Facility Information Summary	
AER Reporting Year	2016
Licence Register Number	P0643-03
Name of site	AbbVie Ireland NL B.V
Site Location	Manorhamilton Road, Sligo, Co. Sligo
NACE Code	2110 (Manufacture of basic pharmaceutical products)
Class/Classes of Activity	5.16.0: Chemicals
National Grid Reference (6E, 6 N)	570530E 837424N

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.

AbbVie Ireland NL B.V is involved in the manufacture of pharmaceuticals at its facility in Sligo Town. AbbVie holds an Industrial Emissions Licence (P0643-03) (originally an IPPC Licence issued in November 2005), as granted by the EPA. The Licence is on its third revision with P0643-03 granted in February 2016.

The following key facilities are located on the AbbVie Ireland site: administration buildings, manufacturing building, drug product building, tank farm, wastewater treatment system, security and stores. A new Thermal Oxidiser (TO) air abatement system was installed in Q4 of 2015 for non-chlorinated waste streams. All air monitoring for 2016 was in accordance with the licenced limits for the new TO.

The site received recertification of ISO:14004:2004 in December 2016.

There was one reported incident during 2016 which included an isolated breech of the LEV for pH at the discharge to sewer (SE-1). No other incidents or complaints occurred in 2016.

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.

Ruaidhri Mohally	31/03/2017
Signature	Date
Group/Facility manager	
(or nominated, suitably qualified and experienced deputy)	

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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	Yes	There are eight emission points to atmosphere at AbbVie: - A1-1 and A1-2 from boilers (A1-3 exists but is redundant) - A2-1(c) from New Thermal Oxidiser (A2-1(a) exists but redundant) - A2-1(b) from Cryogenic Condenser - A2-2 Scrubber (non-operational - no 2016 monitoring data) - A2-3, A2-4 and A2-5 from dust extraction systems

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	No	
3	Was all monitoring carried out in accordance with EPA guidance note AG2 and using the basic air monitoring checklist? Basic air monitoring checklist AGN2	Yes	

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

Emission reference no:	Parameter/ Substance	Frequency of Monitoring	ELV in licence or any revision therof	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence limit	Method of analysis	Annual mass load (kg)	Comments -reason for change in % mass load from previous year if applicable
Boiler A1-1	Nitrogen oxides (NOx/NO2)	Bi-Annual	180	100 % of values < ELV	160.35	mg/Nm3	yes	Flue Gas Analyser	9988.68	Average Value.
Boiler A1-1	Sulphur oxides (SOx/SO2)	Bi-Annual	70	100 % of values < ELV	8.75	mg/Nm3	yes	Flue Gas Analyser	429.80	Average Value.
Boiler A1-1	Carbon monoxide (CO)	Bi-Annual	100	100 % of values < ELV	22.85	mg/Nm3	yes	Flue Gas Analyser	1495.20	Average Value.
Boiler A1-1	Combustion Efficiency	Bi-Annual	N/A	N/A	66.55	%	yes	Flue Gas Analyser	N/A	Average Value.
Boiler A1-1	Particulates	Annual	N/A	N/A	113.1	mg/Nm3	yes	Isokinetic/Gravimetric	3588.90	
Boiler A1-1	volumetric flow	Bi-Annual	13047	100 % of values < ELV	3236	Nm3/hour	yes	Flow Meter	N/A	Average Value.
Boiler A1-2	Nitrogen oxides (NOx/NO2)	Bi-Annual	180	100 % of values < ELV	156.2	mg/Nm3	yes	Flue Gas Analyser	9988.68	Average Value.
Boiler A1-2	Sulphur oxides (SOx/SO2)	Bi-Annual	70	100 % of values < ELV	5.35	mg/Nm3	yes	Flue Gas Analyser	429.80	Average Value.
Boiler A1-2	Carbon monoxide (CO)	Bi-Annual	100	100 % of values < ELV	35.05	mg/Nm3	yes	Flue Gas Analyser	1495.20	Average Value.
Boiler A1-2	Combustion Efficiency	Bi-Annual	N/A	N/A	71.45	%	yes	Flue Gas Analyser	N/A	Average Value.
Boiler A1-2	Particulates	Annual	N/A	N/A	15.7	mg/Nm3	yes	Isokinetic/Gravimetric	3588.90	

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Boiler A1-2	volumetric flow	Bi-Annual	13047	100 % of values < ELV	2783	Nm3/hour	yes	Flow Meter	N/A	Average Value.
A2-1b	TA Luft organic substances class 1	Monthly	20 (at mass flows of >0.1kg/hr)	100 % of values < ELV	<1.8	mg/Nm3	yes	Adsorption/GC-MS	26.69	
A2-1b	TA Luft organic substances class 2	Monthly	100 (at mass flows of >0.5kg/hr)	100 % of values < ELV	<1.8	mg/Nm3	yes	Adsorption/GC-MS	26.69	
A2-1b	VOCs	Monthly	2 (at mass flows of >0.01kg/hr)	100 % of values < ELV	8.9 (0.00246 kg/hr)	mg/Nm3	yes	Adsorption/GC-MS	72.06	
A2-1b	Halogenated VOCs	Monthly	20 (at mass flows of >0.1kg/hr)	100 % of values < ELV	3.4 (0.000983 kg/hr)	mg/Nm3	yes	Adsorption/GC-MS	38.56	
A2-1b	volumetric flow	Monthly	900	100 % of values < ELV	275	Nm3/hour	yes	Flow Meter	N/A	
A2-1c	TA Luft organic substances class 1	Quarterly	20 (at mass flows of >0.1kg/hr)	100 % of values < ELV	1.53	mg/Nm3	yes	Adsorption/GC-MS	26.69	Average Value.
A2-1c	TA Luft organic substances class 2	Quarterly	100 (at mass flows of >0.5kg/hr)	100 % of values < ELV	1.53	mg/Nm3	yes	Adsorption/GC-MS	26.69	Average Value.
A2-1c	VOCs	Monthly	2 (at mass flows of >0.01kg/hr)	100 % of values < ELV	3.47 (0.0043318 kg/hr)	mg/Nm3	yes	Adsorption/GC-MS	72.06	Average Value.
A2-1c	Halogenated VOCs	Monthly	20 (at mass flows of >0.1kg/hr)	100 % of values < ELV	2.08 (0.02531 kg/hr)	mg/Nm3	yes	Adsorption/GC-MS	38.56	Average Value.
A2-1c	Dioxins/Furans	Bi-Annual	0.1	100 % of values < ELV	0.007631	ng/Nm3	yes	Isokinetic filter & GC-HRMS	0.11	Average Value.
A2-1c	HCl	Monthly	10	100 % of values < ELV	0.87	mg/Nm3	yes	Isokinetic/Non-Isokinetic & ISE	11.02	Average Value.
A2-1c	Methoxyethanol	Monthly	2 (at mass flows of >0.01kg/hr)	100 % of values < ELV	0.63	mg/Nm3		Adsorption/GC-MS	9.21	Average Value.
A2-1c	volumetric flow	Continuous	3692	100 % of values < ELV	1678.44	Nm3/hour	yes	Flow Meter	N/A	Average Value.

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A2-3	Total Particulates	Annual	1	100 % of values < ELV	0.2	mg/Nm3	yes	Isokinetic/Gravimetric	3588.90	
A2-3	Total Dust (API)	Annual	0.15	100 % of values < ELV	0.0055	mg/Nm3	yes	Isokinetic/Gravimetric	0.14	
A2-3	volumetric flow	Annual	18000	100 % of values < ELV	487	Nm3/hour	yes	Flow Meter	N/A	
A2-4	Total Particulates	Annual	1	100 % of values < ELV	0.2	mg/Nm3	yes	Isokinetic/Gravimetric	3588.90	
A2-4	Total Dust (API)	Annual	0.15	100 % of values < ELV	0.0027	mg/Nm3	yes	Isokinetic/Gravimetric	0.14	
A2-4	volumetric flow	Annual	4020	100 % of values < ELV	2363	Nm3/hour	yes	Flow Meter	N/A	
A2-5	Total Particulates	Annual	1	100 % of values < ELV	0.7	mg/Nm3	yes	Isokinetic/Gravimetric	3588.90	
A2-5	Total Dust (API)	Annual	0.15	100 % of values < ELV	0.0027	mg/Nm3	yes	Isokinetic/Gravimetric	0.14	
A2-5	volumetric flow	Annual	3000	100 % of values < ELV	2421	Nm3/hour	yes	Flow Meter	N/A	

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

Continuous Monitoring

4	Does your site carry out continuous air emissions monitoring?	Yes	Continuous monitoring is carried out at emission point references A2-1(c) (and A2-1(b) when in use)
	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	No	
6	Do you have a proactive service agreement for each piece of continuous monitoring equipment?	Yes	Service level agreements in place with Vendors (IES) and associated PMs
7	Did your site experience any abatement system bypasses? If yes please detail them in table A3 below	No	

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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 Emission (Average)	Annual maximum	Monitoring Equipment downtime (hours)	Number of ELV exceedances in current reporting year	Comments
A2-1(c)	Sulphur oxides (SOx/SO2)	70	30 minutes	100 % of values < ELV	mg/Nm3	3.65	66.42	0	0	
A2-1(c)	Nitrogen oxides (NOx/NO2)	200	30 minutes	100 % of values < ELV	mg/Nm3	114.96	263.62	0	28	
A2-1(c)	Carbon monoxide (CO)	300	30 minutes	100 % of values < ELV	mg/Nm3	0.08	37.69	0	0	
A2-1(c)	Total Organic Carbon (as C)	20	1 hour	100 % of values < ELV	mg/Nm3	0.09	4.42	0	0	
A2-1(c)	Oxygen	n/a	30 minutes	n/a	%	7.7	13.13	0	0	
A2-1(c)	Temperature	n/a	1 hour	n/a	degrees C	149.76	157.14	0	0	
A2-1(c)	Flow	3962	1 hour	100 % of values < ELV	Nm3/hour	1678.44	3244.55	0	0	

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

Table A3: Abatement system bypass reporting table Bypass protocol

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

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

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

Solvent use and management on site

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

Yes	Licence condition 5.6:"Fugitive emission shall not exceed 15% of the total solvent input, where solvent consumption is greater than 50 tonnes per calendar year."

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 thereof	Compliance
2016	605,880	10,533	1.74	15%	Yes

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Table A5: Solvent Mass Balance summary

	(I) Inputs (kg)	(O) Outputs (kg)						
Solvent	(I) Inputs (kg)	Organic solvent emission in waste	Solvents lost in water (kg)	Collected waste solvent (kg)	Fugitive Organic Solvent (kg)	Solvent released in other ways e.g.	Solvents destroyed onsite through	Total emission of Solvent to air (kg)
ALCOHOL METHYL/METHANO	226,810							
ALCOHOL, ISOPROPYL	21,320							
TETRAHYDROFURAN	18,530							
ETHYL ACETATE	76,780							
METHYLENE CHLORIDE/ DCM	90,130							
DIMETHYL SULFOXIDE	1,900							
ETHANOL	10,720							
N-METHYL MORPHOLINE	250							
IPAC	68,090							
N-METHYLPYRROLIDINONE	4,290							
HYDROC. ACID	40							
DIMETHYLFORMIDE	20							
ETHANOL WITH TOLUNE	23,660							
ACETONITRILE	57,700							
ALCOHOL SD 3A 200 PROOF	5,640							
Total	605,880	0.8	0	595,340	10,530	0	0	10,533

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER) Lic No: P0643-03 Year 2016

			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	Yes	The stormwater discharge reference is SW-1 and the sewer discharge reference is SE-1.
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	Yes	Licence Condition 6.14.1. A visual examination of the storm water discharge shall be carried out daily. A log of such inspections shall be maintained.

