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guidance document link	cells that contain underlined text c
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Please note an interpretation of results is still required. This should be er
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:ain a dropdown menu click to select one option from the list

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iol have an associated footnote or instructions

ie top right corner contain a comment box with further instructions or clarification

ntered in the additional information/comments boxes within the templates. Please size these boxes
se include an appendix to the AER template and merge it as part of the AER PDF document. The excel
ately so that all text is readable before it is converted to PDF document.

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Facility Information Summary	
AER Reporting Year	2018
Licence Register Number	W0036-02
Name of site	Indaver Ireland Limited
Site Location	Tolka Quay Road, Dublin Port, Dublin 1
NACE Code	3821 and 3822
Class/Classes of Activity	3.11, 3.12, 3.13, 4.1, 4.13
National Grid Reference (6E, 6 N)	-6.20299, 53.3521

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.**

The site continues to transfer waste through the facility and onward to Europe for treatment. It also continues to treat solvents and produce a waste fuel for the cement kiln industry. There has been an increase in throughput for our solvent recovery facility. This is due to increased demand for solvent recovered fuel in the cement industry that we serve.

There was an incident in relation to an elevated result for Zinc in surface water. This has been investigated and is now closed INCI 014829. Waste accepted, removed and transferred from site is recorded in the PRTR. As discussed with inspector Mr. Gahan, there is no duplication of data here, the PRTR contains all the waste movements at the site.

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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.

<p><i>Grace McComack</i> —</p> <p>Signature</p> <p>Group/Facility manager</p> <p>(or nominated, suitably qualified and experienced deputy)</p>	<p>26/03/2019</p> <p>Date</p>
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AIR-summary template Lic No: W0036-02 Year 2018

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

Additional information	
No	Indaver does not have licensed air emissions and is not required to complete a solvent management plan

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 [Basic air monitoring checklist](#) note AG2 and using the basic air monitoring checklist? [AGN2](#)

SELECT	
--------	--

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: W0036-02	Year: 2018
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 A2 and compare it to its relevant Emission Limit Value (ELV)

5 Did continuous monitoring equipment experience downtime? If yes please record downtime in table A2 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 A3 below

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

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

Lic No:

W0036-02

Year

2018

Additional information

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

No

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

No

Table W1 Storm water 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
Easting 319749, Northing 234979	onsite	SELECT	BOD	On a quarterly basis	10	All values < ELV	<4 to 9	mg/L	yes	
Easting 319749, Northing 234979	onsite		COD	On a quarterly basis	30	All values < ELV	<10 to 33	mg/L	yes	
Easting 319749, Northing 234979	onsite		Suspended Solids	On a quarterly basis	25	All values < ELV	<5 to 30	mg/L	yes	
Easting 319749, Northing 234979	onsite		Detergents (as MBAS)	On a quarterly basis	10	All values < ELV	0.24 to 0.67	mg/L	yes	
Easting 319749, Northing 234979	onsite		Mineral oils	On a quarterly basis	10	All values < ELV	<0.010 to 0.53	mg/L	yes	
Easting 319749, Northing 234979	onsite		pH	On a quarterly basis	6-9	No pH value shall deviate from the specified range.	7.4 to 8.2	pH units	yes	
Easting 319749, Northing 234979	onsite		Temperature	On a quarterly basis	25	No temperature value shall exceed the limit value.	9.5 to 25.5	degrees C	yes	The Quarter 3 value of 25.5 slightly exceeded the ELV but there was no discharge during this time. The surface water monitoring system is also programmed to prevent discharge when 25°C is reached. The summer of 2018 was among the warmest and driest on record. The temperature exceedance was due to hot weather conditions only.
Easting 319749, Northing 234979	onsite		Fats, Oils and Greases	On a quarterly basis	N/a	N/A	<10 to 19	mg/L	yes	
Easting 319749, Northing 234979	onsite		Total Ammonium (as N)	On a quarterly basis	2	All values < ELV	0.41 to 2.1	mg/L	yes	The result is slightly above the ELV but it is compliant as per licence condition 6.8.2 (ii) in that the result does not exceed 1.2 times the ELV and it's the first Ammonium result above the ELV.
Easting 319749, Northing 234979	onsite		Molybdate Reactive Phosphate (PO4 as P)	On a quarterly basis	1	All values < ELV	<0.2 to 0.44	mg/L	yes	

