

Facility Information Summary	
AER Reporting Year	2018
Licence Register Number	P0078-01
Name of site	Henkel Ireland Operations & Research Ltd
Site Location	Kylemore Park North, Ballyfermot, Dublin 10
NACE Code	2052
Class/Classes of Activity	5.12
National Grid Reference (6E, 6 N)	310000E, 233024N

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.**

Henkel Ireland Operations and Research Limited is a specialty chemical company supplying proprietary high performance adhesives, sealants, coatings and other specialised brand name chemicals. These products are manufactured, packaged and shipped to the European, Middle East, Far East and African markets. Principal markets include industrial and electronics manufacturing and repair, specialised medical applications, professional automotive maintenance and the consumer market. The main function of Henkel Ireland Limited in Ballyfermot is the manufacture of cyanoacrylate adhesives. The principal activities are as follows:

- Synthesis of cyanoacrylate monomers, which are in turn converted into adhesives and transferred to the Tallaght site for bottling and packaging
- manufacture of intermediate resins
- formulation of methyl acrylate based activities

Associated facilities:
In addition to the chemical reaction vessels and their associated equipment, facilities include an effluent treatment plant, condensers, and steam raising boilers, chillers cooling towers, storage facilities for raw materials, products and waste, QC laboratory, workshops and staff facilities.

In 2018 production increased by 10%.
Air monitoring was not required for the reporting period. Water/wastewater parameter average results were similar to 2017. There was a slight increase in Ammonia at BFW1A. The Annual Mass Load showed an overall decrease for all parameters apart from BOD and Ammonia which showed a slight increase.

All bunds passes their integrity tests. In general groundwater analysis showed similar results to 2017. There was exceedances of GTV/IGVs for some results e.g. conductivity, Ammonia and Sodium. There is an increase in Dichloromethane when compared to 2017 at MW3 but a decrease at MW9. Benzene, Toluene, Xylene and Arsenic concentrations in ground water have decreased.

There was no air monitoring required for the reporting period.
ELRA and CRAMP are approved with no requirement for FP. EMP shows good progress on water and waste reduction per T production. Energy and water usage were very similar to the previous year. Waste figure were similar to the previous year. There were no complaints in 2018 and 1 minor incident of a low pH measurement.
Henkel maintained its accreditation to ISO 14001.

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

 Signature Group/Facility manager (or nominated, suitably qualified and experienced deputy)	4/23/2019 Date
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AIR-summary template Lic No: P0078-01 Year 2018

Answer all questions and complete all tables where relevant

Additional information

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

No	Original licence had ELVs for 2 boilers. In 2003, one boiler switched to gas and activity of the second boiler was reduced.
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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	
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3 Was all monitoring carried out in accordance with EPA guidance note AG2 and using the basic air monitoring checklist?

[9642.87](#) [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		

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 A2 and compare it to its relevant Emission Limit Value (ELV)

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

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

SELECT	
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7 Did your site experience any abatement system bypasses? If yes please detail them in table A3 below

SELECT	
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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 maximum	Monitoring Equipment downtime (hours)	Number of ELV exceedences in current reporting year	Comments
	SELECT			SELECT	SELECT	Annual Emission			

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

Table A3: Abatement system bypass reporting table

[Bypass protocol](#)

AIR-summary template				Lic No:	P0078-01	Year	2018
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 Total VOC Emission limit value			Solvent regulations Please refer to linked solvent regulations to complete table 5 and 6					
Reporting year	Total solvent input on site (kg)	Total VOC emissions to Air from entire site (direct and fugitive)	Total VOC emissions as %of solvent input	Total Emission Limit Value (ELV) in licence or any revision therof	Compliance			
					SELECT			
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. by-	Solvents destroyed onsite through	Total emission of Solvent to air (kg)
							Total	

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<p>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 licensed emissions you only need to complete table W1 and or W2 for storm water analysis and visual inspections</p>		<p>Additional information</p>
<p>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 <u>only any evidence of contamination noted during visual inspections</u></p>		<p>Surface water is from the roof areas only. None detected in 2017 during the routine weekly monitoring.</p>

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	9860.13	9642.87			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)

<p>3 Was there any result in breach of licence requirements? If yes please provide brief details in the comment section of Table W3 below</p>		<p>Additional information</p>
<p>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</p>		<p>Yes</p>

