

SELECT

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

[guidance document link](#)

cells that contain underlined text click to access relevant guidance documents for this section

Table heading *

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

Cells with red indicator in top right corner

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

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

Facility Information Summary	
AER Reporting Year	2017
Licence Register Number	P0791-02
Name of site	Arrabawn Co-operative Society Limited
Site Location	Stafford Street, Nenagh, Co. Tipperary
NACE Code	1051
Class/Classes of Activity	7.2.1
National Grid Reference (6E, 6 N)	187600E 178750N

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.**

Arrabawn Co-operative Society limited is a dairy processing installation located in Nenagh, Co. Tipperary. The plant operates on a 24 hour basis processing circa 300 million litres of milk per annum. Approximately 104 people are employed at the installation. The product range from the installation includes skim milk powder, whey powder products, casein and caseinate products and butter. The site is split in three sections, the office block, the processing plant and the wastewater treatment plant. Natural gas was installed to the boilers and HFO was removed from site in 2015. There was 1 official EPA complaint in 2017 on noise which arrabawn was not the source of based on a detailed independent investigation . The other 3 complaints were made locally to the company and were resolved quickly and to the satisfaction of the complainants. There was a pollution incident in July,2017 from SW2, the WWTP was in process of being upgraded and was fully commissioned from august 1 , 2018 with no further issues and the plant has capacity to deal with the daily loadings and unscheduled loadings to drain . During the upgrade of the WWTP there was an acid spill that did not result in damage to the environment but some contaminated soil had to be removed. There was also a diesel spill at the weighbridge entrance due to an incident with a delivery vehicle , this did not have a negative impact on the environment and since both incidents we have done spill training and increased the amount of spill kits on site.Odour control chemicals are available on site 24/7 in the event of an odour issue in the WWTP. In relation to the matter of night time noise at AN1 , a noise investigation is underway with Panther Environmental , this has involved investigation to identify the primary source and noise contour modelling for the site that will identify appropriate solutions.

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.

Alan Kelly	30th March 2017
Signature	Date
Group/Facility manager	
(or nominated, suitably qualified and experienced deputy)	

AIR-summary template	Lic No: P0791-02	Year: 2017
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Answer all questions and complete all tables where relevant

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

Yes	Additional information
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Periodic/Non-Continuous Monitoring

2 Are there any results in breach of licence requirements? If yes please provide brief details in the comment section of TableA1 below

Yes	
-----	--

3 Was all monitoring carried out in accordance with EPA guidance [Basic air monitoring checklist](#) note AG2 and using the basic air monitoring checklist? [AGN2](#)

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
A2-1	volumetric flow	Annual	10900	All 1-hour averages < ELV	16315	m3/hr	no (if no please enter details in comments box)	ISO 16911-1:2013		Repeated on 01/11/2017, result compliant at 9521 m3/hr
A2-4	volumetric flow	Annual	72150	All 1-hour averages < ELV	80137	m3/hr	no (if no please enter details in comments box)	ISO 16911-1:2013		Repeated on 01/11/2017, result compliant at 70599 m3/hr
	SELECT			SELECT		SELECT	SELECT	SELECT		
	SELECT			SELECT		SELECT	SELECT	SELECT		

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

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Continuous Monitoring		

4 Does your site carry out continuous air emissions monitoring?

If yes please review your continuous monitoring data and report the required fields below in Table A2 and compare it to its relevant Emission Limit Value (ELV)

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

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

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

Table A2: Summary of average emissions -continuous monitoring

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

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

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

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

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

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

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER) Lic No: P0791-02 Year 2017

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

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	Additional information
Yes	RW2 continues to be dry.

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
RW1	onsite	SELECT	BOD	28.02.2017	NA	SELECT	<2	mg/L	yes	
RW3	onsite	SELECT	BOD	28.02.2017	NA	SELECT	<2	mg/L	yes	
RW1	onsite	SELECT	BOD	03.05.2017	NA	SELECT	<2	mg/L	yes	
RW3	onsite	SELECT	BOD	03.05.2017	NA	SELECT	<2	mg/L	yes	
RW1	onsite	SELECT	BOD	22.09.2017	NA	SELECT	<2	mg/L	yes	
RW3	onsite	SELECT	BOD	22.09.2017	NA	SELECT	<2	mg/L	yes	
RW1	onsite	SELECT	BOD	09.11.2017	NA	SELECT	<2	mg/L	yes	
RW3	onsite	SELECT	BOD	09.11.2017	NA	SELECT	<2	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
			SELECT		
			SELECT		