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AER Monitoring returns summary template-WATER/WASTEWATER(SEWER) Lic No: W0036-02 Year 2018

Easting 319749, Northing 234979	onsite		Benzene & toluene & xylene (combined)	On a quarterly basis	0.1	All values < ELV	<0.0010	mg/L	yes	
Easting 319749, Northing 234979	onsite		List I/II organic substances VOC's	On a quarterly basis	N/a	N/A	<0.050	mg/L	yes	
Easting 319749, Northing 234979	onsite		List I/II organic substances Semi-VOC's	On a quarterly basis	N/a	N/A	<0.0005	mg/L	yes	
Easting 319749, Northing 234979	onsite		Zinc	On a quarterly basis	2	All values < ELV	0.36 to 3.4	mg/L	no (if no please enter details in comments box)	One value was over the licence limit however this was reported as an incident and the incident was investigated and is now closed. INCI 014829
Easting 319749, Northing 234979	onsite		Copper	On a quarterly basis	2	All values < ELV	0.0017 to 0.0097	mg/L	yes	
Easting 319749, Northing 234979	onsite		Lead	On a quarterly basis	2	All values < ELV	<0.001 to 0.0029	mg/L	yes	
Easting 319749, Northing 234979	onsite		Chromium	On a quarterly basis	2	All values < ELV	<0.001 to 0.0110	mg/L	yes	
Easting 319749, Northing 234979	onsite		Nickel	On a quarterly basis	2	All values < ELV	0.0011 to 0.0055	mg/L	yes	
Easting 319749, Northing 234979	onsite		Toxicity Units (Daphnia Magna)	Annual	10	All values < ELV	<1	Toxic units	yes	
Easting 319749, Northing 234979	onsite		Toxic Units (Vibrio Fischeri)	Annual	10	All values < ELV	2.1700	Toxic units	yes	
Easting 319749, Northing 234979	onsite		Conductivity	Continuous	800	All values < ELV	227.7	µS/cm @20oC	yes	Yearly Averages
Easting 319749, Northing 234979	onsite		Total Organic Carbon (TOC)	Continuous	100	All values < ELV	7.4	mg/L	yes	Yearly Averages
Easting 319749, Northing 234979	onsite		Temperature	Continuous	25	All values < ELV	14	degrees C	yes	Yearly Averages
Easting 319749, Northing 234979	onsite		pH	Continuous	06-Sep	All values < ELV	6.7	pH units	yes	Yearly Averages
	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

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](#)

<input type="text" value="SELECT"/>	Additional information
<input type="text" value="SELECT"/>	

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

Emission reference no:	Emission released to	Parameter/ Substance ^{Note 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
	<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

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

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Continuous monitoring

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

SELECT	Additional Information
--------	------------------------

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

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

SELECT	
--------	--

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

SELECT	
--------	--

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
	SELECT	SELECT		SELECT	SELECT	SELECT					
	SELECT	SELECT		SELECT	SELECT	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?
						SELECT	

*Measures taken or proposed to reduce or limit bypass frequency

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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
- 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?

Yes	
3 years	
Yes	
21	All bunds at the Transfer Station were integrity tested in 2016 and are due to be retested in 2019. Hence, no bunds were tested in 2018 and as such there are no summary details to report in Table B1.
N/A	
9	
Yes	
n/a	All bunds at the Transfer Station were integrity tested in 2016 and are due to be retested in 2019. Hence, no bunds were tested in 2018 and as such there are no summary details to report in Table B1.
12	
N/A	All sumps at the Transfer Station were integrity tested in 2016 and are due to be retested in 2019. Hence, no sumps were tested in 2018 and as such there are no summary details to report in Table B1.
No	
N/A	
N/A	No pond on site

- 5 How many of these bunds have been tested within the required test schedule?
- 6 How many mobile bunds are on site?
- 7 Are the mobile bunds included in the bund test schedule?

- 8 How many of these mobile bunds have been tested within the required test schedule?
- 9 How many sumps on site are included in the integrity test schedule?

