


Facility Information Summary	
AER Reporting Year	2018
Licence Register Number	P0552-03
Name of site	Bristol-Myers Squibb Cruiserath Biologics
Site Location	Cruiserath Road, Mulhuddart, Dublin 15
NACE Code	2120
Class/Classes of Activity	Manufacture of Pharmaceutical Preparations
National Grid Reference (6E, 6 N)	-.6.37297, 53.4149

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.**

2018 saw the completion of the construction phase of the Biologics site, coupled with ongoing commissioning, qualification and validation (CQV) activities and the commencement of licenced activities (Q3 2019). There were no exceedances in ELV's from environmental monitoring both prior to and post the commencement of licenced activities. There was one minor environmental incident relating to a monitoring equipment malfunction and there were no reported complaints. Energy consumption including gas and electricity increased significantly from 2017 on account of commissioning and manufacturing activities commencing.

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.

	<u>29 MAR 2019</u>
Signature	Date
Group/Facility manager	
(or nominated, suitably qualified and experienced deputy)	

AIR-summary template	Lic No: P0552-03	Year: 2018
-----------------------------	------------------	------------

Answer all questions and complete all tables where relevant

- 1 Does your site have licensed air emissions? If yes please complete table A1 and A2 below for the current reporting year and answer further questions. If **you do not have** licensed emissions and **do not complete a solvent management plan** (table A4 and A5) you do not need to complete the tables

Additional information	
Yes	Monitoring results reported in accordance with licenced activities which commenced in Q3 2018. Monitoring for the scrubber test programme took place in Oct-Nov 2018 with a proposal submitted to the Agency on the monitoring frequency. Results from the test programme detected no

Periodic/Non-Continuous Monitoring

- 2 Are there any results in breach of licence requirements? If yes please provide brief details in the comment section of Table A1 below
- 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](#)

No	
Yes	

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

Emission reference no:	Parameter/ Substance	Frequency of Monitoring	ELV in licence or any revision thereof	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence limit	Method of analysis	Annual mass load (kg)	Comments - reason for change in % mass load from previous year if applicable
A1-1	Nitrogen oxides (NOx/NO2)	Quarterly	100mg/m3	97 % of all annual 30-minute averages < 1.2 x ELV	89.68	mg/m3	yes	EN 14792:2017	416.719	100% increase on previous
A1-2	Nitrogen oxides (NOx/NO2)	Quarterly	100mg/m3	97 % of all annual 30-minute averages < 1.2 x ELV	82.73	mg/m3	yes	EN 14792:2017	444.54	100% increase on previous
A1-3	Nitrogen oxides (NOx/NO2)	Quarterly	100mg/m3	97 % of all annual 30-minute averages < 1.2 x ELV	77.37	mg/m3	yes	EN 14792:2017	492.02	100% increase on previous
A1-1	Nitrogen oxides (NOx/NO2)	Quarterly	100mg/m3	97 % of all annual 30-minute averages < 1.2 x ELV	81.48	mg/m3	yes	EN 14792:2017		
A1-2	Nitrogen oxides (NOx/NO2)	Quarterly	100mg/m3	97 % of all annual 30-minute averages < 1.2 x ELV	77.87	mg/m3	yes	EN 14792:2017		
A1-3	Nitrogen oxides (NOx/NO2)	Quarterly	100mg/m3	97 % of all annual 30-minute averages < 1.2 x ELV	79.07	mg/m3	yes	EN 14792:2017		
A1-1	volumetric flow	Quarterly	7000m3/hr	97 % of all annual 30-minute averages < 1.2 x ELV	5,236	m3/hr	yes	EN16911:2013		
A1-2	volumetric flow	Quarterly	7000m3/hr	97 % of all annual 30-minute averages < 1.2 x ELV	6,259	m3/hr	yes	EN16911:2013		
A1-3	volumetric flow	Quarterly	7000m3/hr	97 % of all annual 30-minute averages < 1.2 x ELV	6,367	m3/hr	yes	EN16911:2013		
A1-1	volumetric flow	Quarterly	7000m3/hr	97 % of all annual 30-minute averages < 1.2 x ELV	4,167	m3/hr	yes	EN16911:2013		
A1-2	volumetric flow	Quarterly	7000m3/hr	97 % of all annual 30-minute averages < 1.2 x ELV	4,631	m3/hr	yes	EN16911:2013		
A1-3	volumetric flow	Quarterly	7000m3/hr	97 % of all annual 30-minute averages < 1.2 x ELV	4,588	m3/hr	yes	EN16911:2013		

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

AIR-summary template		Lic No:	P0552-03	Year	2018
Continuous Monitoring					
4	Does your site carry out continuous air emissions monitoring?	No			
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		Maintenance contracts are in place for gas boilers and caustic scrubbers	
7	Did your site experience any abatement system bypasses? If yes please detail them in table A3 below	No			

Table A2: Summary of average emissions -continuous monitoring

Emission reference no:	Parameter/ Substance	ELV in licence or any revision thereof	Averaging Period	Compliance Criteria	Units of measurement	Annual Emission	Annual maximum	Monitoring Equipment downtime (hours)	Number of ELV exceedences in current reporting year	Comments
N/a	SELECT			SELECT	SELECT					
	SELECT				SELECT					
	SELECT				SELECT					
	SELECT				SELECT					
	SELECT				SELECT					

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

Table A3: Abatement system bypass reporting table

[Bypass protocol](#)

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

* 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

AIR-summary template		Lic No:	P0552-03	Year	2018			
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				No				
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			
					SELECT			
					SELECT			
Table A5: Solvent Mass Balance summary								
	(I) Inputs (kg)	(O) Outputs (kg)						
Solvent	(I) Inputs (kg)	Organic solvent emission in waste	Solvents lost in water (kg)	Collected waste solvent (kg)	Fugitive Organic Solvent (kg)	Solvent released in other ways e.g.	Solvents destroyed onsite through	Total emission of Solvent to air (kg)
							Total	

 For inspection purposes only.
 Consent of copyright owner required for any other use.

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)				Lic No:	P0552-03	Year	2018
---	--	--	--	---------	----------	------	------

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

Was it a requirement of your licence to carry out visual inspections on any surface water discharges or watercourses on or near your site? If yes please complete table W2 below summarising only any evidence of contamination noted during visual inspections

Additional information	
Yes	
Yes	Weekly visual inspections carried out at SW1, SW2, SW3 and SE4

Table W1 Storm water monitoring

Location reference	Location relative to site activities	PRTR Parameter	Licensed Parameter	Monitoring date	ELV or trigger level in licence or any revision thereof*	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence	Comments
Butterfly valve	downstream	pH	pH	30/01/2018	<6, >9	N/A	7.4	pH units	yes	Monitoring included prior to 05Sept2018 related to the schedule agreed with the Agency during decommissioning and construction activities. Subsequent to the commencement date of licensed activities the full licence monitoring schedule was included.
Butterfly valve	downstream	Conductivity	Conductivity	30/01/2018	1500	N/A	7.4	µS/cm@25oC	yes	
Butterfly valve	downstream	Total organic carbon (TOC) (as total C or COD/3)	Total organic carbon (TOC) (as total C or COD/3)	30/01/2018	50	N/A	1.96	mg/L	yes	
Butterfly valve	downstream	pH	pH	28/02/2018	<6, >9	N/A	8.16	pH units	yes	
Butterfly valve	downstream	Conductivity	Conductivity	28/02/2018	1500	N/A	589	µS/cm@25oC	yes	
Butterfly valve	downstream	Total organic carbon (TOC) (as total C or COD/3)	Total organic carbon (TOC) (as total C or COD/3)	28/02/2018	50	N/A	17.43	mg/L	yes	
Butterfly valve	downstream	pH	pH	28/03/2018	<6, >9	N/A	7.46	pH units	yes	
Butterfly valve	downstream	Conductivity	Conductivity	28/03/2018	1500	N/A	1083	µS/cm@25oC	yes	
Butterfly valve	downstream	Total organic carbon (TOC) (as total C or COD/3)	Total organic carbon (TOC) (as total C or COD/3)	28/03/2018	50	N/A	8.17	mg/L	yes	
Butterfly valve	downstream	pH	pH	16/04/2018	<6, >9	N/A	6.57	pH units	yes	
Butterfly valve	downstream	Conductivity	Conductivity	16/04/2018	1500	N/A	916	µS/cm@25oC	yes	
Butterfly valve	downstream	Total organic carbon (TOC) (as total C or COD/3)	Total organic carbon (TOC) (as total C or COD/3)	16/04/2018	50	N/A	7.02	mg/L	yes	
Butterfly valve	downstream	pH	pH	28/05/2018	<6, >9	N/A	7.5	pH units	yes	
Butterfly valve	downstream	Conductivity	Conductivity	28/05/2018	1500	N/A	684.4	µS/cm@25oC	yes	
Butterfly valve	downstream	Total organic carbon (TOC) (as total C or COD/3)	Total organic carbon (TOC) (as total C or COD/3)	28/05/2018	50	N/A	9.3	mg/L	yes	
Butterfly valve	downstream	pH	pH	27/06/2018	<6, >9	N/A	7.8	pH units	yes	
Butterfly valve	downstream	Conductivity	Conductivity	27/06/2018	1500	N/A	801	µS/cm@25oC	yes	
Butterfly valve	downstream	Total organic carbon (TOC) (as total C or COD/3)	Total organic carbon (TOC) (as total C or COD/3)	27/06/2018	50	N/A	7.61	mg/L	yes	
Butterfly valve	downstream	pH	pH	31/07/2018	<6, >9	N/A	7.87	pH units	yes	
Butterfly valve	downstream	Conductivity	Conductivity	31/07/2018	1500	N/A	469	µS/cm@25oC	yes	