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

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

Was all monitoring carried out in accordance with EPA guidance and checklists for Quality of Aqueous Monitoring Data Reported to the EPA? If no please detail what areas require improvement in additional information box

[External /Internal Lab Quality Assessment of results checklist](#)

Yes	Additional information
Yes	

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

Emission reference no:	Emission released to	Parameter/ SubstanceNote 1	Type of sample	Frequency of monitoring	Averaging period	ELV or trigger values in licence or any revision thereof ^{Note 2}	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence	Method of analysis	Procedural reference source	Procedural standard number	Annual mass load (kg)	Comments
SW2	Water	Ortho-phosphate (as P)	composite	Daily	24 hour	1	All values < ELV	6.11	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			02.03.2017
SW2	Water	Ortho-phosphate (as P)	composite	Daily	24 hour	1	All values < ELV	6.54	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			15.03.2017
SW2	Water	BOD	composite	Daily	24 hour	20	All values < ELV	216.0	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			13.04.2017
SW2	Water	BOD	composite	Daily	45 hour	20	All values < ELV	118.0	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			14.04.2017
SW2	Water	Suspended Solids	composite	Daily	24 hour	30	All values < ELV	61.0	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			14.04.2017
SW2	Water	Suspended Solids	composite	Daily	24 hour	30	All values < ELV	71.0	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			15.04.2017
SW2	Water	Suspended Solids	composite	Daily	24 hour	30	All values < ELV	52.0	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			16.04.2017
SW2	Water	Ammonia (as N)	composite	Daily	24 hour	1	All values < ELV	1.2	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			20.04.2017
SW2	Water	Ammonia (as N)	composite	Daily	24 hour	1	All values < ELV	1.6	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			21.04.2017
SW2	Water	Ammonia (as N)	composite	Daily	24 hour	1	All values < ELV	2.1	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			22.04.2017
SW2	Water	Suspended Solids	composite	Daily	24 hour	30	All values < ELV	31.0	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			22.04.2017
SW2	Water	Ammonia (as N)	composite	Daily	24 hour	1	All values < ELV	1.9	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			23.04.2017
SW2	Water	Suspended Solids	composite	Daily	24 hour	30	All values < ELV	34.0	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			23.04.2017
SW2	Water	Ammonia (as N)	composite	Daily	24 hour	1	All values < ELV	>3.5	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			24.04.2017
SW2	Water	Ammonia (as N)	composite	Daily	24 hour	1	All values < ELV	13.0	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			25.04.2017
SW2	Water	Ammonia (as N)	composite	Daily	24 hour	1	All values < ELV	15.8	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			26.04.2017
SW2	Water	Ammonia (as N)	composite	Daily	24 hour	1	All values < ELV	13.4	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			27.04.2017
SW2	Water	Ammonia (as N)	composite	Daily	24 hour	1	All values < ELV	12.3	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			28.04.2017
SW2	Water	Ammonia (as N)	composite	Daily	24 hour	1	All values < ELV	8.0	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			29.04.2017
SW2	Water	Suspended Solids	composite	Daily	24 hour	30	All values < ELV	43.0	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			30.04.2017
SW2	Water	Suspended Solids	composite	Daily	24 hour	30	All values < ELV	36.0	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			01.05.2017
SW2	Water	Suspended Solids	composite	Daily	24 hour	30	All values < ELV	35.0	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			02.05.2017
SW2	Water	Ammonia (as N)	composite	Daily	24 hour	1	All values < ELV	2.1	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			03.05.2017
SW2	Water	Ortho-phosphate (as P)	composite	Daily	24 hour	1	All values < ELV	1.23	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			08.05.2017
SW2	Water	Suspended Solids	composite	Daily	24 hour	30	All values < ELV	38.0	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			09.05.2017
SW2	Water	Suspended Solids	composite	Daily	24 hour	30	All values < ELV	36.0	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			10.05.2017
SW2	Water	Suspended Solids	composite	Daily	24 hour	30	All values < ELV	36.0	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			11.05.2017