- 10 How many of these sumps are integrity tested within the test schedule?
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 N/A

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		

* 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? [bundling and storage guidelines](#)

- 16 Are channels/transfer systems to remote containment systems tested?
- 17 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

- 1 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**
- 2 Please provide integrity testing frequency period
- *please note integrity testing means water tightness testing of all underground pipelines (as required under your licence)

Yes	
3 years	

Table B2: Summary details of pipeline/underground structures 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)
Gully 7 to Main	Storm	pvc	no		This cannot have the Hydrostatic test due to physical arrangement. CCTV required. Test not passed within 3 year period.	Yes	When CCTV is complete, repairs can be prioritised where defects exist.	This cannot have the Hydrostatic test due to physical arrangement.	CCTV scheduled for 2019	Summer 2019	

Bund/Pipeline testing template				Lic No:	W0036-02	Year	2018			
Gully 9 to Main	Storm	pvc	no	This cannot have the Hydrostatic test due to physical arrangement. CCTV required. Test not passed within 3 year period.	Yes	When CCTV is complete, repairs can be prioritised where defects exist.	This cannot have the Hydrostatic test due to physical arrangement.	CCTV scheduled for 2019	Summer 2019	
Gully 10 to Main	Storm	pvc	no	This cannot have the Hydrostatic test due to physical arrangement. CCTV required. Test not passed within 3 year period.	Yes	When CCTV is complete, repairs can be prioritised where defects exist.	This cannot have the Hydrostatic test due to physical arrangement.	CCTV scheduled for 2019	Summer 2019	
Gully 11 to Main	Storm	pvc	no	This cannot have the Hydrostatic test due to physical arrangement. CCTV required. Test not passed within 3 year period.	Yes	When CCTV is complete, repairs can be prioritised where defects exist.	This cannot have the Hydrostatic test due to physical arrangement.	CCTV scheduled for 2019	Summer 2019	
Gully 13 to Main	Storm	pvc	no	This cannot have the Hydrostatic test due to physical arrangement. CCTV required. Test not passed within 3 year period.	Yes	When CCTV is complete, repairs can be prioritised where defects exist.	This cannot have the Hydrostatic test due to physical arrangement.	CCTV scheduled for 2019	Summer 2019	
Storage Tank to SWMH 99A	Storm	pvc	no	This cannot have the Hydrostatic test due to physical arrangement. CCTV required. Test not passed within 3 year period.	Yes	When CCTV is complete, repairs can be prioritised where defects exist.	This cannot have the Hydrostatic test due to physical arrangement.	CCTV scheduled for 2019	Summer 2019	
FS MH01 to EX FMH	Storm	foul	no	This cannot have the Hydrostatic test due to physical arrangement. CCTV required. Test not passed within 3 year period.	Yes	When CCTV is complete, repairs can be prioritised where defects exist.	This cannot have the Hydrostatic test due to physical arrangement.	CCTV scheduled for 2019	Summer 2019	
SWMH 6A to SWMH to ACCO1	Storm	pvc	no	This cannot have the Hydrostatic test due to physical arrangement. CCTV required. Test not passed within 3 year period.	Yes	When CCTV is complete, repairs can be prioritised where defects exist.	This cannot have the Hydrostatic test due to physical arrangement.	CCTV scheduled for 2019	Summer 2019	
GY11A to GY11	Storm	pvc	no	This cannot have the Hydrostatic test due to physical arrangement. CCTV required. Test not passed within 3 year period.	Yes	When CCTV is complete, repairs can be prioritised where defects exist.	This cannot have the Hydrostatic test due to physical arrangement.	CCTV scheduled for 2019	Summer 2019	
Gully 1 to Gully 2	Storm	pvc	no	This line requires civil works to complete repairs.	Yes	Pass not achieved within 3 year period.	Defects found.	Civil works scheduled for 2019	Summer 2019	
MH 2 to MH 1	Storm	pvc	no	This line requires civil works to complete repairs.	Yes	Pass not achieved within 3 year period.	Defects found.	Civil works scheduled for 2019	Summer 2019	
Gully 12 to Maln	Storm	pvc	no	This line requires civil works to complete repairs.	Yes	Pass not achieved within 3 year period.	Defects found.	Civil works scheduled for 2019	Summer 2019	
MH5 to GY8A	Storm	pvc	no	This line requires civil works to complete repairs.	Yes	Pass not achieved within 3 year period.	Defects found.	Civil works scheduled for 2019	Summer 2019	
SWMH1 to Petrol Interceptor	Storm	pvc	no	This line requires civil works to complete repairs.	Yes	Pass not achieved within 3 year period.	Defects found.	Civil works scheduled for 2019	Summer 2019	
FAJ02 to FAJ01	Foul	pvc	no	Hydrostatic test required	Yes	Test not carried out within 3 year period.	Test not carried out within 3 year period.	Hydrostatic Test Scheduled for 2019	Summer 2019	
Gully 12 to Gully 12A	Storm		no	Hydrostatic test required	Yes	Test not carried out within 3 year period.	Test not carried out within 3 year period.	Hydrostatic Test Scheduled for 2019	Summer 2019	
Acco Channel beside SRF	Storm		no	Hydrostatic test required	Yes	Test not carried out within 3 year period.	Test not carried out within 3 year period.	Hydrostatic Test Scheduled for 2019	Summer 2019	
GY2	Storm	pvc	No	Hydrostatic test required	Yes	Pass not achieved within 3 year period.	Defects found.	Civil works scheduled for 2019	Summer 2019	

