Facility Information Summary	
AER Reporting Year	2016
Licence Register Number	W0196-01
Name of site	MacAnulty Specialist Underground Services Limited.
Site Location	John F. Kennedy Industrial Estate, John F. Kennedy Road, Naas Road, Dublin 12
NACE Code	3821
Class/Classes of Activity	3.7, 3.11, 3.12, 3.13, 4.13, 4.3, 4.4, 4.6, 4.8
National Grid Reference (6E, 6 N)	53.3279 6.35314

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.

Site Performance: The company continues to demonstrate its commitment towards HSE management standards - the site maintains ISO14001 and OHSAS 18001. This ensures a standard approach is taking to managing activities from an environmental and safety aspect. There were no issues raised during the reporting period regarding maintenance to the standard**.**

Infrastructure / EMP progress: There has been no changes in infrastructure on the site.

Environmental Performance: There was one exceedance of a trigger limit in 2016, with ammonia exceeding the trigger level in an effluent pre-release sample that was tested. The result was 1200 mg/l and the trigger level was 1005.53 mg/L. New and more frequent testing measures have been implemented to prevent any future occurances of exceedance of ammonia. The site did not recieve any other non compliances in 2016 and was compliant with the licence.

Declaration:

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

Signature Group/Facility manager (or nominated, suitably qualified and experienced deputy)	*Sarah Malone*	Date	31/03/2017

AIR-summary template	Lic No:	W0196-01	Year	2016

Answer all questions and complete all tables where relevant

			Additional information
1	Does your site have licensed air emissions? If yes please complete table A1 and A2 below for the current reporting year and answer further questions. If **you do not have** licenced emissions and **do not complete a solvent management plan** (table A4 and A5) you do not need to complete the tables	No	

Periodic/Non-Continuous Monitoring

2	Are there any results in breach of licence requirements? If yes please provide brief details in the comment section of TableA1 below	SELECT	
3	Was all monitoring carried out in accordance with EPA guidance note AG2 and using the basic air monitoring checklist? Basic air monitoring checklist AGN2	SELECT	

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

Emission reference no:	Parameter/ Substance	Frequency of Monitoring	ELV in licence or any revision therof	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence limit	Method of analysis	Annual mass load (kg)	Comments - reason for change in % mass load from previous year if applicable
	SELECT			SELECT		SELECT	SELECT	SELECT		
	SELECT			SELECT		SELECT	SELECT	SELECT		
	SELECT			SELECT		SELECT	SELECT	SELECT		
	SELECT			SELECT		SELECT	SELECT	SELECT		

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

AIR-summary template	Lic No:	W0196-01	Year	2016

Continuous Monitoring

4	Does your site carry out continuous air emissions monitoring?	SELECT	

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

Table A2: Summary of average emissions -continuous monitoring

Emission reference no:	Parameter/ Substance	ELV in licence or any revision therof	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

AIR-summary template	Lic No:	W0196-01	Year	2016

Solvent use and management on site

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

Table A4: Solvent Management Plan Summary
Total VOC Emission limit value

Solvent regulations — Please refer to linked solvent regulations to complete table 5 and 6

Reporting year	Total solvent input on site (kg)	Total VOC emissions to Air from entire site (direct and fugitive)	Total VOC emissions as %of solvent input	Total Emission Limit Value (ELV) in licence or any revision therof	Compliance
					SELECT
					SELECT

Table A5: Solvent Mass Balance summary

	(I) Inputs (kg)	(O) Outputs (kg)						
Solvent	(I) Inputs (kg)	Organic solvent emission in waste	Solvents lost in water (kg)	Collected waste solvent (kg)	Fugitive Organic Solvent (kg)	Solvent released in other ways e.g. by-	Solvents destroyed onsite through	Total emission of Solvent to air (kg)
							Total	

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER) Lic No: W0196-01 Year 2016

			Additional information
1	Does your site have licensed emissions direct to surface water or direct to sewer? If yes please complete table W2 and W3 below for the current reporting year and answer further questions. If **you do not have** licenced emissions you only need to complete table W1 and or W2 for storm water analysis and visual inspections	Yes	W1 has been completed for surface water monitoring.
2	Was it a requirement of your licence to carry out visual inspections on any surface water discharges or watercourses on or near your site? If yes please complete table W2 below summarising only any evidence of contamination noted during visual inspections	No	