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
BFW1A	Wastewater/Sewer	BOD	composite	Weekly	Weekly	800-1000	All values < ELV	309.56	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA "Standard Methods"	5210-B	7636.597313	Reports submitted separately. Measured value is annual average.
BFW1A	Wastewater/Sewer	COD	composite	Weekly	Weekly	1600-2000	All values < ELV	672.58	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA "Standard Methods"	5220D,closed	16591.95825	Reports submitted separately. Measured value is annual average.
BFW1A	Wastewater/Sewer	Suspended Solids	composite	Weekly	Weekly	300-400	All values < ELV	93.08	mg/L	yes	Gravimetric analysis	APHA / AWWA "Standard Methods"	2540D	2296.27275	Reports submitted separately. Measured value is annual average.
BFW1A	Wastewater/Sewer	Sulphate	composite	Weekly	Weekly	800	All values < ELV	69.60	mg/L	yes	LCMS (Liquid Chromatography - Mass Spectroscopy)	APHA / AWWA "Standard Methods"	4110B	1717.065188	Reports submitted separately. Measured value is annual average.
BFW1A	Wastewater/Sewer	Cyanides (as total CN)	composite	Monthly	Monthly	1	All values < ELV	0.03	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA "Standard Methods"	4500-Cn-E	0.6783975	Reports submitted separately. Measured value is annual average.
BFW1A	Wastewater/Sewer	Ammonia (as N)	composite	Monthly	Monthly	100	All values < ELV	2.73	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA "Standard Methods"	2012-NH3 Phenate method	67.371039	Reports submitted separately. Measured value is annual average.

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?

Additional Information	
Yes	

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

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

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

No	
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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
BFW1A	Wastewater/Sewer	Temperature	<42	30 minutes	No temperature value shall exceed the limit value	degrees C	6.2	-61	12	N/A	Annual Emission data is annual average. Downtime for maintenance.
BFW1A	Wastewater/Sewer	pH	6 to 10	30 minutes	No pH value shall deviate from the specified range	pH units	6.71		12	1	1 pH exceedence (5.4 measured in week 14). Annual Emission data is annual average. Downtime for maintenance.
BFW1A	Wastewater/Sewer	Non-methane volatile organic compounds (NMVOC)	0		No flammables in the sewer	mg/L	0	0	0	N/A	licence states "flammable gases" trigger value is determined by limits of detection
BFW1A	Wastewater/Sewer	Total Organic Carbon (as C)	500		None	mg/L	224.59	-21	12	N/A	Annual Emission data is annual average. Average 1hr downtime a month to cover calibration and minor issues with probe. Shut-off valve activated for TOC outside limits.
BFW1A	Wastewater/Sewer	volumetric flow	104	1 hour	No flow value shall exceed the specific limit.	m3/day	24669	-3	12	N/A	Annual Emission data is a total flow measurement. Down time for maintenance.

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/Pipeline testing template	Lic No: P0078-01	Year: 2018	
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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)

Yes	
3 years	
Yes	
39	
39	
10	
Yes	
10	
1	
1	
Yes	CNA tanker bund has alarm
Yes	
N/A	

- 1
- 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
- 4 How many bunds are 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? 9860.13 9642.87
- 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

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)
B08B	reinforced concrete		General Spill containment	3,299	n/a	Hydraulic test		17/09/2018	Yes	Pass	n/a	n/a	n/a	n/a
B14	reinforced concrete		General Spill containment	1,728	n/a	Hydraulic test		17/09/2018	Yes	Pass	n/a	n/a	n/a	n/a
B01	reinforced concrete		General Spill containment	468	n/a	Hydraulic test		17/09/2018	Yes	Pass	n/a	n/a	n/a	n/a
B16	reinforced concrete		General Spill containment	81,041	n/a	Hydraulic test		17/08/2018	Yes	Pass	n/a	n/a	n/a	n/a

* 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

- 15 BS8007/EPA Guidance? [bundings 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?

Yes	
Yes	
Yes	

Commentary

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**

No	
SELECT	

2 Please provide integrity testing frequency period

*please note integrity testing means water tightness testing for process and foul pipelines (as required under your licence)

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	Schedule d 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

Groundwater/Soil monitoring template		Lic No:	P0078-01	Year	2018
					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 interpretation 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.	yes	Groundwater monitoring template	Exceedences of GTV/IGVs	<p>The groundwater results at MW-3 showed improvement when compared to the previous year with all levels dropping, with the exception of Phosphate-P, Chloride, and Calcium. A number of purgeable organics were detected including 1,1-Dichloroethane, trans-1,2-Dichloroethene, m,p-Xylene, Benzene and TPH's. There were exceedances for some GTV/ITS's for some results, e.g. Ammonia, Sodium, Potassium, Manganese, Arsenic and Benzene.</p> <p>The groundwater results at MW-9 was similar to the previous year. A number of purgeable organics were detected including 1,1-Dichloroethane, Trichloroethene, Cis-1,2-Dichloroethene and 1,1,1-Trichloroethane. There were exceedances for some GTV/ITS's for some results, e.g. Ammonia, Sodium, Potassium, Calcium, Aluminum, Barium and Nickel.☒</p>
5	Is the contamination related to operations at the facility (either current and/or historic)	N/A		Possibly.	
6	Have actions been taken to address contamination issues? If yes please summarise remediation strategies proposed/undertaken for the site	yes		On going monitoring to determine there is no	
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?	no		Completed as part of a legal entity change request.	
9	Has any type of risk assessment been carried out for the site?	yes			
10	Has a Conceptual Site Model been developed for the site?	yes			
11	Have potential receptors been identified on and off site?	yes			
12	Is there evidence that contamination is migrating offsite?	no			