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
SW-1	onsite	n/a	TOC	Continuous	14	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	2.01	mg/L	yes	trigger limit - 14mg/l; Warning limit - 11mg/l
SW-1	onsite	n/a	pH	Continuous	6.2-8.8	No pH value shall deviate from the specified range.	7.35	pH units	yes	
SW-1	onsite	n/a	Temperature	Daily	n/a	No temperature value shall exceed the limit value.	15	degrees C	yes	

*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

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

				Additional information
3	Was there any result in breach of licence requirements? If yes please provide brief details in the comment section of Table W3 below		No	
4	Was all monitoring carried out in accordance with EPA guidance and checklists for Quality of Aqueous Monitoring Data Reported to the EPA? If no please detail what areas require improvement in additional information box	External /Internal Lab Quality checklist / Assessment of results checklist	Yes	

Table 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 therof Note 2	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence	Method of analysis	Procedural reference source	Procedural reference standard number	Annual mass load (kg)	Comments
SE-1	Wastewater/Sewer	Ammonia (as N)	composite	Weekly	N/A	25	All values < ELV	0.73	mg/L	yes	ISE (Ion Selective Electrode)	QP-CHEM-2039		14.307	Average value presented
SE-1	Wastewater/Sewer	BOD	composite	Weekly	N/A	450	All values < ELV	4.69	mg/L	yes	5-day incubation and DO probe	QP-CHEM-2016		91.915	Average value presented
SE-1	Wastewater/Sewer	Detergents (as MBAS)	composite	Quarterly	N/A	20	All values < ELV	0.25	mg/L	yes	Standard Method			4.900	Average value presented
SE-1	Wastewater/Sewer	Nitrate (as N)	composite	Monthly	N/A	50	No ELV in Licence	5.57	mg/L	yes	ISE (Ion Selective Electrode)	QP-CHEM-2043		109.161	Average value presented
SE-1	Wastewater/Sewer	Nitrite (as N)	composite	Monthly	N/A	0.2	No ELV in Licence	0.1	mg/L	yes	Standard Method			1.960	Average value presented
SE-1	Wastewater/Sewer	Total nitrogen	composite	Monthly	N/A	N/A	No ELV in Licence	3.02	mg/L	yes	Other (please describe)	Calculation		59.186	Average value presented
SE-1	Wastewater/Sewer	Fats, Oils and Greases	composite	Quarterly	N/A	10	All values < ELV	4.85	mg/L	yes	Hexane Extraction and Gravimetry	QP-CHEM-2019		95.050	Less than detection limit (<10mg/l) therefore actual value taken at 50% of detection limit as per 2015 AER
SE-1	Wastewater/Sewer	Sulphate	composite	Monthly	N/A	1500	All values < ELV	185.55	mg/L	yes	Turbidimetry	QP-CHEM-2050		3636.409	Average value presented
SE-1	Wastewater/Sewer	Kjeldahl Nitrogen	composite	Monthly	N/A	N/A	No ELV in Licence	1.73	mg/L	yes	Digestion and Spectrometry	QP-CHEM-2073		33.905	Average value presented

SE-1	Wastewater/Sewer	Total phosphorus	composite	Weekly	N/A	10	All values < ELV	0.73	mg/L	yes	Standard Method			14.307	Average value presented
SE-1	Wastewater/Sewer	Chlorides (as Cl)	composite	Monthly	N/A	1500	All values < ELV	269.17	mg/L	yes	Titration	QP-CHEM-2035		5275.194	Average value presented
SE-1	Wastewater/Sewer	Aluminium (Dissolved)	composite	Annually	N/A	0.2	No ELV in Licence	<0.1	mg/L	yes	Atomic Absorption/ICP				Value < LOD
SE-1	Wastewater/Sewer	Antimony (Dissolved)	composite	Annually	N/A	N/A	No ELV in Licence	<1.2	µg/L	yes	Atomic Absorption/ICP				Value < LOD
SE-1	Wastewater/Sewer	Arsenic (Dissolved)	composite	Annually	N/A	25	No ELV in Licence	<1.0	µg/L	yes	Atomic Absorption/ICP				Value < LOD
SE-1	Wastewater/Sewer	Cadmium (Dissolved)	composite	Annually	N/A	0.005	No ELV in Licence	<0.0006	mg/L	yes	Atomic Absorption/ICP				Value < LOD
SE-1	Wastewater/Sewer	Chromium (Dissolved)	composite	Annually	N/A	0.03	No ELV in Licence	<0.002	mg/L	yes	Atomic Absorption/ICP				Value < LOD
SE-1	Wastewater/Sewer	Cobalt (Dissolved)	composite	Annually	N/A	N/A	No ELV in Licence	<0.002	mg/L	yes	Atomic Absorption/ICP				Value < LOD
SE-1	Wastewater/Sewer	Copper (Dissolved)	composite	Annually	N/A	0.03	No ELV in Licence	0.027	mg/L	yes	Atomic Absorption/ICP			0.529	Average value presented
SE-1	Wastewater/Sewer	Total Iron (Dissolved)	composite	Annually	N/A	1	No ELV in Licence	<0.23	mg/L	yes	Atomic Absorption/ICP				Value < LOD
SE-1	Wastewater/Sewer	Lead (Dissolved)	composite	Annually	N/A	0.01	No ELV in Licence	<0.006	mg/L	yes	Atomic Absorption/ICP				Value < LOD
SE-1	Wastewater/Sewer	Manganese (Dissolved)	composite	Annually	N/A	0.3	No ELV in Licence	<0.007	mg/L	yes	Atomic Absorption/ICP				Value < LOD
SE-1	Wastewater/Sewer	Mercury (Dissolved)	composite	Annually	N/A	1	No ELV in Licence	<0.10	µg/L	yes	Atomic Absorption/ICP				Value < LOD
SE-1	Wastewater/Sewer	Nickel (Dissolved)	composite	Annually	N/A	0.05	No ELV in Licence	0.006	mg/L	yes	Atomic Absorption/ICP			0.118	Average value presented
SE-1	Wastewater/Sewer	Silver (Dissolved)	composite	Annually	N/A	N/A	No ELV in Licence	<0.0007	mg/L	yes	Atomic Absorption/ICP				Value < LOD
SE-1	Wastewater/Sewer	Tin (Dissolved)	composite	Annually	N/A	N/A	No ELV in Licence	<0.007	mg/L	yes	Atomic Absorption/ICP				Value < LOD
SE-1	Wastewater/Sewer	Titanium (Dissolved)	composite	Annually	N/A	N/A	No ELV in Licence	0.038	mg/L	yes	Atomic Absorption/ICP			0.745	Average value presented
SE-1	Wastewater/Sewer	Zinc (Dissolved)	composite	Annually	N/A	0.1	No ELV in Licence	0.297	mg/L	yes	Atomic Absorption/ICP			5.821	Average value presented

SE-1	Wastewater/Sewer	Chloroform	composite	Quarterly	N/A	12	No ELV in Licence	1.56	µg/L	yes	GC (Gas Chromatography)			14.99	Detected in 2 samples only. All other samples reported at levels below LOD. Maximum value presented
SE-1	Wastewater/Sewer	Dibromochloromethane	composite	Quarterly	N/A	N/A	No ELV in Licence	7.9	µg/L	yes	GC (Gas Chromatography)			38.71	One occurrence only (presented). All other samples reported at levels below LOD. Annual load based on average
SE-1	Wastewater/Sewer	Bromodichloromethane	composite	Quarterly	N/A	N/A	No ELV in Licence	0.29	µg/L	yes	GC (Gas Chromatography)			14.21	One occurrence only (presented). All other samples reported at levels below LOD. Annual load based on average
SE-1	Wastewater/Sewer	Dichloromethane	composite	Quarterly	N/A	10	No ELV in Licence	0.72	µg/L	yes	GC (Gas Chromatography)			3.53	One occurrence only (presented). All other samples reported at levels below LOD. Annual load based on average
SE-1	Wastewater/Sewer	Chloromethane	composite	Quarterly	N/A	N/A	No ELV in Licence	1.1	µg/L	yes	GC (Gas Chromatography)			5.39	One occurrence only (presented). All other samples reported at levels below LOD. Annual load based on average
SE-1	Wastewater/Sewer	volumetric flow	composite	Continuous	N/A	300	No flow value shall exceed the specific limit.	53.55	m3/day	yes	INSTRUMENTAL METHODS			19598	Average value presented

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

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

Continuous monitoring

			Additional Information
5	Does your site carry out continuous emissions to water/sewer monitoring?	Yes	
	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**	No	
7	Do you have a proactive service contract for each piece of continuous monitoring equipment on site?	Yes	Service level agreements in place with Vendors (Water Technology) and associated PM
8	Did abatement system bypass occur during the reporting year? **If yes please complete table W5 below**	No	

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 exceedances in reporting year	Comments
SE-1	Wastewater/Sewer	pH	6-9	24 hour	No pH value shall deviate from the .specified range	pH units	7.47	n/a	0	1	Average value. Exceedance in pH levels on 18-02-2016 for a 26 minute period (see complaints and incidents)
SE-1	Wastewater/Sewer	Temperature	40	24 hour	No temperature value shall exceed the limit .value	degrees Celsius	12.8	n/a	0	0	Average value.
SE-1	Wastewater/Sewer	Suspended Solids	350	24 hour	All values < ELV	mg/L	127.22	-37.33%	0	0	
SE-1	Wastewater/Sewer	COD	1300	24 hour	All values < ELV	mg/L	503.96	232.88%	0	0	Increased COD due to increased volumetric flow
SE-1	Wastewater/Sewer	volumetric flow	300	24 hour	No flow value shall exceed the specific limit.	m3/day	19598(Total yearly flow)	192.59%	0	0	

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?

*Measures taken or proposed to reduce or limit bypass frequency

Bund/Pipeline testing template

Lic No: P0643-03 Year 2016

Bund testing dropdown menu click to see options

			Additional information
1	Are you required by your licence to undertake integrity testing on bunds and containment structures ? if yes please fill out table 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	
2	Please provide integrity testing frequency period	3 years	
3	Does the site maintain a register of bunds, underground pipelines (including stormwater and foul), Tanks, sumps and containers? (containers refers to "Chemstore" type units and mobile bunds)	Yes	
4	How many bunds are on site?	55	Including 3 sumps
5	How many of these bunds have been tested within the required test schedule?	55	Majority of bund testing completed 2015. No. 5 bunds tested in 2016.
6	How many mobile bunds are on site?		
7	Are the mobile bunds included in the bund test schedule?	Yes	
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?	3	
10	How many of these sumps are integrity tested within the test schedule?	3	Sump testing completed 2015
	Please list any sump integrity failures in table B1		
11	Do all sumps and chambers have high level liquid alarms?	N/A	
12	If yes to Q11 are these failsafe systems included in a maintenance and testing programme?	N/A	
13	Is the Fire Water Retention Pond included in your integrity test programme?	N/A	

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)
VOC804-1	reinforced concrete		Main scrubber bund	17.88	8.8	Hydraulic test		10/03/2016	Yes	Pass			2019	
VOC804-2	reinforced concrete		Ammonia pumps bund	0.538	0	Hydraulic test		10/03/2016	Yes	Pass			2019	
VOC804-3	reinforced concrete		Kerosene Pumps bund	2.65	0	Hydraulic test		10/03/2016	Yes	Pass			2019	
VOC804-4	reinforced concrete		Aqueous solvent pumps bu	1.47	0	Hydraulic test		10/03/2016	Yes	Pass			2019	
Foam Suppression Bund	reinforced concrete		Foam Suppression Bund	2.38	1.1	Hydraulic test		10/03/2016	Yes	Pass		SELECT		

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

			Commentary
15	Has integrity testing been carried out in accordance with licence requirements and are all structures tested in line with BS8007/EPA Guidance? bunding and storage guidelines	Yes	
16	Are channels/transfer systems to remote containment systems tested?	n/a	
17	Are channels/transfer systems compliant in both integrity and available volume?	n/a	

Pipeline/underground structure testing

1	Are you required by your licence to undertake integrity testing* on underground structures e.g. pipelines or sumps etc ? if yes please fill out table 2 below listing all underground structures and pipelines on site **which failed the integrity test and all which have not been tested within the integrity test period as specified**	Yes	Underground foul sewer line and surface water lines tested and inspected in March 2016.
2	Please provide integrity testing frequency period	3 years	
	*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	Scheduled date for retest	Results of retest(if in current reporting year)
S2-S1	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S3-S2	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S2A-S2	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S4-S3	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S5-S4	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S6-S5	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT

