all bunds outside the licenced testing period** (mobile bunds and chemstore included)

- 1 Please provide integrity testing frequency period
- 2 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 How many bunds are on site?
- 4 How many of these bunds have been tested within the required test schedule?
- 5 How many mobile bunds are on site?
- 6 Are the mobile bunds included in the bund test schedule?
- 7 How many of these mobile bunds have been tested within the required test schedule?
- 8 How many sumps on site are included in the integrity test schedule?
- 9 How many of these sumps are integrity tested within the test schedule?

SELECT	
SELECT	
SELECT	
SELECT	
SELECT	
SELECT	
SELECT	

- 10 **Please list any sump integrity failures in table B1**
- 11 Do all sumps and chambers have high level liquid alarms?
- 12 If yes to Q11 are these failsafe systems included in a maintenance and testing programme?
- 13 Is the Fire Water Retention Pond included in your integrity test programme?

Table B1: Summary details of bund /containment structure 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)
SELECT	SELECT					SELECT			SELECT	SELECT		SELECT		
SELECT	SELECT					SELECT			SELECT	SELECT		SELECT		

* Capacity required should comply with 25% or 110% containment rule 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?

[bunding and storage guidelines](#)

- 15 Are channels/transfer systems to remote containment systems tested?
- 16 Are channels/transfer systems compliant in both integrity and available volume?

Commentary

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 **which failed the integrity test and all which have not been tested within the integrity test period as specified**

- 1 Please provide integrity testing frequency period
- *please note integrity testing means water tightness testing for process and foul pipelines (as required under your licence)

SELECT	
SELECT	

Table B2: Summary details of pipeline/underground structures integrity test

Structure ID	Type system	Material of construction:	Does this structure have Secondary containment?	Type 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

		Comments
1	Are you required to carry out groundwater monitoring as part of your licence requirements?	SELECT
2	Are you required to carry out soil monitoring as part of your licence requirements?	SELECT
3	Do you extract groundwater for use on site? If yes please specify use in comment section	SELECT
4	Do monitoring results show that groundwater generic assessment criteria such as GTVs or IGVs are exceeded or is there an upward trend in results for a substance? If yes, please complete the Groundwater Monitoring Guideline Template Groundwater monitoring template Report (link in cell G8) and submit separately through ALDER as a licensee return AND answer questions 5-12 below.	SELECT
5	Is the contamination related to operations at the facility (either current and/or historic)	SELECT
6	Have actions been taken to address contamination issues?If yes please summarise remediation strategies proposed/undertaken for the site	SELECT
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?	SELECT
9	Has any type of risk assesment been carried out for the site?	SELECT
10	Has a Conceptual Site Model been developed for the site?	SELECT
11	Have potential receptors been identified on and off site?	SELECT
12	Is there evidence that contamination is migrating offsite?	SELECT

Please enter interpretation of data here

Table 1: Upgradient Groundwater monitoring results

Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration++	Average Concentration+	unit	GTV's*	SELECT**	Upward trend in pollutant concentration over last 5 years of monitoring data
							SELECT			SELECT
							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*	SELECT**	Upward trend in yearly average pollutant concentration over last 5 years of monitoring data
							SELECT			SELECT
							SELECT			SELECT

Groundwater/Soil monitoring template	Lic No: W0289--01	Year 2016
<p>*please note exceedance of generic assessment criteria (GAC) such as a Groundwater Threshold Value (GTV) or an Interim Guideline Value (IGV) or an upward trend in results for a substance indicates that further interpretation of monitoring results is required. In addition to completing the above table, please complete the Groundwater Monitoring Guideline Template Report at the link provided and submit separately through ALDER as a licensee return or as otherwise instructed by the EPA.</p>	<p>Groundwater monitoring template</p>	
<p>More information on the use of soil and groundwater standards/ generic assessment criteria (GAC) and risk assessment tools is available in the EPA published guidance (see the link in G31)</p>	<p>Guidance on the Management of Contaminated Land and Groundwater at EPA Licensed Sites (EPA 2013)</p>	
<p>**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)</p>	<p> Groundwater Drinking water regulations (private supply) Drinking water (public Interim Guideline water EQS GTV's standards supply) standards Values (IGV) </p>	