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	Upward trend in pollutant concentration over last 5 years of monitoring data
Nov-18	MW3	Depth (m)	-	Annual	2.91		Meters		-	no
Nov-18	MW3	SWL (m)	-	Annual	1.14		Meters		-	
Nov-18	MW3	Volume extracted (L)	-	Annual	10		Litres		-	
Nov-18	MW3	Temperature (°C)	-	Annual	11.4		Celcius		25	
Nov-18	MW3	Odour	-	Annual	Moderate odour		Odour		-	
Nov-18	MW3	Visual	-	Annual	Black		Visual		-	
Nov-18	MW3	pH	G/05: Based on APHA 2012, 22nd Ed, method 4500 H+B	Annual	7.4		Ph Units		6.5-9.5	

Groundwater/Soil monitoring template				Lic No:	P0078-01	Year	2018
Nov-18	MW3	Conductivity (mS/cm)	G/06: Based on APHA 2012, 22nd Ed, method 2510B	Annual	1923	mg/l	800-1875
Nov-18	MW3	Ammonia-N (mg/l)	G/67: Based on APHA, 2012 22nd Ed 4500 NH3 & bluebook Ammonia in waters 1981	Annual	43.3	mg/l	0.05-0.136
Nov-18	MW3	*Nitrite-N (mg/l)	G/39 Based on APHA, 2012 22nd Ed Method 4110B	Annual	<0.01	mg/l	0.11
Nov-18	MW3	Nitrate-N (mg/l)	G/39 Based on APHA, 2012 22nd Ed Method 4110B	Annual	<1	mg/l	8.47
Nov-18	MW3	Phosphate-P (mg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 1994	Annual	6.7	mg/l	-
Nov-18	MW3	Chloride (mg/l)	G/39 Based on APHA, 2012 22nd Ed Method 4110B	Annual	81.7	mg/l	24-187.5
Nov-18	MW3	Sulphate (mg/l)	G/39 Based on APHA, 2012 22nd Ed Method 4110B	Annual	<5	mg/l	187.5
Nov-18	MW3	Fluoride (mg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 1994	Annual	0.5	mg/l	1

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Groundwater/Soil monitoring template			Lic No:	P0078-01	Year	2018	
Nov-18	MW3	*Sodium (mg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 1994	Annual	389	mg/l	150
Nov-18	MW3	*Potassium (mg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 1995	Annual	6.69	mg/l	5
Nov-18	MW3	*Calcium (mg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 1996	Annual	58.1	mg/l	200
Nov-18	MW3	*Magnesium (mg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 1997	Annual	5.62	mg/l	50
Nov-18	MW3	*Beryllium (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 1998	Annual	0.1	ug/l	-
Nov-18	MW3	*Aluminium (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 1999	Annual	36.4	ug/l	
Nov-18	MW3	Chromium (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2000	Annual	3.63	ug/l	37.5
Nov-18	MW3	Manganese (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2001	Annual	1360	ug/l	50

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Groundwater/Soil monitoring template				Lic No:	P0078-01	Year	2018
Nov-18	MW3	Cobalt (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2002	Annual	6.98	ug/l	-
Nov-18	MW3	Nickel (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2003	Annual	32.1	ug/l	15
Nov-18	MW3	Copper (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2004	Annual	1.06	ug/l	1500
Nov-18	MW3	Zinc (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2005	Annual	18.1	ug/l	100
Nov-18	MW3	Arsenic (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2006	Annual	8.4	ug/l	7.5
Nov-18	MW3	Selenium (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2007	Annual	1.06	ug/l	-
Nov-18	MW3	Silver (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2008	Annual	<0.5	ug/l	-
Nov-18	MW3	Cadmium (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2009	Annual	<0.08	ug/l	3.75

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Groundwater/Soil monitoring template				Lic No:	P0078-01	Year	2018
Nov-18	MW3	Lead (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2010	Annual	1.25	ug/l	18.75
Nov-18	MW3	*Tin (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2011	Annual	<1	ug/l	-
Nov-18	MW3	Antimony (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2012	Annual	1.3		-
Nov-18	MW3	Barium (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2013	Annual	111	ug/l	100
Nov-18	MW3	*Iron (mg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2014	Annual	8.33	mg/l	0.2
Nov-18	MW3	*Boron (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2015	Annual	66.5	ug/l	750
Nov-18	MW3	*Mercury (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2016	Annual	<0.01	ug/l	0.75
Nov-18	MW3	Methanol (mg/l)	G/14: Based on ASTM Method D3695.	Annual	<0.5	mg/l	-
Nov-18	MW3	Ethanol (mg/l)	G/14: Based on ASTM Method D3695.	Annual	<0.5	mg/l	-