Bund/Pipeline testing template					Lic No:	P0643-03		Year	2016		
S7-S6	Storm	concrete	No	SELECT	CCTV	SELECT	Fail	Grade 3 - connection intruding	Does not require immediate remediation due to location / contains surface water only	May-19	SELECT
S8-S5	Storm	concrete	No	SELECT	CCTV	SELECT	Fail	Grade 4: Multiple defects at	Does not require immediate remediation due to location / contains surface water only	May-19	SELECT
S9-S8	Storm	concrete	No	SELECT	CCTV	SELECT	Fail	Grade 3 -Settle deposits causing loss of volume	Does not require immediate remediation due to location / contains surface water only	May-19	SELECT
S9A-S9	Storm	concrete	No	SELECT	CCTV	SELECT	Fail	Grade 3 - multiple defects at 0m	Does not require immediate remediation due to location / contains surface water only	May-19	SELECT
S10-S3	Storm	concrete	No	SELECT	CCTV	SELECT	Fail	Grade 4: Hole in drain/sewer	Does not require immediate remediation due to location / contains surface water only	May-19	SELECT
S11-S10	Storm	concrete	No	SELECT	CCTV	SELECT	Fail	Grade 3 - multiple defects at 33.2m	Does not require immediate remediation due to location / contains surface water only	May-19	SELECT
S12-S11	Storm	concrete	No	SELECT	CCTV	SELECT	Fail	Grade 5 -Multiple defects at 2.2m	Does not require immediate remediation due to location / contains surface water only	May-19	SELECT
S13-S12	Storm	concrete	No	SELECT	CCTV	SELECT	Fail	Grade 3 - connection intruding	Does not require immediate remediation due to location / contains surface water only	May-19	SELECT
S14-S12	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S15-S14	Storm	pvc	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S16-S14	Storm	polypropylene	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S18-S17	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S19-S18	Storm	concrete	No	SELECT	CCTV	SELECT	Fail	Grade 3 -Settle deposits causing loss of volume	Does not require immediate remediation due to location / contains surface water only	May-19	SELECT
S20-S18	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S20A-S20	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S21-S20	Storm	concrete	No	SELECT	CCTV	SELECT	Fail	Grade 3 - multiple defects at 9.7m	Does not require immediate remediation due to location / contains surface water only	May-19	SELECT
S21A-S21	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S22-S21	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S22A-S22	Storm	pvc	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S22B-S22A	Storm	pvc	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S23-S22	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S24-S23	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S24A-S24	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S25-S24	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S26-S24	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S26A-S26	Storm	pvc	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S26B-S26	Storm	pvc	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S26C-S26B	Storm	pvc	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S28-S27	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S28A-S28	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S29-S28	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S29A-S29	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S31-S29	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S36-S27	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S38-S36	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S40	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S38-S36	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S42	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S40	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S44-S42	Storm	concrete	No	SELECT	CCTV	SELECT	Fail	Grade 3 -Settle deposits causing loss of volume	Does not require immediate remediation due to location / contains surface water only	May-19	SELECT
S45-S44	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S46-S36	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S47-S46	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT

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S48-S47	Storm	concrete	No	SELECT	CCTV	SELECT	Fail	Grade 3 -Settle deposits causing loss of volume	Does not require immediate remediation due to location / contains surface water only	May-19	SELECT
S49-S48	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S49A-S49	Storm	pvc	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S49AB-TANK705	Storm	pvc	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S49C.1-S49B	Storm	concrete	No	SELECT	CCTV	SELECT	Fail	Grade 3 - connection intruding	Does not require immediate remediation due to location / contains surface water only	May-19	SELECT
END-49C	Storm	pvc	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S50-S49	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S52-S50	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
END-S55	Storm	pvc	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S56-S56A	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S56-S14	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S57-S56	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S58-S57	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S59-S58	Storm	pvc	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S60-S59	Storm	pvc	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S60B-S60A	Storm	pvc	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S61A-S60	Storm	pvc	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S61-S60	Storm	pvc	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S62-S61	Storm	pvc	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S17-S11	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
S54-S52	Storm	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
F13-F12	Foul	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
F12-F13	Foul	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
F15-F14	Foul	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
F15A-F15	Foul	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
F17-F15A	Foul	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
F16-F15	Foul	pvc	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
F18-F17	Foul	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
F19-F18	Foul	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
F20-F19	Foul	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
F21-F20	Foul	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
F22-F17	Foul	concrete	No	SELECT	CCTV	SELECT	Fail	Grade 5: other obstacles, brick or masonry in invert	No action required - historical line no longer in use	May-19	SELECT
F22A-F22	Foul	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
F23-F23A	Foul	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
F33-F23	Foul	concrete	No	SELECT	CCTV	SELECT	Fail	Grade 5: Multiple defects at 2.1m	No action required - historical line no longer in use	May-19	SELECT
F23A-F22	Foul	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
F25-F22A	Foul	Epoxy	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
F26-F25	Foul	Epoxy	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
F27-F26	Foul	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
F27A-F27	Foul	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
F27B-F27A	Foul	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
F28-F25	Foul	Epoxy	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
F28B-F28A	Foul	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
F28C-F28B	Foul	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
F28D-F28C	Foul	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
F29-F28A	Foul	Epoxy	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
F30-F29	Foul	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
F31-F30	Foul	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
F32-F31	Foul	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT
F32A-F32	Foul	concrete	No	SELECT	CCTV	SELECT	Pass			May-19	SELECT

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

Groundwater/Soil monitoring template	Lic No:	P0643-03	Year	2016

			Comments	
1	Are you required to carry out groundwater monitoring as part of your licence requirements?	yes	GW monitoring is carried out at 4 no. locations (MW1, MW2, MW3 and MW4)	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?	yes	Soil monitoring required every 10 years. Plan to complete in 2017.	
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		Exceedance of the EPA (2003) IGV for Chloride (30 mg/L) in seven of the 8 samples; however, all samples were below the GTV (187.5 mg/L). This is consistent with previous sampling rounds. No exceedances in Sulphate recorded in 2016 sampling (c.f. one exceedance MW-1 during the November 2015 sampling round). Exceedance of Aluminium GTV (0.15mg/l) during both the April and December monitoring rounds at MW-1 (14.4 and 2.7mg/l) & MW-4 (3.4 and 0.7mg/l) is consistent with the 2015 findings and is likely due to poor background groundwater quality. Exceedance of Potassium IGV (5mg/l) during the December monitoring round at MW-1 (5.5mg/l) is consistent with sampling from November 2015 and is likely due to poor background groundwater quality. Exceedances in the IGVs for Calcium (200mg/L) and Nickel (0.02 mg/L) recorded at MW-1 and MW-4 in the December sampling round only. Concentrations were not significantly elevated and may represent normal variation likely due to poor background groundwater quality. Exceedances in the IGV for Manganese (0.05) recorded at MW1, MW-2 and MW-4 in April and MW-1 and MW-4 in December. This is consistent with the 2014 sampling results and is likely due to poor background groundwater quality. All samples had reported Iron concentrations which exceeded the IGV (0.2 mg/L) for that parameter. This is consistent with previous sampling rounds (including 2015 and 2014) and is likely due to poor background groundwater quality.
5	Is the contamination related to operations at the facility (either current and/or historic)	no		
6	Have actions been taken to address contamination issues? If yes please summarise remediation strategies proposed/undertaken for the site	n/a 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 assessment 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: Up gradient Groundwater monitoring results

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

.+ where average indicates arithmetic mean

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

Groundwater/Soil monitoring template Lic No: P0643-03 Year 2016

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
20 April 2-016 & 15 Dec 20176	MW-1	Chloride	Titration	Biannual	31.5	31.25	mg/l	187.5	30	no
20 April 2-016 & 15 Dec 20176	MW-1	Sulphate	Turbidimetry	Biannual	24.5	14.6	mg/l	187.5	200	no
20 April 2-016 & 15 Dec 20176	MW-1	Nitrate NO3	Ion Selective Electrode	Biannual	1.46	1.23	mg/l	37.5	25	no
20 April 2-016 & 15 Dec 20176	MW-1	COD	Microdigestion & Spectrophotometry	Biannual	51.5	34.75	mg/l	-	n/a	no
20 April 2-016 & 15 Dec 20176	MW-1	Conductivity	pH electrode/meter	Biannual	727	714.5	uS/cm	800-1875	1000	no
20 April 2-016 & 15 Dec 20176	MW-1	pH	pH electrode/meter	Biannual	7.48	7.38	pH Units	-	6.5-9.5	no
20 April 2-016 & 15 Dec 20176	MW-1	Nitrite NO2	Ion Selective Electrode	Biannual	<0.08	<0.08	mg/l	0.375	0.1	no
20 April 2-016 & 15 Dec 20176	MW-1	Ortho-Phosphate	Standard Method	Biannual	<0.6	n/a	mg/l	-	0.15	no
20 April 2-016 & 15 Dec 20176	MW-1	Alkalinity	Titration	Biannual	381	307	mg/l	-	no abnormal change	no
20 April 2-016 & 15 Dec 20176	MW-1	Aluminium	Atomic Absorption/ICP	Biannual	4.4	3.55	mg/l	0.15	0.2	no
20 April 2-016 & 15 Dec 20176	MW-1	Antimony	Atomic Absorption/ICP	Biannual	<1.2	<1.2	ug/l	-	-	no
20 April 2-016 & 15 Dec 20176	MW-1	Arsenic	Atomic Absorption/ICP	Biannual	6.3	5.7	ug/l	7.5	10	no
20 April 2-016 & 15 Dec 20176	MW-1	Cadmium	Atomic Absorption/ICP	Biannual	0.0009	0.0009	mg/l	0.00375	0.005	no
20 April 2-016 & 15 Dec 20176	MW-1	Calcium	Atomic Absorption/ICP	Biannual	258	227.5	mg/l	-	200	no

Groundwater/Soil monitoring template					Lic No:	P0643-03		Year	2016	
20 April 2-016 & 15 Dec 20176	MW-1	Chromium	Atomic Absorption/ICP	Biannual	0.007	0.006	mg/l	0.0375	0.03	no
20 April 2-016 & 15 Dec 20176	MW-1	Cobalt	Atomic Absorption/ICP	Biannual	0.008	0.0065	mg/l	-	-	no
20 April 2-016 & 15 Dec 20176	MW-1	Copper	Atomic Absorption/ICP	Biannual	0.026	0.024	mg/l	1.5	0.03	no
20 April 2-016 & 15 Dec 20176	MW-1	Iron	Atomic Absorption/ICP	Biannual	6.09	4.79	mg/l	-	0.2	no
20 April 2-016 & 15 Dec 20176	MW-1	Lead	Atomic Absorption/ICP	Biannual	0.016	0.015	mg/l	0.0075	0.01	no
20 April 2-016 & 15 Dec 20176	MW-1	Magnesium	Atomic Absorption/ICP	Biannual	31	26.95	mg/l	-	50	no
20 April 2-016 & 15 Dec 20176	MW-1	Manganese	Atomic Absorption/ICP	Biannual	2.42	2.165	mg/l	-	0.05	no
20 April 2-016 & 15 Dec 20176	MW-1	Mercury	Atomic Absorption/ICP	Biannual	0.25	0.23	ug/l	0.75	1	no
20 April 2-016 & 15 Dec 20176	MW-1	Nickel	Atomic Absorption/ICP	Biannual	0.31	0.164	mg/l	0.015	0.02	no
20 April 2-016 & 15 Dec 20176	MW-1	Potassium	Atomic Absorption/ICP	Biannual	5.5	5.035	mg/l	-	5	no
20 April 2-016 & 15 Dec 20176	MW-1	Selenium	Atomic Absorption/ICP	Biannual	1.45	1.125	ug/l	-	-	no
20 April 2-016 & 15 Dec 20176	MW-1	Silver	Atomic Absorption/ICP	Biannual	<0.0007	<0.0007	mg/l	-	-	no
20 April 2-016 & 15 Dec 20176	MW-1	Sodium	Atomic Absorption/ICP	Biannual	16.3	14.2	mg/l	150	150	no
20 April 2-016 & 15 Dec 20176	MW-1	Tin	Atomic Absorption/ICP	Biannual	<0.007	<0.007	mg/l	-	-	no
20 April 2-016 & 15 Dec 20176	MW-1	Zinc	Atomic Absorption/ICP	Biannual	0.05	0.045	mg/l	0.075	0.1	no