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)									
Lic No: P0552-03					Year 2018				
Butterfly valve	downstream	Total organic carbon (TOC) (as total C or COD/3)	Total organic carbon (TOC) (as total C or COD/3)	31/07/2018	50	N/A	13.2	mg/L	yes
Butterfly valve	downstream	pH	pH	30/08/2018	<6, >9	N/A	7.46	pH units	yes
Butterfly valve	downstream	Conductivity	Conductivity	30/08/2018	1500	N/A	768	µS/cm@25oC	yes
Butterfly valve	downstream	Total organic carbon (TOC) (as total C or COD/3)	Total organic carbon (TOC) (as total C or COD/3)	30/08/2018	50	N/A	9.82	mg/L	yes
SW2	downstream	pH	pH	24/09/2018	<6, >9	N/A	7.85	pH units	yes
SW2	downstream	Conductivity	Conductivity	24/09/2018	1500	N/A	286.6	µS/cm@25oC	yes
SW2	downstream	Total organic carbon (TOC) (as total C or COD/3)	Total organic carbon (TOC) (as total C or COD/3)	24/09/2018	50	N/A	5.49	mg/L	yes
SW2	downstream	pH	pH	31/10/2018	<6, >9	N/A	7.24	pH units	yes
SW2	downstream	Conductivity	Conductivity	31/10/2018	1500	N/A	198	µS/cm@25oC	yes
SW2	downstream	Total organic carbon (TOC) (as total C or COD/3)	Total organic carbon (TOC) (as total C or COD/3)	31/10/2018	50	N/A	4.67	mg/L	yes
SW2	downstream	pH	pH	27/11/2018	<6, >9	N/A	7.23	pH units	yes
SW2	downstream	Conductivity	Conductivity	27/11/2018	1500	N/A	844	µS/cm@25oC	yes
SW2	downstream	Total organic carbon (TOC) (as total C or COD/3)	Total organic carbon (TOC) (as total C or COD/3)	27/11/2018	50	N/A	6.63	mg/L	yes
SW2	downstream	pH	pH	23/12/2018	<6, >9	N/A	7.73	pH units	yes
SW2	downstream	Conductivity	Conductivity	23/12/2018	1500	N/A	336	µS/cm@25oC	yes
SW2	downstream	Total organic carbon (TOC) (as total C or COD/3)	Total organic carbon (TOC) (as total C or COD/3)	23/12/2018	50	N/A	12.82	mg/L	yes
SE4	downstream	pH	pH	24/09/2018	<6, >9	N/A	7.32	pH units	yes
SE4	downstream	Conductivity	Conductivity	24/09/2018	1500	N/A	8.19	µS/cm@25oC	yes
SE4	downstream	Total organic carbon (TOC) (as total C or COD/3)	Total organic carbon (TOC) (as total C or COD/3)	24/09/2018	50	N/A	6.73	mg/L	yes
SE4	downstream	pH	pH	31/10/2018	<6, >9	N/A	7.91	pH units	yes
SE4	downstream	Conductivity	Conductivity	31/10/2018	1500	N/A	229.5	µS/cm@25oC	yes
SE4	downstream	Total organic carbon (TOC) (as total C or COD/3)	Total organic carbon (TOC) (as total C or COD/3)	31/10/2018	50	N/A	5.13	mg/L	yes
SE4	downstream	pH	pH	27/11/2018	<6, >9	N/A	7.3	pH units	yes
SE4	downstream	Conductivity	Conductivity	27/11/2018	1500	N/A	752	µS/cm@25oC	yes
SE4	downstream	Total organic carbon (TOC) (as total C or COD/3)	Total organic carbon (TOC) (as total C or COD/3)	27/11/2018	50	N/A	4.28	mg/L	yes
SE4	downstream	pH	pH	18/12/2018	<6, >9	N/A	7.42	pH units	yes
SE4	downstream	Conductivity	Conductivity	18/12/2018	1500	N/A	593	µS/cm@25oC	yes
SE4	downstream	Total organic carbon (TOC) (as total C or COD/3)	Total organic carbon (TOC) (as total C or COD/3)	18/12/2018	50	N/A	3.67	mg/L	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
N/A	N/A	N/A	SELECT	N/A	N/A
			SELECT		

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

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

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

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)															
		Lic No:		P0552-03		Year		2018							
Emission reference no:	Emission released to	Parameter/ SubstanceNote 1	Type of sample	Frequency of monitoring	Averaging period	ELV or trigger values in licence or any revision thereof ^{Note 2}	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence	Method of analysis	Procedural reference source	Procedural reference standard number	Annual mass load (kg)	Comments
W1	Wastewater/Sew	BOD	composite	Fortnightly	24 hour	400	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	6	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA "Standard Methods"	Based on APHA 5210B	465.9	
W1	Wastewater/Sew	BOD	composite	Fortnightly	24 hour	400	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	3	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA "Standard Methods"	Based on APHA 5210B		
W1	Wastewater/Sew	BOD	composite	Fortnightly	24 hour	400	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	3	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA "Standard Methods"	Based on APHA 5210B		
W1	Wastewater/Sew	BOD	composite	Fortnightly	24 hour	400	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	3	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA "Standard Methods"	Based on APHA 5210B		
W1	Wastewater/Sew	BOD	composite	Fortnightly	24 hour	400	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	10	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA "Standard Methods"	Based on APHA 5210B		
W1	Wastewater/Sew	BOD	composite	Fortnightly	24 hour	400	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	3	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA "Standard Methods"	Based on APHA 5210B		
W1	Wastewater/Sew	BOD	composite	Fortnightly	24 hour	400	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	3	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA "Standard Methods"	Based on APHA 5210B		
W1	Wastewater/Sew	BOD	composite	Fortnightly	24 hour	400	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	2	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA "Standard Methods"	Based on APHA 5210B		
W1	Wastewater/Sew	BOD	composite	Fortnightly	24 hour	400	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	2	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA "Standard Methods"	Based on APHA 5210B		
W1	Wastewater/Sew	BOD	composite	Fortnightly	24 hour	400	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	8	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA "Standard Methods"	Based on APHA 5210B		
W1	Wastewater/Sew	BOD	composite	Fortnightly	24 hour	400	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	5	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA "Standard Methods"	Based on APHA 5210B		
W1	Wastewater/Sew	COD	composite	Fortnightly	24 hour	1000	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	85	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA "Standard Methods"	Based on APHA 5220D	6671	
W1	Wastewater/Sew	COD	composite	Fortnightly	24 hour	1000	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	72	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA "Standard Methods"	Based on APHA 5220D		
W1	Wastewater/Sew	COD	composite	Fortnightly	24 hour	1000	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	48	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA "Standard Methods"	Based on APHA 5220D		
W1	Wastewater/Sew	COD	composite	Fortnightly	24 hour	1000	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	45	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA "Standard Methods"	Based on APHA 5220D		
W1	Wastewater/Sew	COD	composite	Fortnightly	24 hour	1000	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	103	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA "Standard Methods"	Based on APHA 5220D		
W1	Wastewater/Sew	COD	composite	Fortnightly	24 hour	1000	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	56	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA "Standard Methods"	Based on APHA 5220D		
W1	Wastewater/Sew	COD	composite	Fortnightly	24 hour	1000	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	51	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA "Standard Methods"	Based on APHA 5220D		
W1	Wastewater/Sew	COD	composite	Fortnightly	24 hour	1000	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	41	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA "Standard Methods"	Based on APHA 5220D		
W1	Wastewater/Sew	COD	composite	Fortnightly	24 hour	1000	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	62	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA "Standard Methods"	Based on APHA 5220D		
W1	Wastewater/Sew	COD	composite	Fortnightly	24 hour	1000	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	89	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA "Standard Methods"	Based on APHA 5220D		