Groundwater/Soil monitoring template	Lic No: W0036-02	Year: 2018
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			Comments
1 Are you required to carry out groundwater monitoring as part of your licence requirements?	yes		Please provide an interpretation of groundwater monitoring data in the interpretation box below or if you require additional space please include a groundwater/contaminated land monitoring results interpretaion as an additional section in this AER
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 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 Report (link in cell G8) and submit separately through ALDER as a licensee return AND answer questions 5-12 below. Groundwater monitoring template	no		Groundwater results for monitoring locations GM1 and GM2 were comparable with Indaver's 1998 Baseline survey and with the EC maximum admissable concentration (MAC) 98/83/EC
5 Is the contamination related to operations at the facility (either current and/or historic)	N/A		
6 Have actions been taken to address contamination issues?If yes please summarise remediation strategies proposed/undertaken for the site	N/A		
7 Please specify the proposed time frame for the remediation strategy	N/A		
8 Is there a licence condition to carry out/update ELRA for the site?	N/A		
9 Has any type of risk assesment been carried out for the site?	N/A		
10 Has a Conceptual Site Model been developed for the site?	N/A		
11 Have potential receptors been identified on and off site?	N/A		
12 Is there evidence that contamination is migrating offsite?	N/A		

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
Q1,2,3 &4	GM2 (E319720, N235030)	pH	Telemetry	Quarterly	8.6	8.375	pH Unit	6.5-9.5	DWS	no
Q1,2,3 &4	GM2 (E319720, N235030)	Conductivity	Telemetry	Quarterly	630	540	uS/cm	2500	DWS	No
Q1,2,3 &4	GM2 (E319720, N235030)	Iron	ICPMS	Quarterly	0.54	0.2575	mg/L	0.2	DWS	No
Q1,2,3 &4	GM2 (E319720, N235030)	Manganese	ICPMS	Quarterly	0.064	0.038775	mg/L	0.05	DWS	No
Q1,2,3 &4	GM2 (E319720, N235030)	Copper	ICPMS	Quarterly	0.0029	0.001575	mg/L	2	DWS	no
Q1,2,3 &4	GM2 (E319720, N235030)	Aluminium	ICPMS	Quarterly	26	18.75	mg/L	200	DWS	no