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

[Click here to access EPA guidance on Environmental Liabilities and Financial provision](#)

		Commentary	
1	ELRA initial agreement status	SELECT	
2	ELRA review status	SELECT	
3	Amount of Financial Provision cover required as determined by the latest ELRA	Specify	
4	Financial Provision for ELRA status	SELECT	
5	Financial Provision for ELRA - amount of cover	Specify	
6	Financial Provision for ELRA - type	SELECT	
7	Financial provision for ELRA expiry date	Enter expiry date	
8	Closure plan initial agreement status	SELECT	
9	Closure plan review status	SELECT	
10	Financial Provision for Closure status	SELECT	
11	Financial Provision for Closure - amount of cover	Specify	
12	Financial Provision for Closure - type	SELECT	
13	Financial provision for Closure expiry date	Enter expiry date	

Environmental Management Programme/Continuous Improvement Programme template Lic No: W0289--01 Year 2016

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

Environmental Management Programme (EMP) report

Objective Category	Target	Status (% completed)	How target was progressed	Responsibility	Intermediate outcomes
SELECT		SELECT		SELECT	SELECT
SELECT		SELECT		SELECT	SELECT
SELECT		SELECT		SELECT	SELECT

Noise monitoring summary report

Lic No: W0289--01 Year: 2016

- 1 Was noise monitoring a licence requirement for the AER period?
If yes please fill in table N1 noise summary below SELECT
- 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? SELECT
[Noise Guidance note NG4](#)
- 3 Does your site have a noise reduction plan SELECT
- 4 When was the noise reduction plan last updated? Enter date
- 5 Have there been changes relevant to site noise emissions (e.g. plant or operational changes) since the last noise survey? SELECT

Table N1: 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 <u>site</u> compliant with noise limits (day/evening/night)?
								SELECT	SELECT		SELECT

*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 summary

Lic No:

W0289-01

Year

2016

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

Enter date of audit	
SELECT	
SELECT	

Table R1 Energy usage on site				
Energy Use	Previous year	Current year	Production +/- % compared to previous reporting year**	Energy Consumption +/- % vs overall site production*
Total Energy Used (MWHrs)				
Total Energy Generated (MWHrs)				
Total Renewable Energy Generated (MWHrs)				
Electricity Consumption (MWHrs)				
Fossil Fuels Consumption:				
Heavy Fuel Oil (m3)				
Light Fuel Oil (m3)				
Natural gas (m3)				
Coal/Solid fuel (metric tonnes)				
Peat (metric tonnes)				
Renewable Biomass				
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 R2 Water usage on site					Water Emissions	Water Consumption	
Water use	Water extracted Previous year m3/yr.	Water extracted Current year m3/yr.	Production +/- % compared to previous reporting year**	Energy Consumption +/- % vs overall site production*	Volume Discharged back to environment(m ³ /yr):	Volume used i.e not discharged to environment e.g. released as steam m3/yr	Unaccounted for Water:
Groundwater							
Surface water							
Public supply							
Recycled water							
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 R3 Waste Stream Summary					
	Total	Landfill	Incineration	Recycled	Other
Hazardous (Tonnes)					
Non-Hazardous (Tonnes)					

Resource Usage/Energy efficiency summary Lic No: W0289-01 Year 2016

Table R4: 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					

Table R5: Power Generation: Where power is generated onsite (e.g. power generation facilities/food and drink industry)please complete the following information

	Unit ID	Unit ID	Unit ID	Unit ID	Station Total
Technology					
Primary Fuel					
Thermal Efficiency					
Unit Date of Commission					
Total Starts for year					
Total Running Time					
Total Electricity Generated (GWH)					
House Load (GWH)					
KWH per Litre of Process Water					
KWH per Litre of Total Water used on Site					

WASTE SUMMARY	Lic No:	W0289-01	Year	2016
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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 SS3(A)(5) of WMA been submitted in reporting year	Comments

→ 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
SELECT UNIT	SELECT UNIT					

*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?

SELECT

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

SELECT

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
			SELECT	

Comments on liner type