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)										Lic No:	P0552-03	Year	2018			
W1	Wastewater/Sew	COD	composite	Fortnightly	24 hour	1000	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	64	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA "Standard Methods"	Based on APHA 5220D			
W1	Wastewater/Sew	Suspended Solids	composite	Fortnightly	24 hour	400	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	26	mg/L	yes	Gravimetric analysis	APHA / AWWA "Standard Methods"	Based on APHA 2540D	3111.97		
W1	Wastewater/Sew	Suspended Solids	composite	Fortnightly	24 hour	400	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	5	mg/L	yes	Gravimetric analysis	APHA / AWWA "Standard Methods"	Based on APHA 2540D			
W1	Wastewater/Sew	Suspended Solids	composite	Fortnightly	24 hour	400	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	20	mg/L	yes	Gravimetric analysis	APHA / AWWA "Standard Methods"	Based on APHA 2540D			
W1	Wastewater/Sew	Suspended Solids	composite	Fortnightly	24 hour	400	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	8	mg/L	yes	Gravimetric analysis	APHA / AWWA "Standard Methods"	Based on APHA 2540D			
W1	Wastewater/Sew	Suspended Solids	composite	Fortnightly	24 hour	400	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	67	mg/L	yes	Gravimetric analysis	APHA / AWWA "Standard Methods"	Based on APHA 2540D			
W1	Wastewater/Sew	Suspended Solids	composite	Fortnightly	24 hour	400	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	14	mg/L	yes	Gravimetric analysis	APHA / AWWA "Standard Methods"	Based on APHA 2540D			
W1	Wastewater/Sew	Suspended Solids	composite	Fortnightly	24 hour	400	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	44	mg/L	yes	Gravimetric analysis	APHA / AWWA "Standard Methods"	Based on APHA 2540D			
W1	Wastewater/Sew	Suspended Solids	composite	Fortnightly	24 hour	400	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	13	mg/L	yes	Gravimetric analysis	APHA / AWWA "Standard Methods"	Based on APHA 2540D			
W1	Wastewater/Sew	Suspended Solids	composite	Fortnightly	24 hour	400	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	45	mg/L	yes	Gravimetric analysis	APHA / AWWA "Standard Methods"	Based on APHA 2540D			
W1	Wastewater/Sew	Suspended Solids	composite	Fortnightly	24 hour	400	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	56	mg/L	yes	Gravimetric analysis	APHA / AWWA "Standard Methods"	Based on APHA 2540D			
W1	Wastewater/Sew	Suspended Solids	composite	Fortnightly	24 hour	400	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	36	mg/L	yes	Gravimetric analysis	APHA / AWWA "Standard Methods"	Based on APHA 2540D			
W1	Wastewater/Sew	Chlorides (as Cl)	composite	Fortnightly	24 hour	1000	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	984	mg/L	yes	Ion Chromatography	APHA / AWWA "Standard Methods"	Based on APHA4110B	90042.78		
W1	Wastewater/Sew	Chlorides (as Cl)	composite	Fortnightly	24 hour	1000	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	834.03	mg/L	yes	Ion Chromatography	APHA / AWWA "Standard Methods"	Based on APHA4110B			
W1	Wastewater/Sew	Chlorides (as Cl)	composite	Fortnightly	24 hour	1000	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	711.46	mg/L	yes	Ion Chromatography	APHA / AWWA "Standard Methods"	Based on APHA4110B			
W1	Wastewater/Sew	Chlorides (as Cl)	composite	Fortnightly	24 hour	1000	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	896.5	mg/L	yes	Ion Chromatography	APHA / AWWA "Standard Methods"	Based on APHA4110B			
W1	Wastewater/Sew	Chlorides (as Cl)	composite	Fortnightly	24 hour	1000	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	831	mg/L	yes	Ion Chromatography	APHA / AWWA "Standard Methods"	Based on APHA4110B			
W1	Wastewater/Sew	Chlorides (as Cl)	composite	Fortnightly	24 hour	1000	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	958	mg/L	yes	Ion Chromatography	APHA / AWWA "Standard Methods"	Based on APHA4110B			
W1	Wastewater/Sew	Chlorides (as Cl)	composite	Fortnightly	24 hour	1000	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	989.96	mg/L	yes	Ion Chromatography	APHA / AWWA "Standard Methods"	Based on APHA4110B			
W1	Wastewater/Sew	Chlorides (as Cl)	composite	Fortnightly	24 hour	1000	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	824.83	mg/L	yes	Ion Chromatography	APHA / AWWA "Standard Methods"	Based on APHA4110B			
W1	Wastewater/Sew	Chlorides (as Cl)	composite	Fortnightly	24 hour	1000	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	973	mg/L	yes	Ion Chromatography	APHA / AWWA "Standard Methods"	Based on APHA4110B			
W1	Wastewater/Sew	Chlorides (as Cl)	composite	Fortnightly	24 hour	1000	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	758.51	mg/L	yes	Ion Chromatography	APHA / AWWA "Standard Methods"	Based on APHA4110B			

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)														
				Lic No:		P0552-03		Year		2018				
W1	Wastewater/Sew	Total nitrogen	composite	Fortnightly	24 hour	30	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	9.6	mg/L	yes	Ion Chromatography	APHA / AWWA "Standard Methods"	Based on APHA4110B	
W1	Wastewater/Sew	Detergents (as MBAS)	composite	Fortnightly	24 hour	100	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	0.05	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA "Standard Methods"	Based on APHA5540C	5.96
W1	Wastewater/Sew	Detergents (as MBAS)	composite	Fortnightly	24 hour	100	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	0.11	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA "Standard Methods"	Based on APHA5540C	
W1	Wastewater/Sew	Detergents (as MBAS)	composite	Fortnightly	24 hour	100	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	0.04	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA "Standard Methods"	Based on APHA5540C	
W1	Wastewater/Sew	Detergents (as MBAS)	composite	Fortnightly	24 hour	100	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	0.08	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA "Standard Methods"	Based on APHA5540C	
W1	Wastewater/Sew	Detergents (as MBAS)	composite	Fortnightly	24 hour	100	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	0.04	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA "Standard Methods"	Based on APHA5540C	
W1	Wastewater/Sew	Detergents (as MBAS)	composite	Fortnightly	24 hour	100	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	0.07	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA "Standard Methods"	Based on APHA5540C	
W1	Wastewater/Sew	Detergents (as MBAS)	composite	Fortnightly	24 hour	100	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	0.09	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA "Standard Methods"	Based on APHA5540C	
W1	Wastewater/Sew	Detergents (as MBAS)	composite	Fortnightly	24 hour	100	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	0.01	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA "Standard Methods"	Based on APHA5540C	
W1	Wastewater/Sew	Detergents (as MBAS)	composite	Fortnightly	24 hour	100	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	0.06	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA "Standard Methods"	Based on APHA5540C	
W1	Wastewater/Sew	Detergents (as MBAS)	composite	Fortnightly	24 hour	100	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	0.07	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA "Standard Methods"	Based on APHA5540C	
W1	Wastewater/Sew	Fats, Oils and Greases	composite	Biannually	24 hour	100	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	<1	mg/L	yes	Gravimetric analysis	APHA / AWWA "Standard Methods"	Based on APHA5520B	
W1	Wastewater/Sew	Acetone	composite	Quarterly	24 hour	n/a	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	< 1.000	mg/L	yes	ICP / ICPMS (Inductively Coupled Plasma - Mass Spectrometry)	APHA / AWWA "Standard Methods"	Based on USEPA Method 200.8	
W1	Wastewater/Sew	Acetonitrile	composite	Quarterly	24 hour	n/a	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	< 1.000	mg/L	yes	ICP / ICPMS (Inductively Coupled Plasma - Mass Spectrometry)	APHA / AWWA "Standard Methods"	Based on USEPA Method 200.8	
W1	Wastewater/Sew	Butan-1-ol	composite	Quarterly	24 hour	n/a	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	< 1.000	mg/L	yes	ICP / ICPMS (Inductively Coupled Plasma - Mass Spectrometry)	APHA / AWWA "Standard Methods"	Based on USEPA Method 200.8	
W1	Wastewater/Sew	Butan-2-ol	composite	Quarterly	24 hour	n/a	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	< 1.000	mg/L	yes	ICP / ICPMS (Inductively Coupled Plasma - Mass Spectrometry)	APHA / AWWA "Standard Methods"	Based on USEPA Method 200.8	
W1	Wastewater/Sew	Dichloromethane	composite	Quarterly	24 hour	n/a	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	< 0.200	mg/L	yes	ICP / ICPMS (Inductively Coupled Plasma - Mass Spectrometry)	APHA / AWWA "Standard Methods"	Based on USEPA Method 200.8	
W1	Wastewater/Sew	Ethanol	composite	Quarterly	24 hour	n/a	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	< 5.000	mg/L	yes	ICP / ICPMS (Inductively Coupled Plasma - Mass Spectrometry)	APHA / AWWA "Standard Methods"	Based on USEPA Method 200.8	
W1	Wastewater/Sew	Ethyl Acetate	composite	Quarterly	24 hour	n/a	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	< 0.500	mg/L	yes	ICP / ICPMS (Inductively Coupled Plasma - Mass Spectrometry)	APHA / AWWA "Standard Methods"	Based on USEPA Method 200.8	
W1	Wastewater/Sew	Isobutanol	composite	Quarterly	24 hour	n/a	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	< 1.000	mg/L	yes	ICP / ICPMS (Inductively Coupled Plasma - Mass Spectrometry)	APHA / AWWA "Standard Methods"	Based on USEPA Method 200.8	
W1	Wastewater/Sew	Methanol	composite	Quarterly	24 hour	n/a	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	< 5.000	mg/L	yes	ICP / ICPMS (Inductively Coupled Plasma - Mass Spectrometry)	APHA / AWWA "Standard Methods"	Based on USEPA Method 200.8	