Groundwater/Soil monitoring template				Lic No: P0643-03				Year 2016		
20 April 2016 & 15 Dec 20176	MW-1	VOCs	Standard Method	Every 5 years	None detected	None detected	mg/l	n/a	n/a	no
20 April 2016 & 15 Dec 20176	MW-1	sVOCs	Standard Method	Every 5 years	None detected	None detected	ug/l	n/a	n/a	no
20 April 2016 & 15 Dec 20176	MW-2	Chloride	Titration	Biannual	33	30.5	mg/l	187.5	30	no
20 April 2016 & 15 Dec 20176	MW-2	Sulphate	Turbidimetry	Biannual	80	71.1	mg/l	187.5	200	no
20 April 2016 & 15 Dec 20176	MW-2	Nitrate NO3	Ion Selective Electrode	Biannual	2.2	1.91	mg/l	37.5	25	no
20 April 2016 & 15 Dec 20176	MW-2	COD	Microdigestion & Spectrophotometry	Biannual	19.5	14.25	mg/l	-	n/a	no
20 April 2016 & 15 Dec 20176	MW-2	Conductivity	pH electrode/meter	Biannual	570	555.5	uS/cm	800-1875	1000	no
20 April 2016 & 15 Dec 20176	MW-2	pH	pH electrode/meter	Biannual	7.51	7.49	pH Units	-	6.5-9.5	no
20 April 2016 & 15 Dec 20176	MW-2	Nitrite NO2	Ion Selective Electrode	Biannual	<0.08	<0.08	mg/l	0.375	0.1	no
20 April 2016 & 15 Dec 20176	MW-2	Ortho-Phosphate	Standard Method	Biannual	<0.6	n/a	mg/l	-	0.15	no
20 April 2016 & 15 Dec 20176	MW-2	Alkalinity	Titration	Biannual	212	211.5	ug/l	-	no abnormal change	no
20 April 2016 & 15 Dec 20176	MW-2	Aluminium	Atomic Absorption/ICP	Biannual	0.3	0.2	mg/l	0.15	0.2	no
20 April 2016 & 15 Dec 20176	MW-2	Antimony	Atomic Absorption/ICP	Biannual	<1.2	<1.2	ug/l	-	-	no
20 April 2016 & 15 Dec 20176	MW-2	Arsenic	Atomic Absorption/ICP	Biannual	1.3	1.15	ug/l	7.5	10	no
20 April 2016 & 15 Dec 20176	MW-2	Cadmium	Atomic Absorption/ICP	Biannual	<0.0006	<0.0006	mg/l	0.00375	0.005	no
20 April 2016 & 15 Dec 20176	MW-2	Calcium	Atomic Absorption/ICP	Biannual	97.9	95	mg/l	-	200	no
20 April 2016 & 15 Dec 20176	MW-2	Chromium	Atomic Absorption/ICP	Biannual	<0.002	<0.002	mg/l	0.0375	0.03	no
20 April 2016 & 15 Dec 20176	MW-2	Cobalt	Atomic Absorption/ICP	Biannual	<0.002	<0.002	mg/l	-	-	no

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20 April 2-016 & 15 Dec 20176	MW-2	Copper	Atomic Absorption/ICP	Biannual	<0.009	<0.009	mg/l	1.5	0.03	no	
20 April 2-016 & 15 Dec 20176	MW-2	Iron	Atomic Absorption/ICP	Biannual	0.75	0.57	mg/l	-	0.2	no	
20 April 2-016 & 15 Dec 20176	MW-2	Lead	Atomic Absorption/ICP	Biannual	<0.006	<0.006	mg/l	0.0075	0.01	no	
20 April 2-016 & 15 Dec 20176	MW-2	Magnesium	Atomic Absorption/ICP	Biannual	10.2	10	mg/l	-	50	no	
20 April 2-016 & 15 Dec 20176	MW-2	Manganese	Atomic Absorption/ICP	Biannual	0.078	0.0525	mg/l	-	0.05	no	
20 April 2-016 & 15 Dec 20176	MW-2	Mercury	Atomic Absorption/ICP	Biannual	<0.1	<0.1	ug/l	0.75	1	no	
20 April 2-016 & 15 Dec 20176	MW-2	Nickel	Atomic Absorption/ICP	Biannual	0.004	0.0035	mg/l	0.015	0.02	no	
20 April 2-016 & 15 Dec 20176	MW-2	Potassium	Atomic Absorption/ICP	Biannual	2.68	2.3	mg/l	-	5	no	
20 April 2-016 & 15 Dec 20176	MW-2	Selenium	Atomic Absorption/ICP	Biannual	<0.8	<0.8	ug/l	-	-	no	
20 April 2-016 & 15 Dec 20176	MW-2	Silver	Atomic Absorption/ICP	Biannual	<0.0007	<0.0007	mg/l	-	-	no	
20 April 2-016 & 15 Dec 20176	MW-2	Sodium	Atomic Absorption/ICP	Biannual	22.6	22.1	mg/l	150	150	no	
20 April 2-016 & 15 Dec 20176	MW-2	Tin	Atomic Absorption/ICP	Biannual	<0.007	<0.007	mg/l	-	-	no	
20 April 2-016 & 15 Dec 20176	MW-2	Zinc	Atomic Absorption/ICP	Biannual	<0.018	<0.018	mg/l	0.075	0.1	no	
20 April 2-016 & 15 Dec 20176	MW-2	Chloroform	Standard Method	Every 5 years	7.7	N/A	ug/l	-	12	no	One occurrence only.
20 April 2-016 & 15 Dec 20176	MW-2	VOCs	Standard Method	Every 5 years	No other VOCs detected	No other VOCs detected	ug/l	n/a	n/a	no	
20 April 2-016 & 15 Dec 20176	MW-2	sVOCs	Standard Method	Every 5 years	None detected	None detected	mg/l	n/a	n/a	no	

Groundwater/Soil monitoring template					Lic No:	P0643-03		Year	2016	
20 April 2-016 & 15 Dec 20176	MW-3	Chloride	Titration	Biannual	32.5	31.75	mg/l	187.5	30	no
20 April 2-016 & 15 Dec 20176	MW-3	Sulphate	Turbidimetry	Biannual	**32.2**	29.6	mg/l	187.5	200	no
20 April 2-016 & 15 Dec 20176	MW-3	Nitrate NO3	Ion Selective Electrode	Biannual	3.39	2.8	mg/l	37.5	25	no
20 April 2-016 & 15 Dec 20176	MW-3	COD	Microdigestion & Spectrophotometry	Biannual	8	6.5	mg/l	-	n/a	no
20 April 2-016 & 15 Dec 20176	MW-3	Conductivity	pH electrode/meter	Biannual	771	749	uS/cm	800-1875	1000	no
20 April 2-016 & 15 Dec 20176	MW-3	pH	pH electrode/meter	Biannual	7.31	7.25	pH Units	-	6.5-9.5	no
20 April 2-016 & 15 Dec 20176	MW-3	Nitrite NO2	Ion Selective Electrode	Biannual	<0.08	<0.08	mg/l	0.375	0.1	no
20 April 2-016 & 15 Dec 20176	MW-3	Ortho-Phosphate	Standard Method	Biannual	<0.6	n/a	mg/l	-	0.15	no
20 April 2-016 & 15 Dec 20176	MW-3	Alkalinity	Titration	Biannual	358	311	mg/l	-	no abnormal change	no
20 April 2-016 & 15 Dec 20176	MW-3	Aluminium	Atomic Absorption/ICP	Biannual	0.2	0.15	mg/l	0.15	0.2	no
20 April 2-016 & 15 Dec 20176	MW-3	Antimony	Atomic Absorption/ICP	Biannual	<1.2	<1.2	ug/l	-	-	no
20 April 2-016 & 15 Dec 20176	MW-3	Arsenic	Atomic Absorption/ICP	Biannual	1.3	1.15	ug/l	7.5	10	no
20 April 2-016 & 15 Dec 20176	MW-3	Cadmium	Atomic Absorption/ICP	Biannual	<0.0006	<0.0006	mg/l	0.00375	0.005	no
20 April 2-016 & 15 Dec 20176	MW-3	Calcium	Atomic Absorption/ICP	Biannual	158	145	mg/l	-	200	no
20 April 2-016 & 15 Dec 20176	MW-3	Chromium	Atomic Absorption/ICP	Biannual	<0.002	<0.002	mg/l	0.0375	0.03	no
20 April 2-016 & 15 Dec 20176	MW-3	Cobalt	Atomic Absorption/ICP	Biannual	<0.002	<0.002	mg/l	-	-	no
20 April 2-016 & 15 Dec 20176	MW-3	Copper	Atomic Absorption/ICP	Biannual	0.025	0.017	mg/l	1.5	0.03	no
20 April 2-016 & 15 Dec 20176	MW-3	Iron	Atomic Absorption/ICP	Biannual	2.44	1.455	mg/l	-	0.2	no

Groundwater/Soil monitoring template					Lic No:	P0643-03		Year	2016	
20 April 2016 & 15 Dec 20176	MW-3	Lead	Atomic Absorption/ICP	Biannual	<0.006	<0.006	mg/l	0.0075	0.01	no
20 April 2016 & 15 Dec 20176	MW-3	Magnesium	Atomic Absorption/ICP	Biannual	17.4	16.45	mg/l	-	50	no
20 April 2016 & 15 Dec 20176	MW-3	Manganese	Atomic Absorption/ICP	Biannual	0.034	0.024	mg/l	-	0.05	no
20 April 2016 & 15 Dec 20176	MW-3	Mercury	Atomic Absorption/ICP	Biannual	<0.1	0.1	ug/l	0.75	1	no
20 April 2016 & 15 Dec 20176	MW-3	Nickel	Atomic Absorption/ICP	Biannual	0.007	0.0055	mg/l	0.015	0.02	no
20 April 2016 & 15 Dec 20176	MW-3	Potassium	Atomic Absorption/ICP	Biannual	3.91	2.875	mg/l	-	5	no
20 April 2016 & 15 Dec 20176	MW-3	Selenium	Atomic Absorption/ICP	Biannual	1.33	1.065	ug/l	-	-	no
20 April 2016 & 15 Dec 20176	MW-3	Silver	Atomic Absorption/ICP	Biannual	0.001	0.0009	mg/l	-	-	no
20 April 2016 & 15 Dec 20176	MW-3	Sodium	Atomic Absorption/ICP	Biannual	16.4	16.15	mg/l	150	150	no
20 April 2016 & 15 Dec 20176	MW-3	Tin	Atomic Absorption/ICP	Biannual	0.009	0.008	mg/l	-	-	no
20 April 2016 & 15 Dec 20176	MW-3	Zinc	Atomic Absorption/ICP	Biannual	<0.018	<0.018	mg/l	0.075	0.1	no
20 April 2016 & 15 Dec 20176	MW-3	VOCs	Standard Method	Every 5 years	None detected	None detected	mg/l	n/a	n/a	no
20 April 2016 & 15 Dec 20176	MW-3	sVOCs	Standard Method	Every 5 years	None detected	None detected	mg/l	n/a	n/a	no
20 April 2016 & 15 Dec 20176	MW-4	Chloride	Titration	Biannual	47.5	44.5	mg/l	187.5	30	no
20 April 2016 & 15 Dec 20176	MW-4	Sulphate	Turbidimetry	Biannual	57.6	53.85	mg/l	187.5	200	no
20 April 2016 & 15 Dec 20176	MW-4	Nitrate NO3	Ion Selective Electrode	Biannual	<1	<1	mg/l	37.5	25	no
20 April 2016 & 15 Dec 20176	MW-4	COD	Microdigestion & Spectrophotometry	Biannual	16	11	mg/l	-	n/a	no
20 April 2016 & 15 Dec 20176	MW-4	Conductivity	pH electrode/meter	Biannual	787	762.5	uS/cm	800-1875	1000	no