Groundwater/Soil monitoring template Lic No: W0036-02 Year 2018

Q1,2,3 &4	GM2 (E319720, N235030)	Ammonium	Kjeldahl	Quarterly	0.095	0.06025	mg/L	0.39	DWS	no
Q1,2,3 &4	GM2 (E319720, N235030)	Arsenic	ICPMS	Quarterly	1.5	1.275	ug/L	10	DWS	no
Q1,2,3 &4	GM2 (E319720, N235030)	Boron	ICPMS	Quarterly	70	48	ug/L	1000	DWS	no
Q1,2,3 &4	GM2 (E319720, N235030)	Cadmium	ICPMS	Quarterly	0.08	0.08	ug/L	5	DWS	no
Q1,2,3 &4	GM2 (E319720, N235030)	Chromium	ICPMS	Quarterly	0.0071	0.00325	mg/L	0.05	DWS	no
Q1,2,3 &4	GM2 (E319720, N235030)	Lead	ICPMS	Quarterly	1	1	ug/L	10	DWS	no
Q1,2,3 &4	GM2 (E319720, N235030)	Mercury	ICPMS	Quarterly	0.5	0.5	ug/L	1	DWS	No
Q1,2,3 &4	GM2 (E319720, N235030)	Nickel	ICPMS	Quarterly	0.0022	0.0013	mg/L	0.02	DWS	no
Q1,2,3 &4	GM2 (E319720, N235030)	Selenium	ICPMS	Quarterly	1.3	1.075	ug/L	10	DWS	no
Q1,2,3 &4	GM2 (E319720, N235030)	Zinc	ICPMS	Quarterly	0.023	0.010675	mg/L	1	DWS	no
Q1,2,3 &4	GM2 (E319720, N235030)	Volatile Organic Compounds	GC-MS	Quarterly	50	50	ug/L	None	DWS	no
Q1,2,3 &4	GM2 (E319720, N235030)	Semi Volatile Organic Compounds	GC-MS	Quarterly	0.5	0.5	ug/L	None	DWS	no
Q1,2,3 &4	GM2 (E319720, N235030)	Total Organic carbon (TOC)	TOC Analyser	Quarterly	8.6	6.525	mg/L	None	DWS	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**	Upward trend in yearly average pollutant concentration over last 5 years of monitoring data
Q1,2,3 &4	GM1 (E319724, N234966)	pH	Telemetry	Quarterly	8.5	8.25	pH Unit	6.5-9.5	DWS	no

Groundwater/Soil monitoring template				Lic No:	W0036-02	Year	2018			
Q1,2,3 &4	GM1 (E319724, N234966)	Conductivity	Telemetry	Quarterly	1900	1600	uS/cm	2500	DWS	No
Q1,2,3 &4	GM1 (E319724, N234966)	Iron	ICPMS	Quarterly	0.95	0.49	mg/L	0.2	DWS	No
Q1,2,3 &4	GM1 (E319724, N234966)	Manganese	ICPMS	Quarterly	0.24	0.2	mg/L	0.05	DWS	No
Q1,2,3 &4	GM1 (E319724, N234966)	Copper	ICPMS	Quarterly	0.0075	0.00285	mg/L	2	DWS	no
Q1,2,3 &4	GM1 (E319724, N234966)	Aluminium	ICPMS	Quarterly	0.12	0.052	mg/L	200	DWS	no
Q1,2,3 &4	GM1 (E319724, N234966)	Ammonium	Kjeldahl	Quarterly	0.27	0.22	mg/L	0.39	DWS	no
Q1,2,3 &4	GM1 (E319724, N234966)	Arsenic	ICPMS	Quarterly	4.1	2.175	ug/L	10	DWS	no
Q1,2,3 &4	GM1 (E319724, N234966)	Boron	ICPMS	Quarterly	180	150	ug/L	1000	DWS	no
Q1,2,3 &4	GM1 (E319724, N234966)	Cadmium	ICPMS	Quarterly	0.08	0.08	ug/L	5	DWS	no
Q1,2,3 &4	GM1 (E319724, N234966)	Chromium	ICPMS	Quarterly	0.0084	0.00545	mg/L	0.05	DWS	no
Q1,2,3 &4	GM1 (E319724, N234966)	Lead	ICPMS	Quarterly	1	1	ug/L	10	DWS	no
Q1,2,3 &4	GM1 (E319724, N234966)	Mercury	ICPMS	Quarterly	0.5	0.5	ug/L	1	DWS	No
Q1,2,3 &4	GM1 (E319724, N234966)	Nickel	ICPMS	Quarterly	0.0025	0.00145	mg/L	0.02	DWS	no
Q1,2,3 &4	GM1 (E319724, N234966)	Selenium	ICPMS	Quarterly	4.6	3.425	ug/L	10	DWS	no
Q1,2,3 &4	GM1 (E319724, N234966)	Zinc	ICPMS	Quarterly	0.0097	0.00635	mg/L	1	DWS	no
Q1,2,3 &4	GM1 (E319724, N234966)	Volatile Organic Compounds	GC-MS	Quarterly	50	50	ug/L	None	DWS	no
Q1,2,3 &4	GM1 (E319724, N234966)	Semi Volatile Organic Compounds	GC-MS	Quarterly	0.5	0.5	ug/L	None	DWS	no
Q1,2,3 &4	GM1 (E319724, N234966)	Total Organic carbon (TOC)	TOC Analyser	Quarterly	15	10.075	mg/L	None	DWS	no