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)										Lic No:	P0552-03	Year	2018						
W1	Wastewater/Sew	Methyl Ethyl Ketone	composite	Quarterly	24 hour	n/a	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	< 0.500	mg/L	yes	ICP / ICPLMS (Inductively Coupled Plasma - Mass Spectrometry)	APHA / AWWA "Standard Methods"	Based on USEPA Method 200.8						
W1	Wastewater/Sew	MIBK	composite	Quarterly	24 hour	n/a	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	< 0.500	mg/L	yes	ICP / ICPLMS (Inductively Coupled Plasma - Mass Spectrometry)	APHA / AWWA "Standard Methods"	Based on USEPA Method 200.8						
W1	Wastewater/Sew	Propan-1-ol	composite	Quarterly	24 hour	n/a	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	< 1.000	mg/L	yes	ICP / ICPLMS (Inductively Coupled Plasma - Mass Spectrometry)	APHA / AWWA "Standard Methods"	Based on USEPA Method 200.8						
W1	Wastewater/Sew	Propan-2-ol	composite	Quarterly	24 hour	n/a	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	< 1.000	mg/L	yes	ICP / ICPLMS (Inductively Coupled Plasma - Mass Spectrometry)	APHA / AWWA "Standard Methods"	Based on USEPA Method 200.8						
W1	Wastewater/Sew	Calcium as CaCO3	composite	Annual	24 hour	n/a	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	203.188	mg/l	yes	ICP / ICPLMS (Inductively Coupled Plasma - Mass Spectrometry)	APHA / AWWA "Standard Methods"	Based on USEPA Method 200.8						
W1	Wastewater/Sew	Cadmium	composite	Annual	24 hour	n/a	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	< 0.3	ug/L	yes	ICP / ICPLMS (Inductively Coupled Plasma - Mass Spectrometry)	APHA / AWWA "Standard Methods"	Based on USEPA Method 200.8						
W1	Wastewater/Sew	Chromium	composite	Annual	24 hour	n/a	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	< 3.0	ug/L	yes	ICP / ICPLMS (Inductively Coupled Plasma - Mass Spectrometry)	APHA / AWWA "Standard Methods"	Based on USEPA Method 200.8						
W1	Wastewater/Sew	Copper	composite	Annual	24 hour	n/a	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	0.017	mg/l	yes	ICP / ICPLMS (Inductively Coupled Plasma - Mass Spectrometry)	APHA / AWWA "Standard Methods"	Based on USEPA Method 200.8						
W1	Wastewater/Sew	Iron	composite	Annual	24 hour	n/a	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	200	ug/L	yes	ICP / ICPLMS (Inductively Coupled Plasma - Mass Spectrometry)	APHA / AWWA "Standard Methods"	Based on USEPA Method 200.8						
W1	Wastewater/Sew	Lead	composite	Annual	24 hour	n/a	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	< 0.9	ug/L	yes	ICP / ICPLMS (Inductively Coupled Plasma - Mass Spectrometry)	APHA / AWWA "Standard Methods"	Based on USEPA Method 200.8						
W1	Wastewater/Sew	Nickel	composite	Annual	24 hour	n/a	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	< 0.6	ug/L	yes	ICP / ICPLMS (Inductively Coupled Plasma - Mass Spectrometry)	APHA / AWWA "Standard Methods"	Based on USEPA Method 200.8						
W1	Wastewater/Sew	Potassium	composite	Annual	24 hour	n/a	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	77	mg/L	yes	ICP / ICPLMS (Inductively Coupled Plasma - Mass Spectrometry)	APHA / AWWA "Standard Methods"	Based on USEPA Method 200.8						
W1	Wastewater/Sew	Calcium	composite	Annual	24 hour	n/a	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	84	mg/L	yes	ICP / ICPLMS (Inductively Coupled Plasma - Mass Spectrometry)	APHA / AWWA "Standard Methods"	Based on USEPA Method 200.8						
W1	Wastewater/Sew	Magnesium	composite	Annual	24 hour	n/a	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	6.9	mg/L	yes	ICP / ICPLMS (Inductively Coupled Plasma - Mass Spectrometry)	APHA / AWWA "Standard Methods"	Based on USEPA Method 200.8						
W1	Wastewater/Sew	Aluminium	composite	Annual	24 hour	n/a	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	< 100.00	ug/L	yes	ICP / ICPLMS (Inductively Coupled Plasma - Mass Spectrometry)	APHA / AWWA "Standard Methods"	Based on USEPA Method 200.8						
W1	Wastewater/Sew	Boron	composite	Annual	24 hour	n/a	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	< 0.50	mg/L	yes	ICP / ICPLMS (Inductively Coupled Plasma - Mass Spectrometry)	APHA / AWWA "Standard Methods"	Based on USEPA Method 200.8						
W1	Wastewater/Sew	Mercury	composite	Annual	24 hour	n/a	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	< 0.06	ug/L	yes	ICP / ICPLMS (Inductively Coupled Plasma - Mass Spectrometry)	APHA / AWWA "Standard Methods"	Based on USEPA Method 200.8						
W1	Wastewater/Sew	Arsenic	composite	Annual	24 hour	n/a	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	< 1.0	ug/L	yes	ICP / ICPLMS (Inductively Coupled Plasma - Mass Spectrometry)	APHA / AWWA "Standard Methods"	Based on USEPA Method 200.8						
W1	Wastewater/Sew	Sodium	composite	Annual	24 hour	n/a	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	646	mg/L	yes	ICP / ICPLMS (Inductively Coupled Plasma - Mass Spectrometry)	APHA / AWWA "Standard Methods"	Based on USEPA Method 200.8						
W1	Wastewater/Sew	Manganese	composite	Annual	24 hour	n/a	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	4.7	ug/L	yes	ICP / ICPLMS (Inductively Coupled Plasma - Mass Spectrometry)	APHA / AWWA "Standard Methods"	Based on USEPA Method 200.8						
W1	Wastewater/Sew	Phosphorus, Total P	composite	Annual	24 hour	n/a	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	1	mg/L	yes	ICP / ICPLMS (Inductively Coupled Plasma - Mass Spectrometry)	APHA / AWWA "Standard Methods"	Based on USEPA Method 200.8						
W1	Wastewater/Sew	Zinc	composite	Annual	24 hour	n/a	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	100	ug/L	yes	ICP / ICPLMS (Inductively Coupled Plasma - Mass Spectrometry)	APHA / AWWA "Standard Methods"	Based on USEPA Method 200.8						

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)							Lic No:	P0552-03	Year	2018					
W1	Wastewater/Sew	Respiratory	composite	Annual	25 hour	n/a	All results < 1.2 times ELV, plus 8 from ten results must be < ELV	10	mg/L	yes	Volumetric Respirometer	EN ISO8192:2007			

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

For inspection purposes only.
Consent of copyright owner required for any other use.

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)	Lic No:	P0552-03	Year	2018
--	---------	----------	------	------

Continuous monitoring

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

Yes	Additional Information
	At monitoring point W1 (SE1)

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

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

Yes	
-----	--

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

Yes	
-----	--

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 exceedences in reporting year	Comments
SE1	Wastewater/Sewer	Total organic carbon (TOC) (as total C or COD/3)	n/a	24 hour	All values < ELV	mg/L	average 10.35	n/a	48	0	Samples taken from composite sampler during downtime confirmed TOC was within average readings
SE1	Wastewater/Sewer	pH	> 6, < 9	24 hour	All values < ELV	pH units	average 7.5	n/a	n/a	0	
SE1	Wastewater/Sewer	Conductivity	na	24 hour	All values < ELV	µS/cm@25oC	average 1717	n/a	n/a	0	
SE1	Wastewater/Sewer	volumetric flow	1500	24 hour	no flow value shall exceed this specific	m3/day	102,490	n/a	n/a	0	Figure includes volumetric flow for period since commencement of licenced activities
SW1	Stormwater	Total organic carbon (TOC) (as total C or COD/3)	n/a	24 hour	All values < ELV	mg/L	average 3.46	n/a	n/a	0	Proposed trigger limits for Stormwater submitted to Agency (BMS Ref BA/19/EPA622). Currently penstock alarms in place which close penstocks at pH <6.5, >8.5, TOC 45mg/l and Conductivity 1450µS/cm
SW1	Stormwater	pH	na	24 hour	All values < ELV	pH units	average 7.96	n/a	n/a	0	
SW1	Stormwater	Conductivity	na	24 hour	All values < ELV	µS/cm@25oC	average 1224	n/a	n/a	0	
SW3	Stormwater	Total organic carbon (TOC) (as total C or COD/3)	n/a	24 hour	All values < ELV	mg/L	average 1.93	n/a	n/a	0	
SW3	Stormwater	pH	na	24 hour	All values < ELV	pH units	average 7.44	n/a	n/a	0	
SW3	Stormwater	Conductivity	na	24 hour	All values < ELV	µS/cm@25oC	average 515	n/a	n/a	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?
N/a						SELECT	

*Measures taken or proposed to reduce or limit bypass frequency

Bond/Pipeline testing template			LC No.	P0512-03	Year	2018
--------------------------------	--	--	--------	----------	------	------