Groundwater/Soil monitoring template					Lic No:	P0643-03		Year	2016	
20 April 2-016 & 15 Dec 20176	MW-4	pH	pH electrode/meter	Biannual	7.5	7.41	pH Units	-	6.5-9.5	no
20 April 2-016 & 15 Dec 20176	MW-4	Nitrite NO2	Ion Selective Electrode	Biannual	<0.08	<0.08	mg/l	0.375	0.1	no
20 April 2-016 & 15 Dec 20176	MW-4	Ortho-Phosphate	Standard Method	Biannual	<0.6	<0.6	mg/l	-	0.15	no
20 April 2-016 & 15 Dec 20176	MW-4	Alkalinity	Titration	Biannual	344	n/a	mg/l	-	no abnormal change	no
20 April 2-016 & 15 Dec 20176	MW-4	Aluminium	Atomic Absorption/ICP	Biannual	3.4	2.05	mg/l	0.15	0.2	no
20 April 2-016 & 15 Dec 20176	MW-4	Antimony	Atomic Absorption/ICP	Biannual	<1.2	<1.2	ug/l	-	-	no
20 April 2-016 & 15 Dec 20176	MW-4	Arsenic	Atomic Absorption/ICP	Biannual	5.5	3.35	ug/l	7.5	10	no
20 April 2-016 & 15 Dec 20176	MW-4	Cadmium	Atomic Absorption/ICP	Biannual	<0.0006	<0.0006	mg/l	0.00375	0.005	no
20 April 2-016 & 15 Dec 20176	MW-4	Calcium	Atomic Absorption/ICP	Biannual	291	217.5	mg/l	-	200	no
20 April 2-016 & 15 Dec 20176	MW-4	Chromium	Atomic Absorption/ICP	Biannual	0.005	0.0035	mg/l	0.0375	0.03	no
20 April 2-016 & 15 Dec 20176	MW-4	Cobalt	Atomic Absorption/ICP	Biannual	0.006	0.004	mg/l	-	-	no
20 April 2-016 & 15 Dec 20176	MW-4	Copper	Atomic Absorption/ICP	Biannual	0.03	0.0195	mg/l	1.5	0.03	no
20 April 2-016 & 15 Dec 20176	MW-4	Iron	Atomic Absorption/ICP	Biannual	5.33	3.195	mg/l	-	0.2	no
20 April 2-016 & 15 Dec 20176	MW-4	Lead	Atomic Absorption/ICP	Biannual	0.021	0.0135	mg/l	0.0075	0.01	no
20 April 2-016 & 15 Dec 20176	MW-4	Magnesium	Atomic Absorption/ICP	Biannual	25.9	25.35	mg/l	-	50	no
20 April 2-016 & 15 Dec 20176	MW-4	Manganese	Atomic Absorption/ICP	Biannual	1.46	1.113	mg/l	-	0.05	no
20 April 2-016 & 15 Dec 20176	MW-4	Mercury	Atomic Absorption/ICP	Biannual	<0.1	<0.1	ug/l	0.75	1	no

Groundwater/Soil monitoring template					Lic No:	P0643-03		Year	2016	
20 April 2-016 & 15 Dec 20176	MW-4	Nickel	Atomic Absorption/ICP	Biannual	0.031	0.0175	mg/l	0.015	0.02	no
20 April 2-016 & 15 Dec 20176	MW-4	Potassium	Atomic Absorption/ICP	Biannual	5.1	3.6	mg/l	-	5	no
20 April 2-016 & 15 Dec 20176	MW-4	Selenium	Atomic Absorption/ICP	Biannual	<0.8	<0.8	ug/l	-	-	no
20 April 2-016 & 15 Dec 20176	MW-4	Silver	Atomic Absorption/ICP	Biannual	<0.0007	<0.0007	mg/l	-	-	no
20 April 2-016 & 15 Dec 20176	MW-4	Sodium	Atomic Absorption/ICP	Biannual	23.5	22.65	mg/l	150	150	no
20 April 2-016 & 15 Dec 20176	MW-4	Tin	Atomic Absorption/ICP	Biannual	<0.007	<0.007	mg/l	-	-	no
20 April 2-016 & 15 Dec 20176	MW-4	Zinc	Atomic Absorption/ICP	Biannual	0.04	0.029	mg/l	0.075	0.1	no
20 April 2-016 & 15 Dec 20176	MW-4	VOCs	Standard Method	Every 5 years	None detected	None detected	mg/l	n/a	n/a	no
20 April 2-016 & 15 Dec 20176	MW-4	sVOCs	Standard Method	Every 5 years	None detected	None detected	mg/l	n/a	n/a	no

*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)

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

Table 3: Soil results

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

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

	Environmental Liabilities template	Lic No:	P0643-03	Year	2016
	Click here to access EPA guidance on Environmental Liabilities and Financial provision				
			Commentary		
1	ELRA initial agreement status	Submitted and agreed by EPA	Financial Services agreement dated 27-03-2015 (Based on 2010 ELRA and CRAMP)		
2	ELRA review status	Review required and completed	Review completed 02/09/2015 and submitted as part of licence review		
3	Amount of Financial Provision cover required as determined by the latest ELRA	1,866,313 (ELRA); 7,466,250 (CRAMP)	2015 ELRA and CRAMP		
4	Financial Provision for ELRA status	Submitted and agreed by EPA	Financial Services agreement dated 27-03-2015 (Based on 2010 ELRA and CRAMP)		
5	Financial Provision for ELRA - amount of cover	9,162,000	Financial Services agreement dated 27-03-2015 (Based on 2010 ELRA and CRAMP)		
6	Financial Provision for ELRA - type	TBC			
7	Financial provision for ELRA expiry date	N/A			
8	Closure plan initial agreement status	Closure plan submitted and agreed by EPA	Financial Services agreement dated 27-03-2015 (Based on 2010 ELRA and CRAMP)		
9	Closure plan review status	Review required and completed	Review completed 02/09/2015 and submitted as part of licence review		
10	Financial Provision for Closure status	Submitted and agreed by EPA	Financial Services agreement dated 27-03-2015 (Based on 2010 ELRA and CRAMP)		
11	Financial Provision for Closure - amount of cover	9,162,000	Financial Services agreement dated 27-03-2015 (Based on 2010 ELRA and CRAMP)		
12	Financial Provision for Closure - type	TBC			
13	Financial provision for Closure expiry date	N/A			

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Highlighted cells contain dropdown menu click to view

			Additional Information
1	Do you maintain an Environmental Management System (EMS) for the site. If yes, please detail in additional information	Yes	Abbvie has been ISO14001 accredited since 2012
2	Does the EMS reference the most significant environmental aspects and associated impacts on-site	Yes	The purpose of the EMP is to identify the Environmental objectives and targets and action plans which have been created by the Health, Safety and Environmental Manager. The Register of Aspects references the most significant environmental aspects and is based on the risk assessment process. From this assessment the environmental objectives and targets are prioritised.
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	The Environmental Policy is available in the reception area. The HS&E manager, in conjunction with the relevant personnel, review the EMP on an annual basis with a view to demonstrating a commitment to continual improvement of environmental performance within the company. This is reported to the relevant personnel within AbbVie. Hard copies are available for viewing by the EPA on site.

Environmental Management Programme (EMP) report

Objective Category	Target	Status (% completed)	How target was progressed	Responsibility	Intermediate outcomes
Additional improvements	1.1 Maintain environmental management documentation (Condition 2.2.2.9 of IEL)	100	The documentation system is reviewed and updated annually.	EHS	Improved Environmental Management Practices
Additional improvements	1.2 Establish Corrective Action Procedure (Condition 2.2.2.10) - This procedure sets out when corrective action is required and what action can be taken to prevent recurrence in the future.	100	All EHS procedures reviewed in 2016. Environmental events investigated & CAPA's assigned where required in 2016	EHS	Improved Environmental Management Practices

Programme/Continuous				Lic No:	P0643-03	Year	2016
Additional improvements	1.3 Internal Audits (Condition 2.2.2.11) - The licensee shall maintain and implement a programme for independent internal audits of the EMS.	100	Internal Audit completed. Report issued in 7th Sept. 2016	EHS	Improved Environmental Management Practices		
Additional improvements	1.4 Awareness, Training and Competence (Condition 2.2.2.12)	100	All employees complete environmental training as appropriate for their role on site. This is managed using ISOtrain software system. All records are kept.	EHS	Improved Environmental Management Practices		
Additional improvements	1.5 Communications Programme (Condition 2.2.2.13)	100	Procedures are in place for receiving and responding to all public communications. As per condition 3.3 of the IEL an installation notice board is in place at the entrance to the site clearly showing all relevant information regarding operation times and contact details.	HR Manager	Improved Environmental Management Practices		
Additional improvements	1.6 Maintenance Programme (Condition 2.2.2.14)	100	All relevant plant and equipment is captured on relevant PMs and Calibration schedules. AbbVie have a Maintenance Excellence Programme in place which uses the computer based system Maximo.	Site Services	Improved Environmental Management Practices		
Additional improvements	1.7 Efficient Process Control (Condition 2.2.2.15)	100	14001 Surveillance Audit planned for 2016 (Q2) & 6 monthly surveillance audit in Q4 2016 (external audit). Q2 Audit Completed on 25th May with 0 NC's and 1 OFI. Q4 Audit completed on 7th & 8th Dec with 0 NC's and 3 OFI's. OFI's were assigned as per the Audit ID Programme on enviroMANAGER.	EHS	Improved Environmental Management Practices		
Reduction of emissions to Wastewater	2.1 Increase environmental control of Emissions to Sewer - Improve environmental control of Emissions to Sewer by the introduction of a slam shut valve post SE1. This shall enable the site to respond & maintain compliance with the licence limits at SE1.	100	Installation was completed in 2016 of a slam shut valve post SE1 to increase control of emissions to sewer. Training and procedures are in place for response to Slam Shut Activations.	EHS	Reduced emissions		

Programme/Continuous				Lic No:	P0643-03	Year	2016
Reduction of emissions to Wastewater	2.2 Assess the impact of any new active ingredients on the existing environment and the municipal WWTP in Sligo using toxicity testing and respirometry testing carried out by a competent laboratory. The biodegradability of all components of the wastewater including pharmaceutical actives and their interaction with other components of the Sanitary Authority sewer shall be assessed.	100	Respirometry analysis was completed for new waste water streams in 2016. Any streams that were identified as suitable for discharge were firstly submitted to Irish waste and then the Agency for review & approval to discharge to SE1. Annual Respirometry testing was also completed for SE-1 for 2016	EHS	Improved Environmental Management Practices		
Reduction of emissions to Wastewater	2.3 Develop test methods for the measurement of pharmaceutical actives in water. Ensure that all new products coming to the facility have suitable test methods.	Ongoing	Methods are to be developed for new products	Global EHS Manufacturing Manager	Improved Environmental Management Practices		
Reduction of emissions to Wastewater	2.4 Maintain suitable trigger levels for TOC in storm water discharges, such that storm waters exceeding these levels will be diverted for retention and suitable disposal. Maintain the response programme for occurrences when the TOC warning and action levels of the discharge to surface water are reached.	100	Storm water trigger limits reviewed for 2016. Control improvement implemented in 2016	EHS	Reduced emissions		
Reduction of emissions to Wastewater	2.5 Investigate methods for linking the automatic outlet valve on the retention pond to the TOC analyser in order to close the valve on a high reading.	100	Completed in 2016. On activation of a warning trigger value for TOC or pH the outlet valve at SW1 closes.	EHS	Increased compliance with licence conditions		
Materials Handling/Storage/Bunding	3.1 The loading and unloading of materials shall be carried out in designated area protected against spillages and leachate run-off. (Condition 8.5 of the Industrial Emissions Licence). Ensure all suppliers delivering hazardous materials are supervised by an appropriate person when making a delivery to the site.	100	Completed: All delivery persons are supervised by the warehouse technicians	Supply Chain Manager	Improved Environmental Management Practices		

Programme/Continuous				Lic No:	P0643-03	Year	2016
Materials Handling/Storage/Bunding	3.2 A full record, which shall be open to inspection by authorized persons of the Agency at all times, shall be kept by the licensee on matters relating to the waste management operations and practices at this site. (Condition 11.9 of the Industrial Emissions Licence)	100	Completed: DGSA maintains hazardous waste documentation	DGSA	Improved Environmental Management Practices		
Energy Efficiency/Utility conservation	4.1 The company shall maintain certification in the energy management standard, ISO 50001 through internal audits and external surveillance audits	100	Completed: ISO 50001 internal & external surveillance audits completed in 2015	EHS&E Manager	Improved Environmental Management Practices		
Energy Efficiency/Utility conservation	4.2 Achieve the 2020 Long Range Plan (LRP) Target for Reduction of Water Usage	Ongoing	Target is 10% reduction based on 2015 baseline (complete tactics identified for 2016). Ongoing and added to 2017 Goals. Work commenced in 2016 on a water conservation and harvesting project which is planned for completion in 2017.	EHS&E Manager	Improved Environmental Management Practices		
Waste reduction/Raw material usage efficiency	4.3 Review raw material usage at AbbVie	n/a	Carry out a survey to determine efficiency of raw material usage at AbbVie for new product introductions. Solvent is monitored per campaign currently. This will be reviewed annually. As of 2016 the solvent usage cannot be reduced for commercial processes.	Technical Operations Manager	Improved Environmental Management Practices		
Energy Efficiency/Utility conservation	4.4 Identify and Implement a renewable energy project	Ongoing	On Going: Added to goal for 2017. A wind turbine survey was completed in 2016. However, it was identified that any proposed Wind Turbine would be located in the flight path of Sligo Hospital and therefore would likely be opposed.	Energy Team	Improved Environmental Management Practices		
Energy Efficiency/Utility conservation	4.5 Implement significant LED Lighting Project	Ongoing	On Going: Project kicked off in the main starting in the main Admin building as a trial. Project will be completed in 2017	Energy Team	Improved Environmental Management Practices		