Groundwater/Soil monitoring template Lic No: W0036-02 Year: 2018

							SELECT		SELECT
							SELECT		SELECT

*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. [Groundwater monitoring template](#)

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 [Guidance on the Management of Contaminated Land and Groundwater at EPA Licensed Sites \(EPA 2013\)](#). (see the link in G31)

**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](#) [Drinking water \(private supply\) standards](#) [Drinking water \(public supply\) standards](#) [Interim Guideline Values \(IGV\)](#)

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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

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Environmental Liabilities template

Lic No:

W0036-02

Year

2018

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

		Commentary
1	ELRA initial agreement status	Submitted and agreed by EPA
2	ELRA review status	Review required and completed
3	Amount of Financial Provision cover required as determined by the latest ELRA	€4,000,366
4	Financial Provision for ELRA status	Submitted and agreed by EPA
5	Financial Provision for ELRA - amount of cover	€4,000,366
6	Financial Provision for ELRA - type	Environmental Impairment Liability insurance
7	Financial provision for ELRA expiry date	23/06/2019
8	Closure plan initial agreement status	Closure plan submitted and agreed by EPA
9	Closure plan review status	Review required and completed
10	Financial Provision for Closure status	Submitted and agreed by EPA
11	Financial Provision for Closure - amount of cover	€1,023,933
12	Financial Provision for Closure - type	bond
13	Financial provision for Closure expiry date	19/06/2021

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Environmental Management Programme/Continuous Improvement Programme template	Lic No:	W0036-02	Year	2018
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	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	Yes ISO 14001 to the new 2015 Standard has been achieved.
2	Does the EMS reference the most significant environmental aspects and associated impacts on-site	Yes Reissued in 2018
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
Additional improvements	Carry out refresher licence training with all relevant personnel.	90	A series of presentations were given in 2018 to operations, logistics and technical personnel based at the transfer station. Refresher training is carried out every year with transfer station operatives and every two years with office-based personnel. Training is ongoing.	Individual	Increased compliance with licence conditions
Additional improvements	Agree with the Agency how the costs will be underwritten and the financial provision for the RMP and ELRA.	100	Financial provisions for the the ELRA and RMP are in place and the ELRA and RMP were approved by the Agency.	Section Head	Increased compliance with licence conditions
Additional improvements	Update the surface water system in the Transfer Station to ensure robustness.	100	Procedure and been reissued and training has been provided. Better controls on TOC system for when maintenance is being carried out.	Individual	Reduced emissions
Additional improvements	Review of Environmental Aspects.	100	All registers were reviewed and issued in 2018.	Individual	Improved Environmental Management Practices
Additional improvements	Hardstanding Surface-lining of the yard	50	Hardstanding in the yard was improved. Work will continue in 2019	Individual	Increased compliance with licence conditions

Environmental Management Programme/Continuous Improvement Programme template				Lic No:	W0036-02	Year	2018
Additional improvements	Increase the amount of waste treated within the island of Ireland and reduce exports to Europe	66	Increased the amount of waste blended in the SRF. Increase the amount of materials forwarded to outlets in the island Ireland compared to 2017 in an effort to comply with the proximity principle and Indaver's sustainability programme.	Section Head	Increased compliance with licence conditions		

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Noise monitoring summary report Lic No: W0036-02 Year 2018

- 1 Was noise monitoring a licence requirement for the AER period?
If yes please fill in table N1 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? [Noise Guidance note NG4](#)
- 3 Does your site have a noise reduction plan
- 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?

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 site compliant with noise limits (day/evening/night)?
24/04/2018	30 minutes	NM1	No	66.6	63.4	78	78	No	SELECT	Noise from off site road traffic travelling to and from the docks is a major contributing factor.	Yes
24/04/2018	30 minutes	NM3	No	58.9	55.6	77.8	77.8	No		Noise from off site road traffic travelling to and from the docks is a major contributing factor.	Yes
24/04/2018	30 minutes	NM4	No	62.1	58.8	63.9	63.9	No		Noise from off site road traffic travelling to and from the docks is a major contributing factor.	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?