Bond testing		dropdown menu click to see options		Additional information										
Are you required by your licence to undertake integrity testing on bunds and containment structures? If yes please fill out table B1 below listing all new bunds and containment structures on site, in addition to all bunds which failed the integrity test at all bunding structures which failed including mobile bunds must be listed in the table below. Please include all bunds outside the licensed testing period (mobile bunds and chemistry included)														
1 Please provide integrity testing frequency period														
Does the site maintain a register of bunds, underground pipelines (including stormwater and foul), tanks, sumps and containers? (containers refer to "Chemotons" type units and mobile bunds)														
4 How many bunds are on site?														
5 How many of these bunds have been tested within the required test schedule?														
6 How many mobile bunds are on site?														
7 Are the mobile bunds included in the bund test schedule?														
8 How many of these mobile bunds have been tested within the required test schedule?														
9 How many sumps on site are included in the integrity test schedule?														
10 How many of these sumps are integrity tested within the test schedule?														
Please list any sump integrity failures in table B1														
11 Do all sumps and chambers have high level float alarms?														
12 If yes to Q11 are these failure systems included in a maintenance and testing programme?														
13 Is the fire water retention pond included in your integrity test programme?														
Table B1: Summary details of bund/containment structure integrity test														
Bund/Containment structure ID	Type	Specify Other type	Product contained	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
400-800-001	reinforced concrete		liquid	75m ³	44m ³	Hydraulic test		09/02/2018	Yes	Pass			08/02/2021	
400-800-002	reinforced concrete		liquid	7.85m ³		Hydraulic test		09/02/2018	Yes	Pass			08/02/2021	
400-800-003	reinforced concrete		liquid	2.3m ³		Structural assessment		14/02/2018	Yes	Fail	The electrical duct in this base on control ducts		14/02/2021	
400-800-004	reinforced concrete		liquid	6.4m ³		Hydraulic test		13/02/2018	Yes	Pass			13/02/2021	
400-800-005	reinforced concrete		liquid	0.7m ³		Hydraulic test		09/02/2018	Yes	Pass			08/02/2021	
400-800-006	reinforced concrete		liquid	1.4m ³	1.3m ³	Hydraulic test		09/02/2018	Yes	Pass			08/02/2021	
400-800-007	reinforced concrete		Process wastewater	45m ³		Hydraulic test		20/02/2018	Yes	Pass			19/02/2021	
400-800-008	reinforced concrete		Process wastewater	27m ³	24m ³	Hydraulic test		21/02/2018	Yes	Pass			20/02/2021	
400-800-009	reinforced concrete		Process wastewater	60m ³		Hydraulic test		09/02/2018	Yes	Pass			08/02/2021	
400-800-010	reinforced concrete		Process wastewater	21m ³		Hydraulic test		20/02/2018	Yes	Pass			19/02/2021	
400-800-011	reinforced concrete		Coating tower discharging chemical	13.00m ³	12.00m ³	Structural assessment		13/02/2018	Yes	Fail	Valves draining the internal bund valves repaired		13/02/2021	
400-800-012	reinforced concrete		Process wastewater	48m ³		Hydraulic test		11/02/2018	Yes	Pass			11/02/2021	
400-800-013	reinforced concrete		Process wastewater	4m ³		Other (please specify)		11/02/2018	Yes	Fail	Valves draining the internal bund valves repaired		13/02/2021	
400-800-014	reinforced concrete		CP100/Sodium Hydroxide	135m ³	79m ³	Hydraulic test		27/02/2018	Yes	Pass			27/02/2021	
400-800-015	reinforced concrete		CP100/Sodium Hydroxide	82m ³	79m ³	Hydraulic test		27/02/2018	Yes	Pass			27/02/2021	
400-800-016	reinforced concrete		Process wastewater	20m ³	20m ³	Structural assessment		04/03/2017	Yes	Pass			04/03/2020	
400-800-017	reinforced concrete		Process wastewater	110m ³	61.3m ³	Structural assessment		17/05/2016	Yes	Pass			16/05/2019	
400-800-018	reinforced concrete		Process wastewater	60m ³	51.1m ³	Hydraulic test		19/04/2016	Yes	Pass			05/04/2020	
400-800-019	reinforced concrete		Process wastewater	1.1m ³	1.1m ³	Structural assessment		14/02/2016	Yes	Pass			20/02/2019	
400-800-020	reinforced concrete		Sulphuric acid	90m ³	88m ³	Hydraulic test		14/02/2016	Yes	Pass			13/02/2019	
400-800-021	reinforced concrete		Sulphuric acid	88m ³	88m ³	Hydraulic test		14/02/2016	Yes	Pass			13/02/2019	
400-800-022	reinforced concrete		Sulphuric acid/Sodium Hydroxide	170m ³	88m ³	Hydraulic test		01/02/2016	Yes	Pass			31/08/2019	
400-800-023	reinforced concrete		Sulphuric acid/Sodium Hydroxide	open bund		Hydraulic test		14/02/2016	Yes	Pass			04/03/2019	
400-800-024	reinforced concrete		Sulphuric acid	3.1m ³	2.14m ³	Hydraulic test		09/02/2018	Yes	Pass			08/02/2021	
400-800-025	reinforced concrete		Sodium Hydroxide	3.1m ³	2.14m ³	Hydraulic test		09/02/2018	Yes	Pass			08/02/2021	
400-800-026	reinforced concrete		lime	3.1m ³	2.14m ³	Hydraulic test		09/02/2018	Yes	Pass			08/02/2021	
400-800-027	reinforced concrete		algalgal	35m ³	25m ³	Hydraulic test		08/02/2018	Yes	Fail	A concrete crack across beam in wall (Repaired crack)		26/02/2021	
400-800-028	reinforced concrete		liquid	1.00m ³	0.79m ³	Hydraulic test		17/08/2017	Yes	Pass			04/03/2021	
400-800-029	reinforced concrete		liquid	1.00m ³	0.79m ³	Hydraulic test		22/08/2018	Yes	Pass			11/02/2021	
400-800-030	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-031	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-032	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-033	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-034	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-035	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-036	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-037	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-038	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-039	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-040	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-041	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-042	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-043	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-044	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-045	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-046	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-047	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-048	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-049	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-050	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-051	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-052	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-053	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-054	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-055	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-056	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-057	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-058	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-059	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-060	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-061	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-062	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-063	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-064	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-065	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-066	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-067	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-068	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-069	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-070	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-071	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-072	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-073	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-074	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-075	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-076	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-077	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-078	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-079	reinforced concrete		liquid	2.4m ³	2.4m ³	Hydraulic test		22/02/2018	Yes	Pass			22/02/2021	
400-800-080	reinforced concrete		liquid	2.4m ³										

Groundwater/Soil monitoring template	Lic No:	P0552-03	Year	2018
---	---------	----------	------	------

Comments		
1 Are you required to carry out groundwater monitoring as part of your licence requirements?	yes	
2 Are you required to carry out soil monitoring as part of your licence requirements?	yes	once every ten years
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.	no	
5 Is the contamination related to operations at the facility (either current and/or historic)	N/A	
6 Have actions been taken to address contamination issues? If yes please summarise remediation strategies proposed/undertaken for the site	N/A	
7 Please specify the proposed time frame for the remediation strategy	N/A	
8 Is there a licence condition to carry out/update ELRA for the site?	N/A	
9 Has any type of risk 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	

Please provide an interpretation of groundwater monitoring data in the interpretation box below or if you require additional space please include a groundwater/contaminated land monitoring results interpretaion as an additional section in this AER

Average conductivity levels decreased at GW01, GW02 GW04, GW09, GW07, MW02 and MW06 compared to 2017 values. Conductivity at upgradient monitoring point MW04 was slightly above the GTV however this relates to background levels and therefore not caused by site activities. Overall results from the new upgradient wells indicated simliar results to the down gradient wells confirming no contamination from site activities

Table 1: Upgradient Groundwater monitoring results

Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration++	Average Concentration+	unit	GTV's*	IGV	Upward trend in pollutant concentration over last 5 years of monitoring data
2018	MW04	Ammonical Ni	Standard metho	Biannual	0.168	0.090	mg/l	0.175	0.15	data not available
2018	MW04	Chloride	Standard metho	Biannual	519.190	463.741	mg/l	187.5	30	data not available
2018	MW04	COD	Standard metho	Biannual	63	46.000	mg/l	na	na	data not available
2018	MW04	Conductivity	Based on APHA	Biannual	2470.0	2299.500	uS/cm	800-1875	1000	data not available
2018	MW04	Fluoride	Standard metho	Biannual	0.1	0.100	mg/l	na	1	data not available
2018	MW04	Total N	Standard metho	Biannual	9.820	8.625	mg/l	na	na	data not available
2018	MW04	Nitrates	Standard metho	Biannual	2.799	2.400	mg/l	37.5	25	data not available
2018	MW04	pH	Based on APHA	Biannual	6.97	6.900	ph units	na	6.5-9.5	data not available
2018	MW05	Ammonical Ni	Standard metho	Biannual	0.093	0.062	mg/l	0.175	0.15	data not available
2018	MW05	Chloride	Standard metho	Biannual	241.056	278.079	mg/l	187.5	30	data not available
2018	MW05	COD	Standard metho	Biannual	131	124.500	mg/l	na	na	data not available
2018	MW05	Conductivity	Based on APHA	Biannual	1738.0	1627.500	uS/cm	800-1875	1000	data not available
2018	MW05	Fluoride	Standard metho	Biannual	0.3	0.250	mg/l	na	1	data not available
2018	MW05	Total N	Standard metho	Biannual	6.060	5.375	mg/l	na	na	data not available
2018	MW05	Nitrates	Standard metho	Biannual	< 2.000	< 2.000	mg/l	37.5	25	data not available
2018	MW05	pH	Based on APHA	Biannual	7.13	7.110	ph units	na	6.5-9.5	data not available
2018	MW06	Ammonical Ni	Standard metho	Biannual	0.108	0.072	mg/l	0.175	0.15	data not available

Groundwater/Soil monitoring template					Lic No:	P0552-03	Year	2018			
	2018	MW06	Chloride	Standard metho	Biannual	231.673	139.318	mg/l	187.5	30	data not available
	2018	MW06	COD	Standard metho	Biannual	144	89.500	mg/l	na	na	data not available
	2018	MW06	Conductivity	Based on APHA	Biannual	1539.0	1248.500	uS/cm	800-1875	1000	data not available
	2018	MW06	Fluoride	Standard metho	Biannual	0.2	0.150	mg/l	na	1	data not available
	2018	MW06	Total N	Standard metho	Biannual	4.020	3.475	mg/l	na	na	data not available
	2018	MW06	Nitrates	Standard metho	Biannual	< 2.000	< 2.000	mg/l	37.5	25	data not available
	2018	MW06	pH	Based on APHA	Biannual	6.93	6.845	ph units	na	6.5-9.5	data not available