Programme/Continuous				Lic No:	P0643-03	Year	2016
Reduction of emissions to Air	5.1 Maintain a preventative maintenance programme for the Thermal Oxidiser, Cryogenic Condenser, Scrubber and the continuous emission monitors.	Ongoing	On-Going: Updated and Maintained with the introduction of VOC-804 Thermal Oxidiser	EHS&E Manager	Increased compliance with licence conditions		
Reduction of emissions to Air	5.2 Support the implementation of a new Thermal Oxidiser for chlorinated processes as per the EPA approved Test programme	Ongoing	On-going: Commissioning phase for chlorinated processes in 2016. A second commissioning phase was requested by the EPA for Q1 2017. Currently ongoing.	EHS&E Manager	Reduced emissions		
Reduction of emissions to Air	5.3 Ensure compliance with new Industrial Emissions licence issued on the 04-Feb-2016.	100	Completed a gap assessment against the Industrial Emissions licence issued on the 04-Feb-2016. Ensured all gaps are actioned within one month as stated in the licence	EHS&E Manager	Increased compliance with licence conditions		
Reduction of emissions to Air	5.4 Submit RFAs for new products introductions to the EPA in advance of process commencing	100	Submitted an RFA for new products introductions to the EPA in advance of process commencing.	EHS Team leader	Improved Environmental Management Practices		
Reduction of emissions to Air	5.5 Implement Air Emission Reduction Project: Reduce SOx Emissions	100	Fuel Conversion Project completed in 2016. The main boiler in the Utilities building was converted from Kerosene to LPG supply. LPG produces lower levels of SOx. Trending to take place in 2017 to review level of reduction.	EHS Team Leader	Reduced emissions		
Reduction of emissions to Air	5.6 Maintain a programme of leak testing of refrigeration and air conditioning systems containing fluorinated refrigerant gases	On Going	Maintained annually	EHS Manager	Improved Environmental Management Practices		
Groundwater protection	6.1 Maintain the Bund Management Programme and update if required.	100	Completed: All relevant maintenance and cleaning check sheets completed for each area and records retained with EHS for inspection by the Agency if requested. PM in place for Bund Integrity Testing, which is due in 2018	EHS&E Manager	Improved Environmental Management Practices		
Groundwater protection	6.2 Ensure Ground Water Monitoring is completed biannually as per Industrial Emissions Licence Conditions.	100	Completed	EHS	Increased compliance with licence conditions		
Groundwater protection	6.3 Ensure Soil Monitoring is completed as per Condition 6.20 of the Industrial Emissions Licence.	Ongoing	A PM is created for this monitoring to be completed, which is planned for 2017.	EHS	Increased compliance with licence conditions		

Programme/Continuous				Lic No:	P0643-03	Year	2016
Noise reduction	7.1 Conduct noise survey as per Industrial Emissions Licence Conditions (IEL Condition 6.17: The licensee shall carry out a noise survey of the site operations as required by the Agency)	100	Not completed in 2016. As per conditions of newly granted IEL, AbbVie are not required to complete annual noise monitoring. A PM has been created to complete a noise survey every two year. Next survey is due to be completed in 2017.	EHS&E Manager	Increased compliance with licence conditions		
Waste reduction/Raw material usage efficiency	8.1 Maintain procedures for waste handling storage and disposal	100	In order to ensure that waste is handled stored and disposed of in an appropriate manner it is necessary to have written procedures to control the handling storage and disposal of waste. Employees are trained on these procedures as part of the on-going training programme.	EHS	Improved Environmental Management Practices		
Waste reduction/Raw material usage efficiency	8.2 Introduce new lab waste procedure for improving the segregation and disposal of waste.	100	Completed: Procedure completed and rolled out with training in Q2 2016	EHS	Improved Environmental Management Practices		
Waste reduction/Raw material usage efficiency	8.3 Ensure all waste vendors used by AbbVie Waste Management Company have been audited in the last 5 years and are approved as per AbbVie waste vendor global standard	100	Completed reaudit of the waste vendor SRCL limited in November 2016 as per Global AbbVie Standards.	EHS	Improved Environmental Management Practices		
Waste reduction/Raw material usage efficiency	8.4 Maintain zero waste going to landfill	Ongoing	Ongoing and agreed with Total Waste Management Company	EHS	Improved Environmental Management Practices		
Waste reduction/Raw material usage efficiency	8.5 Complete waste disposal reduction opportunities assessment	100	Completed in 2016 Monthly meetings on site with Total Waste Management company Indaver completes. The need to improve segregation of waste reviewed. Improvements made such as Solvent IBCs from Thermal Oxidiser returned to supplier for reuse.	EHS	Improved Environmental Management Practices		

Programme/Continuous				Lic No:	P0643-03	Year	2016
Additional improvements	9.1 Adoption of Cleaner Technology in All New developments	n/a - Environmental impact of proposed projects is assessed at design stage	In order to ensure that the potential environmental impact of any proposed developments is considered in the future AbbVie intend to introduce a procedure where the environmental impact of the development is considered at the design stage, thereby facilitating the incorporation of clean technology in all developments as far as is practicably possible.	Global EHS&E Manager	Improved Environmental Management Practices		
Additional improvements	9.2 Substitution of harmful substances - The company shall examine, at least annually, the possibility of substituting 2-Methoxyethanol, the List I substances and the List II substances used onsite with less harmful substances.	Ongoing	It has been determined that 2-Methoxyethanol cannot be substituted in the Terazosin process. The volumes are reducing for Terazosin therefore the volume used will be reduced. A project is ongoing to reduce DCM usage onsite by substituting it with Ethyl Acetate in the Trandolapril process.	Technical Operations Manager	Improved Environmental Management Practices		
Additional improvements	9.6 Substitution of Risk Phrase VOCs	Ongoing	Any substance or preparation, which, because of its content of VOCs classified as carcinogens, mutagens or toxic to reproduction under Directive 67/548/EEC, is assigned or needs to carry the risk phrases R45, R46, R49, R60, R61 shall be replaced, as far as possible within the shortest possible timeframe and, taking into account article 20(l)(b) of S.I. No. 543 of 2002, by less harmful substances or preparations. Guidance on replacement given in Council Directive 1999/13/EC shall be observed. Measures for replacement of such substances or preparations shall be incorporated into the Schedule of Environmental Objectives and Targets under Condition 2.2.2.2.	Technical Operations Manager & Program Manager	Improved Environmental Management Practices		

Noise monitoring summary report	Lic No:	P0643-03	Year	2016

1	Was noise monitoring a licence requirement for the AER period? If yes please fill in table N1 noise summary below	No
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	No
4	When was the noise reduction plan last updated?	n/a
5	Have there been changes relevant to site noise emissions (e.g. plant or operational changes) since the last noise survey?	No

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)?

*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? n/a

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

Resource Usage/Energy efficiency summary

Lic No: P0643-03 Year 2016

				Additional information
1	When did the site carry out the most recent energy efficiency audit? Please list the recommendations in table 3 below			Audits are carried out annually - AbbVie achieved ISO50001:2011 in 2013.
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	SEAI - Large Industry Energy Network (LIEN)	Yes	Member of SEAI - LIEN Group and part of the IBEC Energy Efficiency Sub-Groups
3	Where Fuel Oil is used in boilers on site is the sulphur content compliant with licence conditions? Please state percentage in additional information		Yes	Q4 2016 - change from kerosene to LPG as primary fuel source of main site utility boiler

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)	29,297	27,799	201.68%	-5.11
Total Energy Generated (MWHrs)	18,474	16,171		-12.47
Total Renewable Energy Generated (MWHrs)	0	0		
Electricity Consumption (MWHrs)	10823	11,628		7.44
Fossil Fuels Consumption:				
Heavy Fuel Oil (m3)	1053	385		-63.44
Light Fuel Oil (m3)	321,150	469,714		46.26
Natural gas (m3)				
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 Emissions	Water Consumption	
Water use	Water extracted Previous year m3/yr.	Water extracted Current year m3/yr.	Production +/- % compared to previous reporting year**	Energy Consumption +/- % vs overall site production*	Volume Discharged back to environment(m^3yr):	Volume used i.e not discharged to environment e.g. released as steam m3/yr	Unaccounted for Water:
Groundwater							
Surface water							
Public supply	91,304	94,413			19,598	74,815	
Recycled water							
Total	91,304	94,413	201.68%	-5.11	19,598	74815	

* 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: P0643-03 Year 2016

Table R3 Waste Stream Summary

	Total	Landfill	Incineration	Recycled	Other
Hazardous (Tonnes)	3639.029				
Non-Hazardous (Tonnes)	149.26				

Table R4: Energy Audit finding recommendations

Date of audit	Recommendations	Description of Measures proposed	Origin of measures	Predicted energy savings %	Implementation date	Responsibility	Completion date	Status and comments
14/04/2016	No audit findings	None	energy audit	n/a	Ongoing	Energy Team Leader	Ongoing	Ongoing
07/12/2016	Site successfully achieved recertification	Recertification audit	energy audit	n/a	Ongoing	Energy Team Leader	Ongoing	Ongoing
			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					

Complaints and Incidents summary template

Lic No: P0643-03 Year 2016

Complaints

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

Table 1 Complaints summary

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

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

Incidents

Have any incidents occurred on site in the current reporting year? Please list all incidents for current reporting year in Table 2 below		Additional information
	Yes	One incident reported during 2016

*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
18/02/2016	Breach of ELV	Licenced discharge point (type in reference here)	1. Minor	Sewer	Plant or equipment issues		Normal activities	Other (please specify)	New	Isolated incident of high pH. Irish Water and Sligo County Council notified. No impact to Sligo WWTP.	Site disciplinary action initiated	Complete	18/02/2016	Low

Total number of incidents current year	1
Total number of incidents previous year	2
% reduction/ increase	50% reduction

WASTE SUMMARY	Lic No:	P0643-03	Year	2016
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

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

Licenced annual tonnage limit for your site (total tonnes/annum)	EWC code European Waste Catalogue EWC codes	Source of waste accepted	Description of waste accepted **Please enter an accurate and detailed description - which 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 -

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

WASTE SUMMARY Lic No: P0643-03 Year 2016

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

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

.+ 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	

Guidance to completing the PRTR workbook

PRTR Returns Workbook

Version 1.1.19

REFERENCE YEAR	2016

1. FACILITY IDENTIFICATION

Parent Company Name	AbbVie Ireland NL B.V.
Facility Name	AbbVie Ireland NL B.V.
PRTR Identification Number	P0643
Licence Number	P0643-03

Classes of Activity

No.	class_name
-	Refer to PRTR class activities below

Address 1	Manorhamilton Road
Address 2	Sligo
Address 3	
Address 4	
	Sligo
Country	Ireland
Coordinates of Location	-8.45312 54.2850
River Basin District	IEWE
NACE Code	2120
Main Economic Activity	Manufacture of pharmaceutical preparations
AER Returns Contact Name	Ruaidhri Mohally
AER Returns Contact Email Address	Ruaidhri.mohally@abbvie.com
AER Returns Contact Position	Environmental Specialist
AER Returns Contact Telephone Number	071-9137755
AER Returns Contact Mobile Phone Number	
AER Returns Contact Fax Number	
Production Volume	0.0
Production Volume Units	
Number of Installations	1
Number of Operating Hours in Year	8712
Number of Employees	200
User Feedback/Comments	Air monitoring additions: Dioxins + Furans, VOCs, Halogenated VOCs and HCl monitored for new Thermal Oxidiser (A2-1c); dimethylformamide no longer monitored; NOx, SOx and CO emissions from A2-1c added for completeness. Deviations: SOx annual quantities for A1-1 & A1-2 skewed by elevated bi-annual recording in January 2016. All values compliant with ELVs. Wastewater monitoring additions: Chlorides, total heavy metals and organic solvents not included in 2015 report; included for completeness. Deviations: Increased emissions due to significant increase in volume of wastewater following >200% in production.
Web Address	

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
4(e)	Installations using a chemical or biological process for the production on an industrial scale of basic pharmaceutical products

3. SOLVENTS REGULATIONS (S.I. No. 543 of 2002)

Is it applicable?	
Have you been granted an exemption ?	
If applicable which activity class applies (as per Schedule 2 of the regulations) ?	
Is the reduction scheme compliance route being used ?	