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SW2	Water	Suspended Solids	composite	Daily	24 hour	30	All values < ELV	35.0	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			13.05.2017
SW2	Water	Ortho-phosphate (as P)	composite	Daily	24 hour	1	All values < ELV	1.02	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			13.05.2017
SW2	Water	Ortho-phosphate (as P)	composite	Daily	24 hour	1	All values < ELV	1.17	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			14.05.2017
SW2	Water	Suspended Solids	composite	Daily	24 hour	30	All values < ELV	38.0	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			15.05.2017
SW2	Water	Suspended Solids	composite	Daily	24 hour	30	All values < ELV	33.0	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			17.05.2017
SW1	Water	Suspended Solids	composite	Weekly	24 hour	5	All values < ELV	6.0	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			15.06.2017
SW2	Water	Ammonia (as N)	composite	Daily	24 hour	1	All values < ELV	14.4	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			11.07.2017
SW2	Water	Ammonia (as N)	composite	Daily	24 hour	1	All values < ELV	16.7	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			12.07.2017
SW2	Water	Ammonia (as N)	composite	Daily	24 hour	1	All values < ELV	11.5	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			13.07.2017
SW2	Water	Ammonia (as N)	composite	Daily	24 hour	1	All values < ELV	8.9	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			14.07.2017
SW2	Water	Ammonia (as N)	composite	Daily	24 hour	1	All values < ELV	31.4	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			17.07.2017
SW2	Water	Suspended Solids	composite	Daily	24 hour	30	All values < ELV	32.0	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			18.07.2017
SW2	Water	Ammonia (as N)	composite	Daily	24 hour	1	All values < ELV	25.2	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			18.07.2017
SW2	Water	Suspended Solids	composite	Daily	24 hour	30	All values < ELV	46.0	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			19.07.2017
SW2	Water	Ammonia (as N)	composite	Daily	24 hour	1	All values < ELV	20.5	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			19.07.2017
SW2	Water	Ammonia (as N)	composite	Daily	24 hour	1	All values < ELV	20.4	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			20.07.2017
SW2	Water	Suspended Solids	composite	Daily	24 hour	30	All values < ELV	31.0	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			21.07.2017
SW2	Water	Ammonia (as N)	composite	Daily	24 hour	1	All values < ELV	24.5	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			21.07.2017
SW2	Water	Ammonia (as N)	composite	Daily	24 hour	1	All values < ELV	27.9	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			22.07.2017
SW2	Water	Ammonia (as N)	composite	Daily	24 hour	1	All values < ELV	26.7	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			23.07.2017
SW2	Water	Ammonia (as N)	composite	Daily	24 hour	1	All values < ELV	31.5	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			24.07.2017
SW2	Water	Ammonia (as N)	composite	Daily	24 hour	1	All values < ELV	32.3	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			25.07.2017
SW2	Water	Ammonia (as N)	composite	Daily	24 hour	1	All values < ELV	26.4	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			26.07.2017
SW2	Water	Ammonia (as N)	composite	Daily	24 hour	1	All values < ELV	26.3	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			27.07.2017
SW2	Water	Ammonia (as N)	composite	Daily	24 hour	1	All values < ELV	22.1	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			28.07.2017
SW2	Water	Ammonia (as N)	composite	Daily	24 hour	1	All values < ELV	13.3	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			29.07.2017
SW2	Water	Ammonia (as N)	composite	Daily	24 hour	1	All values < ELV	6.4	mg/L	no (if no please enter	INSTRUMENTAL METHODS	APHA / AWWA			30.07.2017

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

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

Continuous monitoring

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

Yes	Additional Information
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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	
-----	--

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
	SELECT	SELECT		SELECT	SELECT	SELECT					
	SELECT	SELECT		SELECT	SELECT	SELECT					

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

Table W5: Abatement system bypass reporting table

Date	Duration (hours)	Location	Resultant emissions	Reason for bypass	Corrective action*	Was a report submitted to the EPA?	When was this report submitted?
						SELECT	

*Measures taken or proposed to reduce or limit bypass frequency

Bund testing dropdown menu click to see options

Are you required by your licence to undertake integrity testing on bunds and containment structures? If yes please fill out table B1 below listing all **new bunds and containment structures** on site, in addition to all bunds which failed the integrity test-**all bunding structures which failed including mobile bunds must be listed in the table below, please include all bunds outside the licenced testing period** (mobile bunds and chemstore included)

1 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)

2 Please provide integrity testing frequency period

3 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 liquid alarms?