Groundwater/Soil monitoring template			Lic No:	P0078-01	Year	2018	
Nov-18	MW3	Acetonitrile (mg/l)	G/14: Based on ASTM Method D3695.	Annual	<0.05	mg/l	-
Nov-18	MW3	Acetone (mg/l)	G/14: Based on ASTM Method D3695.	Annual	<0.5	mg/l	-
Nov-18	MW3	Isopropanol (mg/l)	G/57: Based on USEPA 524.2	Annual	<0.1	mg/l	-
Nov-18	MW3	1,1-Dichloroethane (µg/l)	G/57: Based on USEPA 524.3	Annual	987	ug/l	-
Nov-18	MW3	Trans-1,2-Dichloroethene (µg/l)	G/57: Based on USEPA 524.4	Annual	2.1	ug/l	-
Nov-18	MW3	Isopropylbenzene	G/57: Based on USEPA 524.5	Annual	<1	ug/l	-
Nov-18	MW3	Dichloromethane (µg/l)	G/57: Based on USEPA 524.6	Annual	<3	ug/l	10
Nov-18	MW3	Cis -1,3-Dichloropropene (µg/l)	G/57: Based on USEPA 524.7	Annual	<1	ug/l	-
Nov-18	MW3	Cis-1,2-Dichloroethene (µg/l)	G/57: Based on USEPA 524.8	Annual	<1	ug/l	-
Nov-18	MW3	Trans-1,3-Dichloropropene (µg/l)	G/57: Based on USEPA 524.9	Annual	<1	ug/l	-
Nov-18	MW3	m,p-Xylene (µg/l)	G/57: Based on USEPA 524.10	Annual	2	ug/l	10
Nov-18	MW3	o-Xylene	G/57: Based on USEPA 524.11	Annual	<1	ug/l	-
Nov-18	MW3	Ethyl Benzene	G/57: Based on USEPA 524.12	Annual	<1	ug/l	-
Nov-18	MW3	Benzene (µg/l)	G/57: Based on USEPA 524.13	Annual	3.34	ug/l	0.75
Nov-18	MW3	Toluene (µg/l)	G/57: Based on USEPA 524.14	Annual	<1	ug/l	10
Nov-18	MW3	1,2-Dichloropropane (µg/l)	G/57: Based on USEPA 524.15	Annual	<1	ug/l	-

Groundwater/Soil monitoring template			Lic No:	P0078-01	Year	2018			
Nov-18	MW3	1,2,4-Trimethylbenzene	G/57: Based on USEPA 524.16	Annual	<1	ug/l			
Nov-18	MW3	1,4-Dichlorobenzene	G/57: Based on USEPA 524.17	Annual	<1	ug/l			
Nov-18	MW3	*TPH's (µg/l)	G/57: Based on USEPA 524.18	Annual	15483	ug/l		10	

.+ 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*	IGV	Upward trend in yearly average pollutant concentration over last 5 years of monitoring data
Nov-18	MW9	Depth (m)	-	Annual	3.26		Meters		-	no
Nov-18	MW9	SWL (m)	-	Annual	0.1		Meters		-	
Nov-18	MW9	Volume extracted (L)	-	Annual	9		Litres		-	
Nov-18	MW9	Temperature (°C)	-	Annual	12.4		Celcius		25	
Nov-18	MW9	Odour	-	Annual	Faint		Odour		-	
Nov-18	MW9	Visual	-	Annual	Cloudy Grey		Visual		-	
Nov-18	MW9	pH	G/05: Based on APHA 2012, 22nd Ed, method 4500 H+B	Annual	13.1		Ph Units		6.5-9.5	
Nov-18	MW9	Conductivity (mS/cm)	G/06: Based on APHA 2012, 22nd Ed, method 2510B	Annual	7020		mg/l		800-1875	
Nov-18	MW9	Ammonia-N (mg/l)	G/67: Based on APHA, 2012 22nd Ed 4500 NH3 & bluebook Ammonia in waters 1981	Annual	43		mg/l		0.05-0.136	
Nov-18	MW9	*Nitrite-N (mg/l)	G/39 Based on APHA, 2012 22nd Ed Method 4110B	Annual	1.3		mg/l		0.11	