4. WASTE IMPORTED/ACCEPTED ONTO SITE

Guidance on waste imported/accepted onto site

Do you import/accept waste onto your site for on-site treatment (either recovery or disposal activities) ?	No

This question is only applicable if you are an IPPC or Quarry site

4.1 RELEASES TO AIR Link to previous years emissions data

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

RELEASES TO AIR					Please enter all quantities in this section in KGs				
POLLUTANT		METHOD					QUANTITY		
			Method Used		A1-1 &A1-2	A2-1 (c)			
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	Emission Point 2	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
47	PCDD + PCDF (dioxins + furans)(as Teq)	M	EN 1948-1 to3:2003	Isokinetic filter & GC-HRMS	0.0	0.1116	0.1116	0.0	0.0
08	Nitrogen oxides (NOx/NO2)	M	OTH	Continuous by infrared analyser	8307.7	1680.94	9988.64	0.0	0.0
11	Sulphur oxides (SOx/SO2)	M	OTH	Continuous by infrared analyser	376.39	53.4	429.79	0.0	0.0

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

SECTION B : REMAINING PRTR POLLUTANTS

RELEASES TO AIR					Please enter all quantities in this section in KGs					
POLLUTANT		METHOD						QUANTITY		
			Method Used		A1-1 &A1-2	A2-1(c)	A2-1(b)			
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	Emission Point 2	Emission Point 3	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
40	Halogenated organic compounds (as AOX)	M	OTH	Adsorption/GC-MS	0.0	30.41	8.15	38.56	0.0	0.0
02	Carbon monoxide (CO)	M	OTH	Continuous by infrared analyser	1494.0	1.2	0.0	1495.2	0.0	0.0

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

SECTION C : REMAINING POLLUTANT EMISSIONS (As required in your Licence)

RELEASES TO AIR					Please enter all quantities in this section in KGs									
POLLUTANT		METHOD										QUANTITY		
			Method Used		A1-1 &A1-2	A2-1(c)	A2-3	A2-4	A2-5	A2-1(b)				
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	Emission Point 2	Emission Point 3	Emission Point 4	Emission Point 5	Emission Point 6	Emission Point 7	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
237	Volatile organic compounds (as TOC)	M	OTH	Adsorption/GC-MS	0.0	50.74	0.0	0.0	0.0	21.32	0.0	72.06	0.0	0.0
244	Total Particulates	M	OTH	Isokinetic/gravimetric	3569.17	0.0	0.85	4.12	14.76	0.0	0.0	3588.9	0.0	0.0
351	Total Organic Carbon (as C)	M	OTH	Continuous using flame ionisation detection	0.0	1.27	0.0	0.0	0.0	0.0	0.0	1.27	0.0	0.0
230	TA Luft organic substances class 1	M	OTH	Adsorption, absorption and GCMS	0.0	22.37	0.0	0.0	0.0	4.31	0.0	26.68	0.0	0.0
231	TA Luft organic substances class 2	M	OTH	Adsorption, absorption and GCMS	0.0	22.37	0.0	0.0	0.0	4.31	0.0	26.68	0.0	0.0
202	2-methyoxyethanol	M	OTH	Adsorption, absorption and GCMS	0.0	9.21	0.0	0.0	0.0	0.0	0.0	9.21	0.0	0.0
319	**Inorganic acids**	M	OTH	HCl by Isokinetic/Non-Isokinetic & ISE	0.0	11.02	0.0	0.0	0.0	0.0	0.0	11.02	0.0	0.0

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

Additional Data Requested from Landfill operators

For the purposes of the National Inventory on Greenhouse Gases, landfill operators are requested to provide summary data on landfill gas (Methane) flared or utilised on their facilities to accompany the figures for total methane generated. Operators should only report their Net methane (CH4) emission to the environment under T(total) KG/yr for Section A: Sector specific PRTR pollutants above. Please complete the table below:

Landfill: AbbVie Ireland NL B.V.

Please enter summary data on the quantities of methane flared and / or utilised

	T (Total) kg/Year	M/C/E	Method Used: Method Code	Method Used: Designation or Description	Facility Total Capacity m3 per hour	
Total estimated methane generation (as per site model)	0.0				N/A	
Methane flared	0.0				0.0	(Total Flaring Capacity)
Methane utilised in engine/s	0.0				0.0	(Total Utilising Capacity)
Net methane emission (as reported in Section A above)	0.0				N/A	

4.2 RELEASES TO WATERS

Link to previous years emissions data

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

Data on ambient monitoring of storm/surface water or groundwater, conducted as part of your licence requirements, should NOT be submitted under AER / PRTR Reporting as this onl

RELEASES TO WATERS					Please enter all quantities in this section in KGs				
POLLUTANT					QUANTITY				
			Method Used		SW1				
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	Emission Point 2	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0	0.0
					0.0	0.0	0.0	0.0	0.0

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

SECTION B : REMAINING PRTR POLLUTANTS

RELEASES TO WATERS					Please enter all quantities in this section in KGs			
POLLUTANT					QUANTITY			
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

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

SECTION C : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

RELEASES TO WATERS					Please enter all quantities in this section in KGs			
POLLUTANT					QUANTITY			
			Method Used		SW1			
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

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

4.3 RELEASES TO WASTEWATER OR SEWER

Link to previous years emissions data

SECTION A : PRTR POLLUTANTS

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			QUANTITY			
			Method Used		SE-1			
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
12	Total nitrogen	C	OTH	Calculation	59.19	59.19	0.0	0.0
06	Ammonia (NH3)	M	OTH	Ion selective electrode	14.31	14.31	0.0	0.0
13	Total phosphorus	M	OTH	Titration	14.3	14.3	0.0	0.0
79	Chlorides (as Cl)	M	OTH	Titration	5275.19	5275.19	0.0	0.0
21	Mercury and compounds (as Hg)	M	OTH	Atomic Absorption/ICP	0.0	0.0	0.0	0.0
17	Arsenic and compounds (as As)	M	OTH	Atomic Absorption/ICP	0.0	0.0	0.0	0.0
18	Cadmium and compounds (as Cd)	M	OTH	Atomic Absorption/ICP	0.0	0.0	0.0	0.0
19	Chromium and compounds (as Cr)	M	OTH	Atomic Absorption/ICP	0.0	0.0	0.0	0.0
20	Copper and compounds (as Cu)	M	OTH	Atomic Absorption/ICP	0.529	0.0	0.0	0.0
22	Nickel and compounds (as Ni)	M	OTH	Atomic Absorption/ICP	0.118	0.0	0.0	0.0
23	Lead and compounds (as Pb)	M	OTH	Atomic Absorption/ICP	0.0	0.0	0.0	0.0
24	Zinc and compounds (as Zn)	M	OTH	Atomic Absorption/ICP	5.821	5.821	0.0	0.0

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

SECTION B : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			QUANTITY			
			Method Used		SE-1			
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
303	BOD	M	OTH	5-day incubation and DO probe	91.96	91.96	0.0	0.0
240	Suspended Solids	M	OTH	Ion-selective electrode, Spectrophotometry	127.22	127.22	0.0	0.0
343	Sulphate	M	OTH	Turbidimetry	3636.41	3636.41	0.0	0.0
314	Fats, Oils and Greases	M	OTH	Standard method	95.05	95.05	0.0	0.0
308	Detergents (as MBAS)	M	OTH	Standard method	4.9	4.9	0.0	0.0
362	Kjeldahl Nitrogen	M	OTH	Digestion & Spectrophotometry	33.91	33.91	0.0	0.0
327	Nitrate (as N)	M	OTH	Ion-selective electrode	109.16	109.16	0.0	0.0
372	Nitrite (as N)	M	OTH	Spectrophotometry	1.96	1.96	0.0	0.0
306	COD	M	OTH	Spectrophotometry	503.96	503.96	0.0	0.0
330	Organic solvents	C	OTH	Gas Chromatography; Sum of all VOC totals	76.83	76.83	0.0	0.0
205	Antimony (as Sb)	M	OTH	Atomic Absorption/ICP	0.0	0.0	0.0	0.0
321	Manganese (as Mn)	M	OTH	Atomic Absorption/ICP	0.0	0.0	0.0	0.0
355	Aluminium	M	OTH	Atomic Absorption/ICP	0.0	0.0	0.0	0.0
356	Cobalt	M	OTH	Atomic Absorption/ICP	0.0	0.0	0.0	0.0
357	Iron	M	OTH	Atomic Absorption/ICP	0.0	0.0	0.0	0.0
354	Silver	M	OTH	Atomic Absorption/ICP	0.0	0.0	0.0	0.0
358	Tin	M	OTH	Atomic Absorption/ICP	0.0	0.0	0.0	0.0
347	**Total heavy metals**	C	OTH	Sum off all heavy metals	7.213	7.213	0.0	0.0

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

4.4 RELEASES TO LAND

Link to previous years emissions data

SECTION A : PRTR POLLUTANTS

RELEASES TO LAND					Please enter all quantities in this section in KGs		
POLLUTANT		METHOD			QUANTITY		
			Method Used				
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
					0.0	0.0	0.0

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

SECTION B : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

RELEASES TO LAND					Please enter all quantities in this section in KGs		
POLLUTANT		METHOD			QUANTITY		
			Method Used				
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
					0.0	0.0	0.0

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

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

Please enter all quantities on this sheet in Tonnes 0

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
To Other Countries	06 01 06	Yes	0.363	other acids	D15	M	Weighed	Abroad	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,,Ireland	Indaver NV,MLAV1/9800000485/MV/bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,,Belgium	Poldervlietweg 5,Haven 550 2030,Antwerp,,Belgium
To Other Countries	06 02 04	Yes	4.257	sodium and potassium hydroxide	D15	M	Weighed	Abroad	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,,Ireland	Indaver NV,MLAV1/9800000485/MV/bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,,Belgium	Poldervlietweg 5,Haven 550 2030,Antwerp,,Belgium
To Other Countries	06 02 05	Yes	0.174	other bases	D15	M	Weighed	Abroad	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,,Ireland	Indaver NV,MLAV1/9800000485/MV/bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,,Belgium	Poldervlietweg 5,Haven 550 2030,Antwerp,,Belgium
Within the Country	07 05 01	Yes	2699.492	aqueous washing liquids and mother liquors	R1	M	Weighed	Offsite in Ireland	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,,Ireland	Indaver Ireland Limited,W0167-03,Carranstown,Duleek,Meath,,Ireland	Carranstown,Duleek,Meath,,Ireland
To Other Countries	07 05 01	Yes	72.677	aqueous washing liquids and mother liquors	D10	M	Weighed	Abroad	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,,Ireland	Indaver NV,MLAV1/9800000485/MV/bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,,Belgium	Poldervlietweg 5,Haven 550 2030,Antwerp,,Belgium
To Other Countries	07 05 01	Yes	25.28	aqueous washing liquids and mother liquors	D10	M	Weighed	Abroad	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,,Ireland	ARF,AP4_07_2009,Zl La Soudiere,Route de Soissons,02300 Chauny,,France	Zl La Soudiere,Route de Soissons,02300 Chauny,,France
To Other Countries	07 05 01	Yes	67.7	aqueous washing liquids and mother liquors	D15	M	Weighed	Abroad	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,,Ireland	ARF,AP4_07_2009,Zl La Soudiere,Route de Soissons,02300 Chauny,,France	Zl La Soudiere,Route de Soissons,02300 Chauny,,France
To Other Countries	07 05 01	Yes	42.66	aqueous washing liquids and mother liquors	D15	M	Weighed	Abroad	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,,Ireland	Indaver NV,MLAV1/9800000485/MV/bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,,Belgium	Poldervlietweg 5,Haven 550 2030,Antwerp,,Belgium
To Other Countries	07 05 03	Yes	75.04	organic halogenated solvents, washing liquids and mother liquors	D10	M	Weighed	Abroad	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,,Ireland	Indaver NV,MLAV1/9800000485/MV/bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,,Belgium	Poldervlietweg 5,Haven 550 2030,Antwerp,,Belgium
To Other Countries	07 05 04	Yes	0.435	other organic solvents, washing liquids and mother liquors	D15	M	Weighed	Abroad	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,,Ireland	AVG (Abfall Verwertungs Gesellschaft GmbH,B01VS0013 B01CA0012 B01BA0286,Borsignstrasse 2,,Hamburg,22113,Germany	Borsignstrasse 2,,Hamburg,22113,Germany
To Other Countries	07 05 04	Yes	12.601	other organic solvents, washing liquids and mother liquors	D10	M	Weighed	Abroad	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,,Ireland	Indaver NV,MLAV1/9800000485/MV/bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,,Belgium	Poldervlietweg 5,Haven 550 2030,Antwerp,,Belgium