12 If yes to Q11 are these failsafe systems included in a maintenance and testing programme?

13 Is the Fire Water Retention Pond included in your integrity test programme?

Additional information	
Yes	
3 years	Apr.17
Yes	
27	
27	
17	
Yes	
17	
12	Apr.17
12	
Yes	
Yes	
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)
1	Metal Chemstore		Production Chemicals	1.2 m3	24 IBC's	Hydraulic test	Structural assessment	19.04.2017	Yes	Fail	Not watertight	Base of bunds relined	Apr.20	Pass
5a	prefabricated		Cleaning Chemicals	2666 litres	1100 litres	Hydraulic test	Structural assessment	19.04.2017	Yes	Fail	Seepage, unsaled pipe & holes	Holes sealed & valves fitted	Apr.20	Pass
6	prefabricated		Production Chemicals	95 m3	59 m3	Structural assessment		19.04.2017	Yes	Fail	Leaking & minor punctures	Liner repaired	Apr.20	Pass
9	Cylindrical plastic bund		Production Chemicals	1.18 m3	1100 L	Structural assessment		19.04.2017	Yes	Fail	Puncture in the side	Bund replaced	Apr.20	Pass

* Capacity required should comply with 25% or 110% containment rule as detailed in your licence
 Has integrity testing been carried out in accordance with licence requirements and are all structures tested in line with BS8007/EPA Guidance?

Commentary	
Yes	
Yes	
Yes	

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

Pipeline/underground structure testing

Are you required by your licence to undertake integrity testing* on underground structures e.g. pipelines or sumps etc? If yes please fill out table 2 below listing all underground structures and pipelines on site **which failed the integrity test and all which have not been tested within the integrity test period as specified**

2 Please provide integrity testing frequency period

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

Yes	
3 years	

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

Structure ID	Type system	Material of construction:	Does this structure have Secondary containment?	Type of secondary containment	Type integrity testing	Integrity reports maintained on site?	Results of test	Integrity test failure explanation <50 words	Corrective action taken	Scheduled date for retest	Results of retest(if in current reporting year)

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

			Comments
1 Are you required to carry out groundwater monitoring as part of your licence requirements?	no		Please provide an interpretation of groundwater monitoring data in the interpretation box below or if you require additional space please include a groundwater/contaminated land monitoring results interpretaion as an additional section in this AER
2 Are you required to carry out soil monitoring as part of your licence requirements?	no		
3 Do you extract groundwater for use on site? If yes please specify use in comment section	yes	All fresh water used on site is from our own wells.	
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	SELECT		
5 Is the contamination related to operations at the facility (either current and/or historic)	SELECT		
6 Have actions been taken to address contamination issues?If yes please summarise remediation strategies proposed/undertaken for the site	SELECT		
7 Please specify the proposed time frame for the remediation strategy	SELECT		
8 Is there a licence condition to carry out/update ELRA for the site?	SELECT		
9 Has any type of risk assesment been carried out for the site?	SELECT		
10 Has a Conceptual Site Model been developed for the site?	SELECT		
11 Have potential receptors been identified on and off site?	SELECT		
12 Is there evidence that contamination is migrating offsite?	SELECT		

Please enter interpretation of data here

Table 1: Upgradient Groundwater monitoring results

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

.+ where average indicates arithmetic mean

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

Table 2: Downgradient Groundwater monitoring results

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

Groundwater/Soil monitoring template Lic No: P0791-02 Year: 2017

*please note exceedance of generic assessment criteria (GAC) such as a Groundwater Threshold Value (GTV) or an Interim Guideline Value (IGV) or an upward trend in results for a substance indicates that further interpretation of monitoring results is required. In addition to completing the above table, please complete the Groundwater Monitoring Guideline Template Report at the link provided and submit separately through ALDER as a licensee return or as otherwise instructed by the EPA. [Groundwater monitoring template](#)

More information on the use of soil and groundwater standards/ generic assessment criteria (GAC) and risk assessment tools is available in the EPA published guidance (see the link in G31) [Guidance on the Management of Contaminated Land and Groundwater at EPA Licensed Sites \(EPA 2013\).](#)

**Depending on location of the site and proximity to other sensitive receptors alternative Receptor based Water Quality standards should be used in addition to the GTV e.g. if the site is close to surface water compare to Surface Water Environmental Quality Standards (SWEQS), If the site is close to a drinking water supply compare results to the Drinking Water Standards (DWS) [Groundwater regulations](#) [Drinking water \(private supply\) standards](#) [Surface water EQS](#) [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:	P0791-02	Year	2017
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[Click here to access EPA guidance on Environmental Liabilities and Financial provision](#)