Groundwater/Soil monitoring template				Lic No:	P0078-01	Year	2018
Nov-18	MW9	Nitrate-N (mg/l)	G/39 Based on APHA, 2012 22nd Ed Method 4110B	Annual	<1	mg/l	8.47
Nov-18	MW9	Phosphate-P (mg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 1994	Annual	<0.09	mg/l	-
Nov-18	MW9	Chloride (mg/l)	G/39 Based on APHA, 2012 22nd Ed Method 4110B	Annual	135	mg/l	24-187.5
Nov-18	MW9	Sulphate (mg/l)	G/39 Based on APHA, 2012 22nd Ed Method 4110B	Annual	<5	mg/l	187.5
Nov-18	MW9	Fluoride (mg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 1994	Annual	0.41	mg/l	1
Nov-18	MW9	*Sodium (mg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 1994	Annual	277	mg/l	150
Nov-18	MW9	*Potassium (mg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 1995	Annual	27.4	mg/l	5
Nov-18	MW9	*Calcium (mg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 1996	Annual	583	mg/l	200

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Groundwater/Soil monitoring template			Lic No:	P0078-01	Year	2018	
Nov-18	MW9	*Magnesium (mg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 1997	Annual	<0.036	mg/l	50
Nov-18	MW9	*Beryllium (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 1998	Annual	<0.1	ug/l	-
Nov-18	MW9	*Aluminium (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 1999	Annual	385	ug/l	150
Nov-18	MW9	Chromium (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2000	Annual	23	ug/l	37.5
Nov-18	MW9	Manganese (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2001	Annual	45	ug/l	50
Nov-18	MW9	Cobalt (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2002	Annual	6.53	ug/l	-
Nov-18	MW9	Nickel (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2003	Annual	45.3	ug/l	15
Nov-18	MW9	Copper (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2004	Annual	107	ug/l	1500

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Groundwater/Soil monitoring template				Lic No:	P0078-01	Year	2018
Nov-18	MW9	Zinc (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2005	Annual	4.18	ug/l	100
Nov-18	MW9	Arsenic (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2006	Annual	6.78	ug/l	7.5
Nov-18	MW9	Selenium (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2007	Annual	2.96	ug/l	-
Nov-18	MW9	Silver (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2008	Annual	<0.5	ug/l	-
Nov-18	MW9	Cadmium (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2009	Annual	0.08	ug/l	3.75
Nov-18	MW9	Lead (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2010	Annual	2.61	ug/l	18.75
Nov-18	MW9	*Tin (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2011	Annual	1.61	ug/l	-
Nov-18	MW9	Antimony (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2012	Annual	<1		-

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Groundwater/Soil monitoring template				Lic No:	P0078-01	Year	2018
Nov-18	MW9	Barium (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2013	Annual	1120	ug/l	100
Nov-18	MW9	*Iron (mg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2014	Annual	0.0272	mg/l	0.2
Nov-18	MW9	*Boron (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2015	Annual	<10	ug/l	750
Nov-18	MW9	*Mercury (µg/l)	G/57: Based on USEPA 200.8 Supplement 1 Rev 5.4 May 2016	Annual	<0.01	ug/l	0.75
Nov-18	MW9	Methanol (mg/l)	G/14: Based on ASTM Method D3695.	Annual	4.471	mg/l	-
Nov-18	MW9	Ethanol (mg/l)	G/14: Based on ASTM Method D3695.	Annual	<0.05	mg/l	-
Nov-18	MW9	Acetonitrile (mg/l)	G/14: Based on ASTM Method D3695.	Annual	12.907	mg/l	-
Nov-18	MW9	Acetone (mg/l)	G/14: Based on ASTM Method D3695.	Annual	<0.5	mg/l	-
Nov-18	MW9	Isopropanol (mg/l)	G/57: Based on USEPA 524.2	Annual	1.197	mg/l	-
Nov-18	MW9	1,1-Dichloroethane (µg/l)	G/57: Based on USEPA 524.2	Annual	6.12	ug/l	-
Nov-18	MW9	1,1-Dichloroethene (µg/l)	G/57: Based on USEPA 524.2	Annual	1.26	ug/l	-

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Groundwater/Soil monitoring template Lic No: P0078-01 Year 2018

Nov-18	MW9	Trichloroethene (µg/l)	G/57: Based on USEPA 524.2	Annual	20.5	ug/l	7.5
Nov-18	MW9	bromodichloromethane (ug/l)	G/57: Based on USEPA 524.2	Annual	<1	ug/l	-
Nov-18	MW9	Dibromochloromethane (ug/l)	G/57: Based on USEPA 524.2	Annual	<1	ug/l	-
Nov-18	MW9	Chloroform (ug/l)	G/57: Based on USEPA 524.2	Annual	<1	ug/l	12
Nov-18	MW9	Cis-1,2-Dichloroethene (µg/l)	G/57: Based on USEPA 524.2	Annual	8.83	ug/l	-
Nov-18	MW9	1,1,1-Trichloroethane (µg/l)	G/57: Based on USEPA 524.2	Annual	8.66	ug/l	500
Nov-18	MW9	*TPH's (µg/l)	G/57: Based on USEPA 524.2	Annual	13	ug/l	10