.+ where average indicates arithmetic mean

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

Table 2: Downgradient Groundwater monitoring results

Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration	Average Concentration	unit	GTV's*	IGV	Upward trend in yearly average pollutant concentration over last 5 years of monitoring data
2018	GW01	Ammonical Ni	Standard metho	Biannual	0.847	0.847	mg/l	0.175	0.15	data not available
2018	GW01	Chloride	Standard metho	Biannual	49.647	49.647	mg/l	187.5	30	no
2018	GW01	COD	Standard metho	Biannual	127	127	mg/l	na	na	no
2018	GW01	Conductivity	Based on APHA	Biannual	1450.0	1450.0	uS/cm	800-1875	1000	data not available
2018	GW01	Fluoride	Standard metho	Biannual	0.2	0.2	mg/l	na	1	data not available
2018	GW01	Total N	Standard metho	Biannual	16.170	16.170	mg/l	na	na	data not available
2018	GW01	Nitrates	Standard metho	Biannual	< 2.000	< 2.000	mg/l	37.5	25	data not available
2018	GW01	pH	Based on APHA	Biannual	6.86	6.86	ph units	na	6.5-9.5	no
2018	GW02	Ammonical Ni	Standard metho	Biannual	< 0.012	0.012	mg/l	0.175	0.15	data not available
2018	GW02	Chloride	Standard metho	Biannual	84.985	84.991	mg/l	187.5	30	no
2018	GW02	COD	Standard metho	Biannual	20	19	mg/l	na	na	no
2018	GW02	Conductivity	Based on APHA	Biannual	999.0	966.0	uS/cm	800-1875	1000	data not available
2018	GW02	Fluoride	Standard metho	Biannual	0.1	0.1	mg/l	na	1	data not available
2018	GW02	Total N	Standard metho	Biannual	4.580	3.770	mg/l	na	na	data not available
2018	GW02	Nitrates	Standard metho	Biannual	2.017	2.009	mg/l	37.5	25	data not available
2018	GW02	pH	Based on APHA	Biannual	7.62	6.97	ph units	na	6.5-9.5	no
2018	GW04	Ammonical Ni	Standard metho	Biannual	0.067	0.040	mg/l	0.175	0.15	data not available
2018	GW04	Chloride	Standard metho	Biannual	25.121	18.830	mg/l	187.5	30	no
2018	GW04	COD	Standard metho	Biannual	46	46	mg/l	na	na	no
2018	GW04	Conductivity	Based on APHA	Biannual	820.0	782.5	uS/cm	800-1875	1000	data not available
2018	GW04	Fluoride	Standard metho	Biannual	0.2	0.2	mg/l	na	1	data not available
2018	GW04	Total N	Standard metho	Biannual	4.780	4.780	mg/l	na	na	data not available
2018	GW04	Nitrates	Standard metho	Biannual	< 2.000	< 2.000	mg/l	37.5	25	data not available
2018	GW04	pH	Based on APHA	Biannual	7.02	6.98	ph units	na	6.5-9.5	no
2018	GW07	Ammonical Ni	Standard metho	Biannual	< 0.012	0.012	mg/l	0.175	0.15	data not available
2018	GW07	Chloride	Standard metho	Biannual	381.366	236.307	mg/l	187.5	30	no
2018	GW07	COD	Standard metho	Biannual	23	18	mg/l	na	na	no
2018	GW07	Conductivity	Based on APHA	Biannual	1735.0	1300.5	uS/cm	800-1875	1000	data not available
2018	GW07	Fluoride	Standard metho	Biannual	0.2	0.2	mg/l	na	1	data not available
2018	GW07	Total N	Standard metho	Biannual	7.280	6.990	mg/l	na	na	data not available
2018	GW07	Nitrates	Standard metho	Biannual	5.575	5.384	mg/l	37.5	25	data not available
2018	GW07	pH	Based on APHA	Biannual	7.36	7.30	ph units	na	6.5-9.5	no

Groundwater/Soil monitoring template					Lic No:	P0552-03	Year	2018		
2018	GW09	Ammonical N	Standard metho	Biannual	< 1.210	0.611	mg/l	0.175	0.15	data not available
2018	GW09	Chloride	Standard metho	Biannual	91.231	59.039	mg/l	187.5	30	no
2018	GW09	COD	Standard metho	Biannual	65	38	mg/l	na	na	no
2018	GW09	Conductivity	Based on APHA	Biannual	753.0	667.5	uS/cm	800-1875	1000	data not available
2018	GW09	Fluoride	Standard metho	Biannual	0.2	0.2	mg/l	na	1	data not available
2018	GW09	Total N	Standard metho	Biannual	8.990	7.000	mg/l	na	na	data not available
2018	GW09	Nitrates	Standard metho	Biannual	5.490	4.737	mg/l	37.5	25	data not available
2018	GW09	pH	Based on APHA	Biannual	7.28	7.22	ph units	na	6.5-9.5	no
2018	MW02	Ammonical N	Standard metho	Biannual	0.054	0.033	mg/l	0.175	0.15	data not available
2018	MW02	Chloride	Standard metho	Biannual	135.041	128.395	mg/l	187.5	30	data not available
2018	MW02	COD	Standard metho	Biannual	69	50	mg/l	na	na	data not available
2018	MW02	Conductivity	Based on APHA	Biannual	1208.0	1179.5	uS/cm	800-1875	1000	data not available
2018	MW02	Fluoride	Standard metho	Biannual	0.3	0.3	mg/l	na	1	data not available
2018	MW02	Total N	Standard metho	Biannual	7.800	5.255	mg/l	na	na	data not available
2018	MW02	Nitrates	Standard metho	Biannual	2.872	2.872	mg/l	37.5	25	data not available
2018	MW02	pH	Based on APHA	Biannual	7.11	7.06	ph units	na	6.5-9.5	data not available
2018	MW07	Ammonical N	Standard metho	Biannual	0.065	0.065	mg/l	0.175	0.15	data not available
2018	MW07	Chloride	Standard metho	Biannual	397.423	355.850	mg/l	187.5	30	data not available
2018	MW07	COD	Standard metho	Biannual	144	110	mg/l	na	na	data not available
2018	MW07	Conductivity	Based on APHA	Biannual	1774.0	1701.5	uS/cm	800-1875	1000	data not available
2018	MW07	Fluoride	Standard metho	Biannual	0.3	0.3	mg/l	na	1	data not available
2018	MW07	Total N	Standard metho	Biannual	5.370	5.250	mg/l	na	na	data not available
2018	MW07	Nitrates	Standard metho	Biannual	< 2.000	< 2.000	mg/l	37.5	25	data not available
2018	MW07	pH	Based on APHA	Biannual	7.08	7.06	ph units	na	6.5-9.5	data not available
<p>*please note exceedance of generic assessment criteria (GAC) such as a Groundwater Threshold Value (GTV) or an Interim Guideline Value (IGV) or an upward trend in results for a substance indicates that further interpretation of monitoring results is required. In addition to completing the above table, please complete the Groundwater Monitoring Guideline Template Report at the link provided and submit separately through ALDER as a licensee return or as otherwise instructed by the EPA.</p> <p>More information on the use of soil and groundwater standards/ generic assessment criteria (GAC) and risk assessment tools is available in the EPA published guidance (see the link in G31)</p>										
<p>**Depending on location of the site and proximity to other sensitive receptors alternative Receptor based Water Quality standards should be used in addition to the GTV e.g. if the site is close to surface water compare to Surface Water Environmental Quality Standards (SWEQS). If the site is close to a drinking water supply compare results to the Drinking Water Standards (DWS)</p>										

[Groundwater monitoring template](#)
[Guidance on the Management of Contaminated Land and Groundwater at EPA Licensed Sites \(EPA 2013\).](#)
[Groundwater regulations](#) [Drinking water \(private supply\) standards](#) [Drinking water \(public supply\) standards](#) [Interim Guideline Values \(IGV\)](#)

Groundwater/Soil monitoring template	Lic No: P0552-03	Year 2018
--------------------------------------	------------------	-----------

Table 3: Soil results

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

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

For inspection purposes only.
Consent of copyright owner required for any other use.

Environmental Liabilities template		Lic No:	P0552-03	Year	2018
------------------------------------	--	---------	----------	------	------

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

		Commentary	
1	ELRA initial agreement status	Submitted and not agreed by EPA;	Revised ELRA (report ref RH/15/8558WR02) submitted to the Agency for review on 20 Nov 2017 The
2	ELRA review status	Review required and completed	Submitted for review
3	Amount of Financial Provision cover required as determined by the latest ELRA	Specify	As included in submitted ELRA
4	Financial Provision for ELRA status	Submitted and not agreed by EPA;	Submitted for review
5	Financial Provision for ELRA - amount of cover	As required	
6	Financial Provision for ELRA - type	Other please specify	Parent Company Gaurantee (Proposed)
7	Financial provision for ELRA expiry date	N/A	No expiry date on ELRA
8	Closure plan initial agreement status	Closure plan submitted on 20Nov2017 and not agreed	No expiry date on ELRA
9	Closure plan review status	Review required and not completed	Under the revised IED
10	Financial Provision for Closure status	Submitted and not agreed by EPA;	Submitted for review
11	Financial Provision for Closure - amount of cover	Specify	As included in submitted CRAMP
12	Financial Provision for Closure - type	Other please specify	Parent Company Gaurantee (Proposed)
13	Financial provision for Closure expiry date	N/A	No expiry date on CRAMP

Environmental Management Programme/Continuous Improvement Programme template				Lic No:	P0552-03	Year	2018
--	--	--	--	---------	----------	------	------

Highlighted cells contain dropdown menu click to view		Additional Information	
1	Do you maintain an Environmental Mangement System (EMS) for the site. If yes, please detail in additional information	Yes	The EMS is currently being updated to reflect the new Biologics manufacturing activities
2	Does the EMS reference the most significant environmental aspects and associated impacts on-site	Yes	SOP-00496 Environmental Impacts and Aspects in place
3	Does the EMS maintain an Environmental Management Programme (EMP) as required in accordance with the licence requirements	Yes	Environmental objectives and targets included zero non-compliances and zero reportable incidents to the EPA. Objectives for energy consummmption, waste generated, material use etc. could not be established as the site was still under construction in the 2018. Data collected from 2018 will however be used for baseline figures when establishing objectives and targets going forward.
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	EHS Manual POL-00023 outlines communication system and procedures

Environmental Management Programme (EMP) report

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

For inspection purposes only.
Consent of copyright owner required for any other use.