** please explain the reason for not taking action/resolution of noise issues?
Any additional comments? (less than 200 words)

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- 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 \(LIEN\)](#)

Additional information

24/08/2007 and Indaver as a company completed the EAS audit (SI 426 of 2014) in 2017	An annual audit is not a requirement for the site as per condition 8.1 of W0036-02
No	Site is certified to ISO 14001
	Don't have boilers on site

Energy Use	Previous year	Current year	Production +/- % compared to previous reporting year**	Energy Consumption +/- % vs overall site production*
Total Energy Used (MWHrs)	301.577	251.976	About a 25% increase in the solvent recovery facility production	There has been a decrease in energy consumption
Total Energy Generated (MWHrs)	0			
Total Renewable Energy Generated (MWHrs)	0			
Electricity Consumption (MWHrs)				
Fossil Fuels Consumption:				
Heavy Fuel Oil (m3)	0			
Light Fuel Oil (m3)	0.319	2.339	There are more tank movements so the shunter requires filling more often	
Natural gas (m3)	0			
Coal/Solid fuel (metric tonnes)	0			
Peat (metric tonnes)	0			
Renewable Biomass	0			
Renewable energy generated on site	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

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*	Water Emissions		Water Consumption	
					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	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
Surface water	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
Public supply	1450.6	1051.83	N/a	N/a	N/a	N/a	N/a	N/a
Recycled water	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a

Resource Usage/Energy efficiency summary	Lic No: W0036-02	Year: 2018
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Total	1450.6	1051.83			
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* 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

As agreed by phone with our inspector Mr.Gahan,
 the PRTR contains all records of waste brought onto site
 and leaving site so won't be duplicated here-please refer to PRTR

	Total	Landfill	Incineration	Recycled	Other
Hazardous (Tonnes)					
Non-Hazardous (Tonnes)					

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Resource Usage/Energy efficiency summary Lic No: W0036-02 Year 2018

Table R4: Energy Audit finding recommendations			N/A					
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 NOT APPLICABLE

	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					

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Complaints and Incidents summary template Lic No: W0036-02 Year: 2018

Complaints		Additional information	
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		No	

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							
Total new complaints received during reporting year							
Total complaints closed during reporting year							
Balance of complaints end of reporting year							

Incidents		Additional information	
Have any incidents occurred on site in the current reporting year? Please list all incidents for current reporting year in Table 2 below		Yes	INCI 014829

*For information on how to report and what constitutes an incident [What is an incident](#)

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	Likelihood of reoccurrence
03/07/2018	Trigger level reached	Licensed discharge point (typ	1. Minor	Water	Plant or equipment	Hydraulic oil spill from a haulier in the yard	Normal activities	EPA	New	Stop was put on discharge of the water.	Spill procedure for site updated.	Complete	30/11/2018	Low
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
Total number of incidents current year		1												
Total number of incidents previous year		2												
% reduction/increase		50												

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WASTE SUMMARY	Lic No: W0036-02	Year: 2018
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SECTION A- WASTE ACCEPTED ONTO SITE-TO BE COMPLETED BY ALL IPPC AND WASTE FACILITIES

Additional Information	
Yes	
No	
No	

- 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)
- 1 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
- 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

As agreed by phone with our inspector Mr.Gahan, the PRTR contains all records of waste brought onto site and leaving site so won't be duplicated here-please refer to PRTR

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)	EWG code	Source of waste accepted	Description of waste accepted Please enter an accurate and detailed description - which applies to relevant EWG code European Waste Catalogue EWG 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 -

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

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- 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	
Yes	
Yes	
Yes	
No	

SECTION C-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

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 8													

WASTE SUMMARY	Lic No:	W0036-02	Year	2018
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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 S53(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	

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Waste Summary Continued

Please insert a copy of your Waste Management Record for waste transferred off site

As agreed by phone with our inspector Mr.Gahan, the PRTR contains all records of waste brought onto site and leaving site so won't be duplicated here-please refer to PRTR

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