			Commentary
1	ELRA initial agreement status	Submitted and not agreed by EPA	Submission of ELRA rejected by EPA in Q4-2015. Revised document submitted during Q3-2016.
2	ELRA review status	No instruction from the EPA	Submission of ELRA rejected by EPA in Q4-2015. Revised document submitted during Q3-2016 not approved by the EPA.
3	Amount of Financial Provision cover required as determined by the latest ELRA	€442,578	
4	Financial Provision for ELRA status	Submitted and not agreed by EPA	
5	Financial Provision for ELRA - amount of cover	€2,600,000.00	
6	Financial Provision for ELRA - type	Public Liability Insurance with Environmental Impairment Liability cover,	
7	Financial provision for ELRA expiry date	NA	
8	Closure plan initial agreement status	Closure plan submitted and not agreed by EPA	Submission of DMP (Decommissioning Management Plan) rejected by EPA in Q4-2015. Revised document submitted during Q3-2016.
9	Closure plan review status	Review required and not completed	
10	Financial Provision for Closure status	Submitted and not agreed by EPA	
11	Financial Provision for Closure - amount of cover	€92,343.00	
12	Financial Provision for Closure - type	Public Liability Insurance with Environmental Impairment Liability cover,	
13	Financial provision for Closure expiry date	16.08.2016	

Environmental Management Programme/Continuous Improvement Programme template		Lic No:	P0791-02	Year	2017
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	EMS based on ISO 14001		
2	Does the EMS reference the most significant environmental aspects and associated impacts on-site	Yes			
3	Does the EMS maintain an Environmental Management Programme (EMP) as required in accordance with the licence requirements	Yes			
4	Do you maintain an environmental documentation/communication system to inform the public on environmental performance of the facility, as required by the licence	Yes			

Environmental Management Programme (EMP) report					
Objective Category	Target	Status (% completed)	How target was progressed	Responsibility	Intermediate outcomes
Reduction of emissions to Water	Improve the operation and infrastructure of the effluent plant and the condensate system. Reduce the flow and increase the quality of the effluent going to river	100%	New SCADA system with remote monitoring and alarms on key equipment in the WWTP. On going COD reduction programme at site level to reduce the loading on the WWTP. Comprehensive training completed on WWTP operation by all WWTP operators. Environmental awareness training completed by all operators and managers on site.	Individual	Improved operation of WWTP, ability to respond quickly to operational issues with the Alarm alert system in place. Trigger values in place to ensure immediate action taken if ELV start to rise. Reduction on COD from individual plants going to the WWTP with a daily review of each plant COD at the daily operations meeting.
Reduction of emissions to Air	Improve the air quality of the surrounding area by reducing emissions. Reduce and eliminate odour complaints. Reduce and eliminate dust complaints	100%	Bag filter replace on niro 1 Dryer with best available technology. Optimised operation of WWTP has eliminated odour issues. Dust monitor in place and all operators and manager have received training in environmental awareness	Environmental Manager & Environmental Officer	Improved systems in place to manage emissions
Noise reduction	Comply with the 55/45db limit at site boundary	In progress	In 2017 noise survey monitoring point AN1 exceeded the night time limit as per ICAN acoustics report, however there is significant background noise which is also over the night time limit in this area. We have commissioned Panther Environmental to do a noise survey to locate the source and to conduct noise modelling on potential solutions	Environmental Manager	Work in progress, survey completed and awaiting the noise modelling report
Environmental Management	Implement Certified environmental Management system to manage environmental	In progress	Apply for certification to ISO 14001 Environmental standard	Environmental Manager	TO progress Q2/Q3 2018 with intention to achieve certification by Q1 2019

Noise monitoring summary report	Lic No: P0791-02	Year	2017
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- 1 Was noise monitoring a licence requirement for the AER period?
If yes please fill in table N1 noise summary below Yes
- 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? Yes
- 3 Does your site have a noise reduction plan Yes
- 4 When was the noise reduction plan last updated? Enter date
- 5 Have there been changes relevant to site noise emissions (e.g. plant or operational changes) since the last noise survey? No

[Noise Guidance note NG4](#)

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 ₉₅	LA _{max}	Tonal or Impulsive noise* (Y/N)	If tonal /impulsive noise was identified was 5dB penalty applied?	Comments (ex. main noise sources on site, & extraneous noise ex. road traffic)	Is <u>site</u> compliant with noise limits (day/evening/night)?
07.08.2017	16.01	AN1		55.8	54.6	54.3		No		Constant traffic on Stafford Street	Yes
07.08.2017	16.30	AN2		43.9	41.8	41.4		No		Mart in operation, Arrabawn plant noise, birdsong & traffic noise from Stafford Street	Yes
07.08.2017	13.30	AN3		50.9	45.3	44.9		No		Arrabawn WWTP noise including a lorry making a delivery with reversing alarms, birdsong & distant traffic	Yes