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

**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](#) [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 Liabilities template		Lic No:	P0078-01	Year	2018
				Commentary	
1	ELRA initial agreement status		Submitted and agreed by EPA		
2	ELRA review status		Agreed in 2017		
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		9860.13		9642.87
9	Closure plan review status		Agreed in 2017		
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: P0078-01	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	ISO14001
2	Does the EMS reference the most significant environmental aspects and associated impacts on-site	Yes	
3	Does the EMS maintain an Environmental Management Programme (EMP) as required in accordance with the licence requirements	9642.87	
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
Energy Efficiency/Utility conservation	3% reduction in energy consumption per tonne of production vs the previous year	100	Monthly tracking and reporting.	Section Head	Reduced emissions
Waste reduction/Raw material usage efficiency	3% reduction in waste consumption per tonne of production vs the previous year	100	Monthly tracking and reporting.	Section Head	Reduced emissions
Energy Efficiency/Utility conservation	3% reduction in water consumption per tonne of production vs the previous year	100	Monthly tracking and reporting.	Section Head	Reduced emissions
Waste reduction/Raw material usage efficiency	Improve segregation of waste	100	Increased streams and outlets as required.	Section Head	Improved Environmental Management Practices
Waste reduction/Raw material usage efficiency	Review existing Labelling and Tracking Project for Waste Management vs corporate and legal requirements and findings from previous incidents/audits.	60	In house system working well and is under constant review. P92 Horizon labelling system (ISFP) is due on line. This will link to the current waste labelling system. Further data is required in waste system to ensure compliance with waste regulations. Tracking system will follow.	Section Head	Improved Environmental Management Practices
Noise reduction	Complete approved project of works for noise reduction based on the 2015 results. Complete monitoring to measure effectiveness.	80	Phase 1 & 2 complete. Phase 3 due in 2018. Works based on recommendations from acoustic consultant.	Section Head	Increased compliance with licence conditions

Environmental Management Programme/Continuous Improvement Programme template				Lic No:	P0078-01	Year	2018
Energy Efficiency/Utility conservation	Install at least one water meter	50	Complete initial work via Jump Ahead	Section Head	Reduced emissions		
Reduction of emissions to Air	Continue programme of air emissions testing	90	Review of air emissions levels. Compliance with air standards. Measure effectively of project works.	Section Head	Increased compliance with licence conditions		
Additional improvements	Chemical Risk assessments are updated to review environmental risk for highest volume env haz chemicals.	100	Review existing chemical risk assessment person involved in RAs in the area and update with env hazards, controls and actions (if needed).	Section Head	Improved Environmental Management Practices		
Materials Handling/Storage/Bunding	Complete bund testing on bunds due under 3 year test schedule.	100	Approx 1/3 of bunds require testing p.a.	Section Head	Increased compliance with licence conditions		
Additional improvements	Complete refresher training on bund procedure for Grade As and responsible area owners.	0	Existing procedures on HIMDOC.	Section Head	Improved Environmental Management Practices		
Additional improvements	Review and verify compliance with current legislation	90	Complete via Enviromanager	Section Head	Increased compliance with licence conditions		

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Noise monitoring summary report Lic No: P0078-01 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? Enter date
- 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)?
								<input type="button" value="SELECT"/>	<input type="button" value="SELECT"/>		<input type="button" value="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?

** 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

	Dec-15
No	
SELECT	N/A

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)	9,860.13	9,642.87	10.18%	2.20%
Total Energy Generated (MWHrs)	0	0		
Total Renewable Energy Generated (MWHrs)	0	0		
Electricity Consumption (MWHrs)	3,456.80	3,356.00		
Fossil Fuels Consumption:	0	0		
Heavy Fuel Oil (m3)	0	0		
Light Fuel Oil (m3)	0	0		
Natural gas (m3)	550,355	617,233.90		
Coal/Solid fuel (metric tonnes)	0	0		
Peat (metric tonnes)	0	0		
Renewable Biomass	0	0		
Renewable energy generated on site	0	0		

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

** where site production information is available please enter percentage increase or decrease compared to previous year

Table R2 Water usage on site

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								
Surface water								
Public supply	29,827	30,984	10.18%	-6%	25423	0		Rainwater run off also discharged to sewer. Minimal loss to steam.
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

Resource Usage/Energy efficiency summary	Lic No:	P0078-01	Year	2018
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	Total	Landfill	Incineration	Recycled	Other
Hazardous (Tonnes)	619.94	0	363	10.44	246.5
Non-Hazardous (Tonnes)	17.9	0	0	8	9.9

Date of audit	Recommendations	Description of Measures proposed	Origin of measures	Predicted energy savings %	Implementation date	Responsibility	Completion date	Status and comments
Dec-15	system (one vessel)	system with dry vacuum	energy audit	15	Aug-17	Engineering		Design stage
			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					