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
To Other Countries	07 05 04	Yes	21.02	other organic solvents, washing liquids and mother liquors	R1	M	Weighed	Abroad	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	ARF,AP4_07_2009,Zl La Soudiere,Route de Soissons,02300 Chauny,.,France	Zl La Soudiere,Route de Soissons,02300 Chauny,.,France
To Other Countries	07 05 04	Yes	19.82	other organic solvents, washing liquids and mother liquors	D15	M	Weighed	Abroad	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	ARF,AP4_07_2009,Zl La Soudiere,Route de Soissons,02300 Chauny,.,France	Zl La Soudiere,Route de Soissons,02300 Chauny,.,France
Within the Country	07 05 04	Yes	456.6	other organic solvents, washing liquids and mother liquors	R1	M	Weighed	Offsite in Ireland	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	Indaver Ireland Limited,W0036-02 ,Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland
To Other Countries	07 05 13	Yes	0.05	solid wastes containing dangerous substances	D15	M	Weighed	Abroad	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	Indaver NV,MLAV1/9800000485/MV/bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium	Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium
To Other Countries	07 05 13	Yes	16.987	solid wastes containing dangerous substances	D10	M	Weighed	Abroad	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	Indaver NV,MLAV1/9800000485/MV/bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium	Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium
Within the Country	08 03 18	No	0.108	waste printing toner other than those mentioned in 08 03 17	R3	M	Weighed	Offsite in Ireland	Source Imaging Ltd.,	Unit 3, Syngefield Industrial Estate,Birr Co. Offaly,Ireland		
To Other Countries	13 08 99	Yes	0.503	wastes not otherwise specified	D15	M	Weighed	Abroad	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	Indaver NV,MLAV1/9800000485/MV/bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium	Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium
Within the Country	15 01 01	No	4.385	paper and cardboard packaging	R3	M	Weighed	Offsite in Ireland	Bruscar Bhearna Teoranta,W0106-02	Carrowbrowne,.,Headford Road Galway,.,Ireland		
Within the Country	15 01 06	No	21.819	mixed packaging	R3	M	Weighed	Offsite in Ireland	Bruscar Bhearna Teoranta,W0106-02	Carrowbrowne,.,Headford Road Galway,.,Ireland		
To Other Countries	15 01 10	Yes	0.603	packaging containing residues of or contaminated by dangerous substances	D15	M	Weighed	Abroad	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	AVG (Abfall Verwertungs Gesellschaft GmbH,B01VS0013 B01CA0012 B01BA0286,Borsignstrasse 2,.,Hamburg,22113,Germany	Borsignstrasse 2,.,Hamburg,22113,Germany
To Other Countries	15 01 10	Yes	6.978	packaging containing residues of or contaminated by dangerous substances	D10	M	Weighed	Abroad	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	Indaver NV,MLAV1/9800000485/MV/bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium	Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium
To Other Countries	15 02 02	Yes	7.379	absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances	D10	M	Weighed	Abroad	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	Indaver NV,MLAV1/9800000485/MV/bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium	Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium
Within the Country	16 02 13	Yes	4.529	discarded equipment containing hazardous components (16) other than those mentioned in 16 02 09 to 16 02 12	R4	M	Weighed	Offsite in Ireland	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	KMK Metals,W0113-03 ,Cappincur Industrial Estate,Daingean Road,Tullamore,Co.Offally,Ireland	Cappincur Industrial Estate,Daingean Road,Tullamore,Co.Offally,Ireland

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
To Other Countries	16 03 03	Yes	1.131	inorganic wastes containing dangerous substances	D10	M	Weighed	Abroad	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	Indaver NV,MLAV1/9800000485/MV/ bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium	Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium
To Other Countries	16 03 05	Yes	1.317	organic wastes containing dangerous substances	D10	M	Weighed	Abroad	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	Indaver NV,MLAV1/9800000485/MV/ bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium	Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium
To Other Countries	16 05 04	Yes	0.024	gases in pressure containers (including halons) containing dangerous substances	D15	M	Weighed	Abroad	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	Indaver NV,MLAV1/9800000485/MV/ bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium	Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium
To Other Countries	16 05 06	Yes	0.034	laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals	D15	M	Weighed	Abroad	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	Indaver NV,MLAV1/9800000485/MV/ bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium	Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium
To Other Countries	16 05 06	Yes	0.217	laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals	D15	M	Weighed	Abroad	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	AVG (Abfall Verwertungs Gesellschaft GmbH,B01VS0013 B01CA0012 B01BA0286,Borsignstrasse 2,.,Hamburg,22113,Germany	Borsignstrasse 2,.,Hamburg,22113,Germany
Within the Country	16 06 01	Yes	0.356	lead batteries	R4	M	Weighed	Offsite in Ireland	KMK Metals,W0113-03 ,Cappincur Industrial Estate,Daingean Indaver Ireland Limited,W0036-02	Road,Tullamore,Co.Offaly,Ireland Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	Cappincur Industrial Estate,Daingean Road,Tullamore,Co.Offaly,Ireland	
Within the Country	20 01 08	No	6.941	biodegradable kitchen and canteen waste	R3	M	Weighed	Offsite in Ireland	Bruscar Bhearna Teoranta,W0106-02	Carrowbrowne,.,Headford Road Galway,.,Ireland		
Within the Country	20 01 21	Yes	0.074	fluorescent tubes and other mercury-containing waste	R4	M	Weighed	Offsite in Ireland	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	Irish Lamp Recycling Co Ltd.,WFP-KE-14-0072-01,Woodstock Industrial Estate,Kilkenny Road,Athy,Co. Kildare,Ireland	Woodstock Industrial Estate,Kilkenny Road,Athy,Co. Kildare,Ireland
Within the Country	20 01 38	No	9.85	wood other than that mentioned in 20 01 37	R3	M	Weighed	Offsite in Ireland	Bruscar Bhearna Teoranta,W0106-02	Carrowbrowne,.,Headford Road Galway,.,Ireland		
Within the Country	20 01 39	No	9.935	plastics	R3	M	Weighed	Offsite in Ireland	Bruscar Bhearna Teoranta,W0106-02	Carrowbrowne,.,Headford Road Galway,.,Ireland		
Within the Country	20 01 40	No	3.98	metals	R4	M	Weighed	Offsite in Ireland	Bruscar Bhearna Teoranta,W0106-02	Carrowbrowne,.,Headford Road Galway,.,Ireland		
Within the Country	20 03 01	No	24.532	mixed municipal waste	R1	M	Weighed	Offsite in Ireland	Bruscar Bhearna Teoranta,W0106-02	Carrowbrowne,.,Headford Road Galway,.,Ireland		
Within the Country	20 03 07	No	21.98	bulky waste	R1	M	Weighed	Offsite in Ireland	Bruscar Bhearna Teoranta,W0106-02	Carrowbrowne,.,Headford Road Galway,.,Ireland		
To Other Countries	06 02 04	Yes	0.2	sodium and potassium hydroxide	D15	M	Weighed	Abroad	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	AVG (Abfall Verwertungs Gesellschaft GmbH,B01VS0013 B01CA0012 B01BA0286,Borsignstrasse 2,.,Hamburg,22113,Germany	Borsignstrasse 2,.,Hamburg,22113,Germany

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
Within the Country	06 02 04	Yes	47.96	sodium and potassium hydroxide	D9	M	Weighed	Offsite in Ireland	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	Enva Ireland Ltd,COR-MH-14-003-01,Cloneylogan,Kildalkey,Co. Meath,.,Ireland	Cloneylogan,Kildalkey,Co. Meath,.,Ireland
To Other Countries	07 05 03	Yes	0.24	organic halogenated solvents, washing liquids and mother liquors	D15	M	Weighed	Abroad	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	AVG (Abfall Verwertungs Gesellschaft GmbH,B01VS0013 B01CA0012 B01BA0286,Borsignstrasse 2,.,Hamburg,22113,Germany	Borsignstrasse 2,.,Hamburg,22113,Germany
To Other Countries	15 01 10	Yes	0.215	packaging containing residues of or contaminated by dangerous substances	D15	M	Weighed	Abroad	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	Indaver NV,MLAV1/9800000485/MV/ bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium	Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium
To Other Countries	15 02 02	Yes	4.56	absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances	D10	M	Weighed	Abroad	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	AVG (Abfall Verwertungs Gesellschaft GmbH,B01VS0013 B01CA0012 B01BA0286,Borsignstrasse 2,.,Hamburg,22113,Germany	Borsignstrasse 2,.,Hamburg,22113,Germany
Within the Country	15 02 02	Yes	18.72	absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances	R1	M	Weighed	Offsite in Ireland	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	Indaver Ireland Limited,W0167-03,Carranstown,Duleek,Meath,.,Ireland	Carranstown,Duleek,Meath,., Ireland
Within the Country	17 09 04	No	45.73	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	R5	M	Weighed	Offsite in Ireland	Bruscar Bhearna Teoranta,W0106-02	Carrowbrowne,.,Headford Road Galway,.,Ireland		
To Other Countries	16 03 03	Yes	0.06	inorganic wastes containing dangerous substances	D15	M	Weighed	Abroad	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	AVG (Abfall Verwertungs Gesellschaft GmbH,B01VS0013 B01CA0012 B01BA0286,Borsignstrasse 2,.,Hamburg,22113,Germany	Borsignstrasse 2,.,Hamburg,22113,Germany
To Other Countries	16 03 03	Yes	3.986	inorganic wastes containing dangerous substances	D15	M	Weighed	Abroad	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	Indaver NV,MLAV1/9800000485/MV/ bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium	Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium
Within the Country	20 01 33	Yes	0.074	batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries	R4	M	Weighed	Offsite in Ireland	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	KMK Metals,W0113-03 ,Cappincur Industrial Estate,Daingean Road,Tullamore,Co.Offally,Ireland	Cappincur Industrial Estate,Daingean Road,Tullamore,Co.Offally,Ireland
To Other Countries	07 05 03	Yes	1.279	organic halogenated solvents, washing liquids and mother liquors	D15	M	Weighed	Abroad	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	Indaver NV,MLAV1/9800000485/MV/ bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium	Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
To Other Countries	07 05 04	Yes	21.417	other organic solvents, washing liquids and mother liquors	D15	M	Weighed	Abroad	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	Indaver NV,MLAV1/9800000485/MV/ bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium	Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium
Within the Country	07 05 04	Yes	0.48	other organic solvents, washing liquids and mother liquors	D15	M	Weighed	Offsite in Ireland	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	Indaver Ireland Limited,W0036-02 ,Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland
To Other Countries	06 01 02	Yes	1.371	hydrochloric acid	D15	M	Weighed	Abroad	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	AVG (Abfall Verwertungs Gesellschaft GmbH,B01VS0013 B01CA0012 B01BA0286,Borsignstrasse 2,.,Hamburg,22113,Germany	Borsignstrasse 2,.,Hamburg,22113,Germany
To Other Countries	06 01 04	Yes	0.118	phosphoric and phosphorous acid	D15	M	Weighed	Abroad	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	Indaver NV,MLAV1/9800000485/MV/ bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium	Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium
Within the Country	16 03 03	Yes	0.048	inorganic wastes containing dangerous substances	D15	M	Weighed	Offsite in Ireland	Indaver Ireland Limited,W0036-02	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	Indaver Ireland Limited,W0036-02 ,Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland	Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland

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