07.08.2017	13.30	AN6		48.2	45.9	45.3		No		Traffic noise, Arrabawn plant noise, dog barking and birdsong.	Yes
08.08.2017	00.03	AN1		54.3	53.6	53.4		No		Arrabawn Plant noise	No
08.08.2017	1.30	AN2		41	40.2	40		No		Dogs barking & distant traffic	Yes
16.10.2017	23.40	AN3		45.9	43.9	43.6		No		Dogs barking, distant traffic & livestock presence	Yes
17.10.2017	0.18	AN6		41.9	38.7	38.3		No		Distant traffic, noise from the WWTP, dogs barking and livestock	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?

noise reduction plan

Arrabawn Co- Op, with the expertise of ICAN Acoustics Ltd, have been putting together a noise reduction plan during 2015. As part of this, a detailed site assessment has been carried out by ICAN Acoustic which included the update of a site specific noise model for the site. It also includes a noise survey carried out during plant shut-down (January,2016) to determine accurately, the background noise. The effectiveness of a noise barrier for Niro 2 was also being investigated in Q4-2015 with a decision on its erection to be made by Q2-2016, subject to planning.

Any additional comments? (less than 200 words)

Usage/Energy efficiency summary Lic No: P0791-02 Year

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)	111825	121094		
Total Energy Generated (MWHrs)				
Total Renewable Energy Generated (MWHrs)				
Electricity Consumption (MWHrs)	20613	22746		
Fossil Fuels Consumption:				
Heavy Fuel Oil (m3)	0	0		
Light Fuel Oil (m3)	22	8		
Natural gas (m3)	8679297	9313655		
Coal/Solid fuel (metric tonnes)				
Peat (metric tonnes)				
Renewable Biomass				
Renewable energy generated on site				

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

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

WASTE SUMMARY	Lic No: P0791-02	Year: 2017
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SECTION A-PRTR ON SITE WASTE TREATMENT AND WASTE TRANSFERS TAB- TO BE COMPLETED BY ALL IPPC AND WASTE FACILITIES [PRTR facility logon](#) dropdown list click to see options

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

Were any wastes accepted onto your site for recovery or disposal or treatment prior to recovery or disposal within the boundaries of your facility?; (waste generated within your 1 boundaries is to be captured through PRTR reporting)
If yes please enter details in table 1 below

Additional Information	
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

SELECT	
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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

SELECT	
--------	--

Table 1 Details of waste accepted onto your site for recovery, disposal or treatment (do not include wastes generated at your site, as these will have been reported in your PRTR workbook)

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

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	
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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	
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SECTION D-TO BE COMPLETED BY LANDFILL SITES ONLY

Table 2 Waste type and tonnage-landfill only

Waste types permitted for disposal	Authorised/licenced annual intake for disposal (tpa)	Actual intake for disposal in reporting year (tpa)	Remaining licensed capacity at end of reporting year (m3)	Comments

Table 3 General information-Landfill only

Area ID	Date landfilling commenced	Date landfilling ceased	Currently landfilling	Private or Public Operated	Inert or non-hazardous	Predicted date to cease landfilling	Licence permits asbestos	Is there a separate cell for asbestos?	Accepted asbestos in reporting year	Total disposal area occupied by waste	Lined disposal area occupied by waste	Unlined area	Comments on liner type
										SELECT UNIT	SELECT UNIT	SELECT UNIT	
Cell 8													

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

Was meteorological monitoring in compliance with Landfill Directive (LD) standard in reporting year +	Was leachate monitored in compliance with LD standard in reporting year	Was Landfill Gas monitored in compliance with LD standard in reporting year	Was SW monitored in compliance with LD standard in reporting year	Have GW trigger levels been established	Were emission limit values agreed with the Agency (ELVs)	Was topography of the site surveyed in reporting year	Has the statement under SS3(A)(5) of WMA been submitted in reporting year	Comments

-> please refer to Landfill Manual linked above for relevant Landfill Directive monitoring standards

Table 5 Capping-Landfill only

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

*please note this includes daily cover area

Table 6 Leachate-Landfill only

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

SELECT	
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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	