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Complaints and Incidents summary template Lic No: P0078-01 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

Table 1 Complaints summary		9860.13	9642.87				
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		
Total complaints open at start of reporting year		0					
Total new complaints received during reporting year		0					
Total complaints closed during reporting year		0					
Balance of complaints end of reporting year		0					

Incidents		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

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

Table 2 Incidents summary														
Date of occurrence	Incident nature	Location of occurrence	Incident category*please refer to guidance	Receptor	Cause of incident	Other cause(please specify)	Activity in progress at time of incident	Communication	Occurrence	Corrective action<20 words	Preventative action <20 words	Resolution status	Resolution date	Likelihood of reoccurrence
3/4/2018	Breach of ELV	Licensed discharge point	1. Minor	No Uncontrolled release	Other (add details)	Low pH material in the base of in the sampling chamber.	Normal activities	EPA	New	pH checked on on-line monitoring for composite sample. Low pH seen on Sat evening-Sun evening. Activities over the weekend checked	Clean out the interceptor	Complete	3/4/2018	Low
Total number of incidents current year		1												
Total number of incidents previous year		1												
% reduction/ increase		0												

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WASTE SUMMARY	Lic No: P0078-01	Year: 2018
SECTION A-PRTR ON SITE WASTE TREATMENT AND WASTE TRANSFERS TAB- TO BE COMPLETED BY ALL IPPC AND WASTE FACILITIES		PRTR facility logon dropdown list click to see options

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

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 **1 within your boundaries is to be captured through PRTR reporting**)

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

Additional Information	
No	
No	
N/A	

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 applies to relevant EWC code 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 -
	European Waste Catalogue EWC codes		European Waste Catalogue EWC codes								

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?

SELECT	

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

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													

Table 4 Environmental monitoring-landfill only

[Landfill Manual-Monitoring Standards](#)