- Yes

- Yes

- | |
|----|
| No |
|----|

- | |
|------------|
| Enter date |
|------------|

- Yes

Table N1: Noise monitoring summary	

	survey.		Yes
			Yes
	The most dominant source of noise at this point as aircraft activity from Dublin airport. There was high noise levels also from the R121. Cars entering and exiting the car park also contributed to the noise levels. There was also bird activity in the area, during this time, BMS was not audible at this location at any stage during the survey.	Yes	
	The main source of noise as aircraft activity from Dublin airport. There was high noise levels also from the R121. Cars entering and exiting the car park also contributed to the noise levels. People were also recorded talking during the noise	Yes	

18-Dec-18	13:37	offsite	NSL2	80	54	62	80	No	n/a		Yes
18-Dec-18	21:19	offsite	NSL2	55	51	57	80	No	n/a	The main source of noise again was traffic on the R121. Planes could also be heard during the evening time. People were recorded talking near the noise for a time. BMS was not audible at this location at any stage during the survey.	Yes
19-Dec-18	23:43	offsite	NSL2	58	55	59	80	No	n/a	The most dominant source of noise again was the traffic on the R121. Planes could be also be heard during the night time. A dog was heard barking in the distance for a time. BMS was not audible at this location at any stage during the survey.	Yes
19-Dec-18	23:58	offsite	NSL2	58	55	59	85	No	n/a	The main source at this point was traffic on the R121. Planes could be heard also flying overhead. Cars entering and exiting the car park contributed to the noise levels during the daytime. BMS was not audible at this location at any stage during the survey.	Yes
18-Dec-18	14:55	offsite	NSL3	65	56	68	87	No	n/a	The main source of noise was planes flying overhead from Dublin airport. There was also high noise levels from traffic on the Ballycoolin Road. BMS was not audible at this location at any stage during the survey.	Yes
18-Dec-18	15:25	offsite	NSL3	62	55	65	81	No	n/a		Yes
18-Dec-18	15:55	offsite	NSL3	65	55	65	103	No	n/a		Yes
18-Dec-18	20:26	offsite	NSL3	64	56	67	86	No	n/a	The main source of noise was planes flying overhead from Dublin airport. There was also high noise levels from traffic on the Ballycoolin Road. A dog was recorded barking in the distance. BMS was not audible at this location at any stage during the survey.	Yes
19-Dec-18	00:26	offsite	NSL3	62	55	60	98	No	n/a	The main source of noise was planes flying overhead from Dublin airport. There was also high noise levels from traffic on the Ballycoolin Road. Birds were heard in the area for a time. BMS was not audible at this location at any stage during the survey.	Yes
19-Dec-18	00:41	offsite	NSL3	59	55	60	88	No	n/a		Yes

*Please ensure that a tonal analysis has been carried out as per guidance note NG4. These records must be maintained onsite for future inspection

If noise limits exceeded as a result of noise attributed to site activities, please choose the corrective action from the following options?

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:	P0552-03	Year	2018
--	---------	----------	------	------

- 1 When did the site carry out the most recent energy efficiency audit? Please list the recommendations in table 3 below
- 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
- 2 Where Fuel Oil is used in boilers on site is the sulphur content compliant with licence conditions? Please state percentage in additional information
- 3

Additional information

Not applicable	As the facility only completed construction and commenced licenced a
Not applicable	
Yes	EN590 used for boilers and backup

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)	31,234.25	66,937.27	>100	N/A
Total Energy Generated (MWHrs)	N/A	N/A	N/A	N/A
Total Renewable Energy Generated (MWHrs)	N/A	N/A	N/A	N/A
Electricity Consumption (MWHrs)	14,109.06	24,029.92	>100	N/A
Fossil Fuels Consumption:				
Heavy Fuel Oil (m3)	N/A	N/A	N/A	N/A
Light Fuel Oil (m3)	10.15	47.57	>100	N/A
Natural gas (m3)	1,590,770	3,951,367	>100	N/A
Coal/Solid fuel (metric tonnes)	N/A	N/A	N/A	N/A
Peat (metric tonnes)	N/A	N/A	N/A	N/A
Renewable Biomass	N/A	N/A	N/A	N/A
Renewable energy generated on site	N/A	N/A	N/A	N/A

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

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

Table R2 Water usage on site					Water Emissions	Water Consumption	
Water use	Water extracted Previous year m3/yr.	Water extracted Current year m3/yr.	Production +/- % compared to previous reporting year**	Energy Consumption +/- % vs overall site production*	Volume Discharged back to environment(m ³ /yr):	Volume used i.e not discharged to environment e.g. released as steam m3/yr	Unaccounted for Water:
Groundwater	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Surface water	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Public supply	112,522	355,153	>100	N/A	not available	not available	not available
Recycled water	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	112,522	355,153	>100	N/A	not available	not available	not available

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

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

Table R3 Waste Stream Summary					
	Total	Landfill	Incineration	Recycled	Other
Hazardous (Tonnes)	80.25	0.00	69.41	10.84	
Non-Hazardous (Tonnes)	364.80	0.00	181.01	183.80	

Resource Usage/Energy efficiency summary	Lic No:	P0552-03	Year	2018
---	---------	----------	------	------

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
N/a			SELECT					
			SELECT					
			SELECT					

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

	Unit ID	Unit ID	Unit ID	Unit ID	Station Total
Technology	N/a				
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					

For inspection purposes only.
Consent of copyright owner required for any other use.

Complaints and Incidents summary template		Lic No:	P0552-03	Year	2018
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
N/a	SELECT				SELECT		
Total complaints open at start of reporting year	n/a						
Total new complaints received during reporting year	n/a						
Total complaints closed during reporting year	n/a						
Balance of complaints end of reporting year	n/a						

Incidents	
Have any incidents occurred on site in the current reporting year? Please list all incidents for current reporting year in Table 2 below	
Yes	
*For information on how to report and what constitutes an incident	What is an incident

Table 2 Incidents summary														
Date of occurrence	Incident nature	Location of occurrence	Incident category*please refer to guidance	Receptor	Cause of incident	Other cause (please specify)	Activity in progress at time of incident	Communication	Occurrence	Corrective action<20 words	Preventative action <20 words	Resolution status	Resolution date	Likelihood of reoccurrence
28.12.2018	Monitoring equipment offline	Licenced discharge point (type in reference here)	1. Minor	Sewer	Plant or equipment issues		Normal activities	EPA	New	Faulty solenoid on TOC analyser was removed and cleaned by the Environmental Service Technician. The composite sampler for W1 was fully operational during the period in question and samples confirmed TOC was 19 mg/land 18.26mg/l on the 29 and 30 Dec 2018 respectively	New filter for the solenoid valve installed. Additional service of the sample line to take place	Complete	30.12.2018	Low
Total number of incidents current year	1													

Complaints and Incidents summary template		Lic No:	P0552-03	Year	2018
Total number of incidents previous year					0
% reduction/increase					100

For inspection purposes only.
Consent of copyright owner required for any other use.

WASTE SUMMARY	Lic No:	P0552-03	Year	2018
----------------------	---------	----------	------	------

SECTION A- WASTE MANAGEENT RECORD FOR WASTE TRANSFERRED OFF SITE

Please insert details of waste transferred off site in the adjoining Waste Management Record tab.

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

Additional Information

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 **1 to be captured through PRTR reporting**)

N/A

If yes please enter details in table 1 below

2 Did your site have any rejected consignments of waste in the current reporting year? If yes please give a brief explanation in the additional information

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)

Licensed annual tonnage limit for your site (total tonnes/annum)	EWG code European Waste Catalogue EWG codes	Source of waste accepted	Description of waste accepted Please enter an accurate and detailed description - which applies to relevant EWG code European Waste Catalogue EWG codes	Quantity of waste accepted in current reporting year (tonnes)	Quantity of waste accepted in previous reporting year (tonnes)	Reduction/ increase over previous year +/- %	Reason for reduction/ increase from previous reporting year	Packaging Content (%) only applies if the waste has a packaging component	Disposal/Recovery or treatment operation carried out at your site and the description of this operation	Quantity of waste remaining on site at the end of reporting year (tonnes)	Comments -
n/a											

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 on site

N/A

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

N/A

6 Does your facility have relevant nuisance controls in place?

N/A

7 Do you have an odour management system in place for your facility? If no why?

N/A

8 Do you maintain a sludge register on site?

N/A

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
N/a				

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 SELECT UNIT	Lined disposal area occupied by waste SELECT UNIT	Unlined area SELECT UNIT
Cell 8												

WASTE SUMMARY	Lic No:	P0552-03	Year	2018
----------------------	---------	----------	------	------

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

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

+.+ please refer to Landfill Manual linked above for relevant Landfill Directive monitoring standards

Table 5 Capping-Landfill only

Area uncapped*	Area with temporary cap	Area with final cap to LD Standard m2 ha, a	Area capped other	Area with waste that should be permanently capped to date under licence	What materials are used in the cap	Comments
SELECT UNIT	SELECT UNIT					

*please note this includes daily cover area

Table 6 Leachate-Landfill only

9 Is leachate from your site treated in a Waste Water Treatment Plant?

SELECT
SELECT

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

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	

For inspection purposes only.
Consent of copyright owner required for any other use.

Waste Summary Continued

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

European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility <u>Non Haz Waste:</u> Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility <u>Non Haz Waste:</u> 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)
06 01 01	Yes	0.167	sulphuric acid	R2	Abroad	Indaver Ireland, W0036-02	Tolka Road, Dublin 1	Indaver NV,MLAVI/980000 0485,,,,,,Belgium	Indaver NV,Polderslietwegs,Haven 550-2030,Atnwerpen,Belgium
06 01 02	Yes	0.11	hydrochloric acid	R2	Abroad	Indaver Ireland, W0036-02	Tolka Road, Dublin 1	Indaver NV,MLAVI/980000 0485,,,,,,Belgium	Indaver NV,Polderslietwegs,Haven 550-2030,Atnwerpen,Belgium
06 01 04	Yes	0.349	phosphoric acid	R2	Abroad	Indaver Ireland, W0036-02	Tolka Road, Dublin 1	Indaver NV,MLAVI/980000 0485,,,,,,Belgium	Indaver NV,Polderslietwegs,Haven 550-2030,Atnwerpen,Belgium
06 01 06	Yes	0.03	other acids	R2	Abroad	Indaver Ireland, W0036-02	Tolka Road, Dublin 1	Indaver NV,MLAVI/980000 0485,,,,,,Belgium	Indaver NV,Polderslietwegs,Haven 550-2030,Atnwerpen,Belgium
06 02 04	Yes	0.121	sodium and potassium hydroxide	R2	Abroad	Indaver Ireland, W0036-02	Tolka Road, Dublin 1	Indaver NV,MLAVI/980000 0485,,,,,,Belgium	Indaver NV,Polderslietwegs,Haven 550-2030,Atnwerpen,Belgium
07 05 01	Yes	0.092	aqueous washing liquids and mother liquors	R2	Offsite in Ire	Indaver Ireland, W0036-02	Tolka Road, Dublin 1	Indaver NV,MLAVI/980000 0485,,,,,,Belgium	Indaver NV,Polderslietwegs,Haven 550-2030,Atnwerpen,Belgium
07 05 04	Yes	1.024	other organic solvents, washing liquids and mother liquors	R2	Abroad	Indaver Ireland, W0036-02	Tolka Road, Dublin 1	Indaver NV,MLAVI/980000 0485,,,,,,Belgium	Indaver NV,Polderslietwegs,Haven 550-2030,Atnwerpen,Belgium
07 05 04	Yes	1.624	other organic solvents, washing liquids and mother liquors	R1	Offsite in Ire	Indaver Ireland, W0036-02	Tolka Road, Dublin 1		
07 05 12	no	31.42	WWTP Sludge	R1	Offsite in Ire	Indaver Ireland , W0167-03	Carranstown, Duleek, Co. Meath		
07 05 13	Yes	49.841	solid waste containing hazardsou	R1	Offsite in Ire	Indaver Ireland , W0167-03	Carranstown, Duleek, Co. Meath		
13 07 01		0.388	fuel oil and diesel	R2	Abroad	Indaver Ireland, W0036-02	Tolka Road, Dublin 1	AVG Abfall Verwertungs Gesellsch IB2234/AVG-GenB	Borgisstrasse 2, 22113 Hamburg, Germany

15 01 01	No	17.186	paper and cardboard packaging	R13	Offsite in Ire	Greenstar Recycling (MRF Millenium Park),W0183-01	Cappagh Road,Ballycoolin,Dublin ,15,Ireland		
15 01 02	No	5.06	plastic packaging	R13	Offsite in Ire	Leinster Recycling WFP-DC-11-0025-02	Clermont Business Park, Dundalk, Co. Louth		
15 01 02	No	2.698	plastic packaging	R13	Offsite in Ire	Greenstar Recycling (MRF Millenium Park),W0183-01	Cappagh Road,Ballycoolin,Dublin ,15,Ireland		
15 01 03	No	22.788	wooden packaging	R13	Offsite in Ire	Nurendale Ltd,W0261-02	Cappagh Road,Finglas,Dublin ,11,Ireland		
15 01 05	No	0.6	composite packaging	R3	Offsite in Ire	Rilta Environmental W0192-03	Block 402, Greenogue Bus. Park, Rathcoole		
15 01 07	No	4.757	glass packaging	R5	Offsite in Ire	Glassco Recycling , WFP-KE-08-357-01	Osberstown Business Park,Carragh Road Unit,4 Naas ,County Kildare,Ireland		
15 01 10	Yes	0.202	packaging containing hazardous components	D10	Abroad	Indaver Ireland, W0036-02	Tolka Road, Dublin 1	Indaver NV,MLAVI/980000 0485,,,,,,Belgium	Indaver NV,Polderslietwegs,Haven 550-2030,Atnwerpen,Belgium
15 01 10	Yes	1.525	packaging containing hazardous	R1	Offsite in Ire	Indaver Ireland , W0167-03	Carranstown, Duleek, Co. Meath		
15 01 10	Yes	0.792	packaging containing hazardous	R3	Offsite in Ire	Rilta Environmental W0192-03	Block 402, Greenogue Bus. Park, Rathcoole		
15 02 02	Yes	0.37	absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02	D10	Abroad	Indaver Ireland, W0036-02	Tolka Road, Dublin 1	Indaver NV,MLAVI/980000 0485,,,,,,Belgium	Indaver NV,Polderslietwegs,Haven 550-2030,Atnwerpen,Belgium
16 02 13	Yes	0.791	Discarded equipment containing hazardous components other	R4	Offsite in Ire	KMK Metals Recycling,W0113-03	Cappincur Ind. Estate,Daingean Rd,Tullamore,Co.Offaly ,Ireland		
16 03 03	Yes	0.433	inorganic waste containing dangerous substances	D10	Abroad	Indaver Ireland, W0036-02	Tolka Road, Dublin 1	Indaver NV,MLAVI/980000 0485,,,,,,Belgium	Indaver NV,Polderslietwegs,Haven 550-2030,Atnwerpen,Belgium
16 03 05	Yes	0.887	organic waste containing dangerous substances	D10	Abroad	Indaver Ireland, W0036-02	Tolka Road, Dublin 1	Indaver NV,MLAVI/980000 0485,,,,,,Belgium	Indaver NV,Polderslietwegs,Haven 550-2030,Atnwerpen,Belgium
16 03 06	No	0.22	organic waste other than those mentioned in 16 03	R1	Offsite in Ire	Indaver Ireland , W0167-03	Carranstown, Duleek, Co. Meath		

16 05 06	Yes	1.035	laboratory chemicals consisting of or containing soil and stones	D10	Abroad	Indaver Ireland, W0036-02	Tolka Road, Dublin 1	Indaver NV,MLAVI/980000 0485,,,,,,Belgium	Indaver NV,Polderslietwegs,Haven 550-2030,Atnwerpen,Belgium
17 05 03	Yes	0.117	containing dangerous substances	D10	Abroad	Indaver Ireland, W0036-02	Tolka Road, Dublin 1	Indaver NV,MLAVI/980000 0485,,,,,,Belgium	Indaver NV,Polderslietwegs,Haven 550-2030,Atnwerpen,Belgium
18 01 03	Yes	0.38	wastes whose collection and disposal is subject to special requirements in order to prevent infection	D10	Offsite in Ire	SRCL Ltd,W0054-02	Unit 1 A Allied Industrial Estate Kylemore Road Ballyfermot ,Ballyfermot,Dublin 10,,Ireland	AGR mbH,E56252039,Im Emscherbruch 11,45699 Herten,,,,Germany	Im Emscherbruch 11,45699 Herten,,,,Germany
18 01 03	Yes	11.37	wastes whose collection and disposal is subject to special requirements in order to prevent infection	D10	Offsite in Ire	SRCL Ltd,W0054-02	Unit 1 A Allied Industrial Estate Kylemore Road Ballyfermot ,Ballyfermot,Dublin 10,,Ireland	Indaver NV,MLAVI/980000 0485,,,,,,Belgium	Indaver NV,Polderslietwegs,Haven 550-2030,Atnwerpen,Belgium
18 01 03	Yes	0.97	wastes whose collection and disposal is subject to special requirements in order to prevent infection	D10	Abroad	SRCL Ltd,W0054-02	Unit 1 A Allied Industrial Estate Kylemore Road Ballyfermot ,Ballyfermot,Dublin 10,,Ireland	Thermische,E36321 12,Rodenkirchener Strasse,D50389,Wesseling,,Germany	Rodenkirchener Strasse,D50389,Wesseling,,Germany
18 01 03	Yes	7.63	wastes whose collection and disposal is subject to special requirements in order to prevent	R3	Offsite in Ire	SRCL Limited - W0055	Beech Road, Tallaght Dublin 24		
20 01 01	No	12.585	paper and cardboard	R13	Offsite in Ire	Rehab Enterprises Limited,WFP-DS-10-0008-03	Broomhill Road ,Unit 77,Tallaght,Dublin 24,Ireland		
20 01 08	No	37.215	biodegradable kitchen and canteen waste	R13	Offsite in Ire	Greenstar Recycling (MRF Millenium Park),W0183-01	Cappagh Road,Ballycoolin,Dublin ,15,Ireland		
20 01 25	No	4.1	edible oil and fat	R3	Offsite in Ire	Acorn Recycling Ltd,W0249-01	Ballybeg ,Littleton,Co.Tipperary,,Ireland		
20 01 38	No	15.42	wood other than that mentioned in 20 01 37	R13	Offsite in Ire	Greenstar Recycling (MRF Millenium Park),W0183-01	Cappagh Road,Ballycoolin,Dublin ,15,Ireland		
20 03 01	No	131.161	mixed municipal waste	R13	Offsite in Ire	Greenstar Recycling (MRF Millenium Park),W0183-01	Cappagh Road,Ballycoolin,Dublin ,15,Ireland		
20 03 01	No	18.76	mixed municipal waste (DMR)	R12	Offsite in Ire	Nurendale Ltd,W0261-02	Cappagh Road,Finglas,Dublin ,11,Ireland		
20 03 01	No	2.8	mixed municipal waste	R1	Offsite in Ire	Indaver Ireland , W0167-03	Carranstown, Duleek, Co. Meath		

20 03 01	No	42.628	mixed municipal waste (DMR)	R12	Offsite in Ire	Greenstar Recycling (MRF Millenium Park),W0183-01	Cappagh Road,Ballycoolin,Dublin ,15,Ireland		
20 03 07	No	15.408	bulky waste	R12	Offsite in Ire	Greenstar Recycling (MRF Millenium Park),W0183-01	Cappagh Road,Ballycoolin,Dublin ,15,Ireland		

For inspection purposes only.
Consent of copyright owner required for any other use.