WASTE SUMMARY Lic No: P0078-01 Year 2018

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

EWC	Hazardous	Material description	Treatment facility	RD Codes	Quantity (T)	Treatment facility details
07 01 03*	Yes	HALOGENATED SOLVENTS	Abfall Verwertungs Gesellsch.GmbH	D15D10	9.92	Abfall Verwertungs Gesellsch.GmbH, IB2234/AVG-GENB-2, Borsigstrasse 2, D 22113, Hamburg, Germany
07 01 03*	Yes	HALOGENATED SOLVENTS	Indaver Antwerpen nv	D10	1.728	Indaver NV, MLAV1/980000485/MV/bd Industriële Afvalverwerking, Poldervlietweg, B-2030 Antwerpen 3, BELGIUM
07 01 04*	Yes	NON HALOGENATED SOLVENTS	ATM bv	R12R1	8.078	ATM BV, Vlasweg 12, MOERDIJK, 4782 PW
07 01 04*	Yes	NON HALOGENATED SOLVENTS	Indaver Antwerpen nv	D10	1.362	Indaver NV, MLAV1/980000485/MV/bd Industriële Afvalverwerking, Poldervlietweg, B-2030 Antwerpen 3, BELGIUM
08 04 09*	Yes	ADHESIVE LIQUID	Lindenschmidt KG	R12R1	30.902	Lindenschmidt KG,E97095037,Krombacher Strasse, 42-46,Kreuztal-Krombach, Germany
08 04 09*	Yes	ADHESIVE LIQUID - CYANOACRYLATES	9860.13	9642.87	22.211	Lindenschmidt KG,E97095037,Krombacher Strasse, 42-46,Kreuztal-Krombach, Germany
08 04 09*	Yes	ADHESIVE LIQUID - RESIDUES	Lindenschmidt KG	R12R1	19.844	Lindenschmidt KG,E97095037,Krombacher Strasse, 42-46,Kreuztal-Krombach, Germany
08 04 09*	Yes	SOLVENT BASED ADHES AND SEALANT LIQ	ATM bv	R12R1	3.176	ATM BV, Vlasweg 12, MOERDIJK, 4782 PW
08 04 09*	Yes	SOLVENT BASED ADHES AND SEALANT LIQ	Indaver Antwerpen nv	D10	1.107	Indaver NV, MLAV1/980000485/MV/bd Industriële Afvalverwerking, Poldervlietweg, B-2030 Antwerpen 3, BELGIUM
08 04 09*	Yes	SOLVENT BASED ADHES AND SEALANT SOL	ATM bv	R1	61.555	ATM BV, Vlasweg 12, MOERDIJK, 4782 PW
08 04 09*	Yes	SOLVENT BASED ADHES AND SEALANT SOL	ATM bv	R12R1	54.05	ATM BV, Vlasweg 12, MOERDIJK, 4782 PW
08 04 09*	Yes	SOLVENT BASED ADHES AND SEALANT SOL	Indaver Antwerpen nv	D10	60.748	Indaver NV, MLAV1/980000485/MV/bd Industriële Afvalverwerking, Poldervlietweg, B-2030 Antwerpen 3, BELGIUM
15 01 10*	Yes	EMPTY 200L PLASTIC DRUMS	Rilta Environmental Ltd	R3	1.64	Rilta Environmental Ltd, W0192-03, Block 402, Greenogue Bus. Park, RATHCOOLE, DUBLIN
15 01 10*	Yes	EMPTY 200L STEEL DRUMS	Rilta Environmental Ltd	R4	4.662	Rilta Environmental Ltd, W0192-03, Block 402, Greenogue Bus. Park, RATHCOOLE, DUBLIN
15 01 10*	Yes	EMPTY 25-120L PLASTIC DRUMS	Rilta Environmental Ltd	R3	0.008	Rilta Environmental Ltd, W0192-03, Block 402, Greenogue Bus. Park, RATHCOOLE, DUBLIN
15 01 10*	Yes	EMPTY 25-120L STEEL DRUMS	Rilta Environmental Ltd	R4	4.13	Rilta Environmental Ltd, W0192-03, Block 402, Greenogue Bus. Park, RATHCOOLE, DUBLIN
15 01 10*	Yes	EMPTY INNER PACKAGING	Indaver Antwerpen nv	D10	0.589	Indaver NV, MLAV1/980000485/MV/bd Industriële Afvalverwerking, Poldervlietweg, B-2030 Antwerpen 3, BELGIUM
15 01 10*	Yes	EMPTY PACKAGING	ATM bv	R1	10.951	ATM BV, Vlasweg 12, MOERDIJK, 4782 PW
15 01 10*	Yes	EMPTY PACKAGING	ATM bv	R12R1	18.587	ATM BV, Vlasweg 12, MOERDIJK, 4782 PW
15 01 10*	Yes	EMPTY PACKAGING - INNERS	ATM bv	R1	37.94	ATM BV, Vlasweg 12, MOERDIJK, 4782 PW
15 01 10*	Yes	EMPTY PACKAGING - INNERS	ATM bv	R12R1	10.073	ATM BV, Vlasweg 12, MOERDIJK, 4782 PW
15 01 10*	Yes	EMPTY PACKAGING WASTE	Indaver Antwerpen nv	D10	0.19	Indaver NV, MLAV1/980000485/MV/bd Industriële Afvalverwerking, Poldervlietweg, B-2030 Antwerpen 3, BELGIUM
15 02 02*	Yes	FILTERS, ABORBENTS, WIPES	ATM bv	R1	11.3	ATM BV, Vlasweg 12, MOERDIJK, 4782 PW
15 02 02*	Yes	FILTERS, ABORBENTS, WIPES	ATM bv	R12R1	7.027	ATM BV, Vlasweg 12, MOERDIJK, 4782 PW
15 02 02*	Yes	FILTERS/ABSORBENTS/WIPES ORG	Indaver Antwerpen nv	D10	0.869	Indaver NV, MLAV1/980000485/MV/bd Industriële Afvalverwerking, Poldervlietweg, B-2030 Antwerpen 3, BELGIUM
16 03 05*	Yes	OFF SPEC LIQUID	Indaver Antwerpen nv	D10	0.555	Indaver NV, MLAV1/980000485/MV/bd Industriële Afvalverwerking, Poldervlietweg, B-2030 Antwerpen 3, BELGIUM
16 03 05*	Yes	OFF SPEC ORGANIC LIQUID	ATM bv	R12R1	3.027	ATM BV, Vlasweg 12, MOERDIJK, 4782 PW
16 10 01*	Yes	AQUEOUS LIQUID INORGANIC	Enva Ireland Ltd	D9	216.5	Enva Ireland Ltd, W0041-1, Smithstown Industrial Estate, CLARE, SHANNON, V14 FT53
20 01 38	No	wood other than that mentioned in 20 01 37	Ballymount W0238	R12	6	Ballymount MRF (Merrywell) - W0238, Merrywell Industrial Estate, Ballymount Road Lower, Ballymount, Dublin 12
20 01 40 C	No	Mixed metals	Ballymount W0238	R12	2	Ballymount MRF (Merrywell) - W0238, Merrywell Industrial Estate, Ballymount Road Lower, Ballymount, Dublin 12
20 03 01 B	No	Municipal mixed residual non-household	Ballymount W0238	R12	1.3	Ballymount MRF (Merrywell) - W0238, Merrywell Industrial Estate, Ballymount Road Lower, Ballymount, Dublin 12
20 03 01 B	No	Municipal mixed residual non-household	Ballymount Baling Stn	R12	8.6	Ballymount Baling Station,Waste Licence 3-3, Ballymount Road, Dublin 12