Table W1 Storm water monitoring

Location reference	Location relative to site activities	PRTR Parameter	Licenced Parameter	Monitoring date	ELV or trigger level in licence or any revision thereof*	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence	Comments
SW 1	onsite	SELECT	pH	09/11/2016	-	SELECT	7.78	pH units	yes	Quarterly Sample, Highest Value Of The Year Listed Here
SW 1	onsite	SELECT	BOD	22/08/2016	-	SELECT	2.74	mg/L	yes	Quarterly Sample, Highest Value Of The Year Listed Here
SW 1	onsite	SELECT	COD	09/11/2016	-	SELECT	46.3	mg/L	yes	Quarterly Sample, Highest Value Of The Year Listed Here
SW 1	onsite	SELECT	Suspended Solids	14/06/2016	-	SELECT	14.5	mg/L	yes	Quarterly Sample, Highest Value Of The Year Listed Here
SW 1	onsite	SELECT	Mineral oils	14/06/2016	5000	All values < ELV	146	µg/L	yes	Quarterly Sample, Highest Value Of The Year Listed Here

*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)

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

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

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.

	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
SE 1	Wastewater/Sewer	BOD	composite	Monthly	Monthly	1000	All values < ELV	331	mg/L	yes	Dissolved Oxygen Meter (Electrode)	UK SCA "Blue Book" series	MEWAM BOD5 2nd Ed.HMSO 1988 / Method 5210B, AWWA/APHA, 20th Ed., 1999; SCA Blue Book 130	1543.68	
SE 1	Wastewater/Sewer	COD	composite	Weekly	Monthly	3000	All values < ELV	2360	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA "Standard Methods"	SOP 1241	23213.23	
SE 1	Wastewater/Sewer	Mineral oils	discrete	Monthly	Monthly	10	All values < ELV	4.1	mg/L	yes	EPH in Waters	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	17.64	
SE 1	Wastewater/Sewer	Suspended Solids	composite	Weekly	Monthly	1000	All values < ELV	168	mg/L	yes	Gravimetric analysis	APHA / AWWA "Standard Methods"	SOP 1291	497.48	
SE 1	Wastewater/Sewer	Sulphate	composite	Weekly	Monthly	1000	All values < ELV	770.4	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA "Standard Methods"	SOP 1032	3500.75	
SE 1	Wastewater/Sewer	Ammonia	composite	Weekly	Monthly	1005.53	All values < ELV	1226.69	mg/L	no	Spectrophotometry (Colorimetry)	APHA / AWWA "Standard Methods"	SOP 2667	4138.76	This was the highest result for this parameter in 2016. This result was recorded from internal monitoring and reported to the EPA. Corrective actions are now in place
SE 1	Wastewater/Sewer	pH	composite	Weekly	Monthly	6 - 10	All values < ELV	7.75	pH units	yes	pH Meter (Electrode)	Manufacturer method	SOP 1134	n/a	
SE 1	Wastewater/Sewer	Temperature	discrete	Daily	Monthly	42	All values < ELV	8.2	degrees C	yes	Temperature Probe	Manufacturer method	SOP 1513	n/a	
SE 1	Wastewater/Sewer	Detergents (as MBAS)	discrete	Monthly	Monthly	100	All values < ELV	0.4503	mg/L	yes	The Determination of Methylene Blue Active Substances in Waters	Standard Methods for the Examination of Water and Wastewater. 20th Edition. 1998	Standard Methods for the Examination of Water and Wastewater. 20th Edition. 1998	7.92	
SE 1	Wastewater/Sewer	Total Organic Carbon (as Toluene)	discrete	Monthly	Monthly	1	All values < ELV	0.0092	mg/L	yes	GC - FID	Manufacturer method	Determination of GRO by Headspace in waters	0.1595	
SE 1	Wastewater/Sewer	Xylenes	discrete	Monthly	Monthly	1	All values < ELV	0.0115	mg/L	yes	GC - FID	Manufacturer method	Determination of GRO by Headspace in waters	0.2391	

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER) Lic No: W0196-01 Year 2016

SE 1	Wastewater/Sewer	Zinc and compounds (as Zn)	composite	Weekly	Monthly	5	All values < ELV	0.1420	mg/L	yes	ICP / ICPMS (Inductively Coupled Plasma - Mass Spectrometry)	US EPA	TM30/PM14	3.9680	
SE 1	Wastewater/Sewer	Copper (as Cu)	composite	Weekly	Monthly	5	All values < ELV	0.0375	mg/L	yes	ICP / ICPMS (Inductively Coupled Plasma - Mass Spectrometry)	US EPA	TM30/PM14	0.9417	
SE 1	Wastewater/Sewer	Phosphates (as PO_4-P)	composite	Weekly	Monthly	50	All values < ELV	16.08	mg/L	yes	Spectrophotometry (Colorimetry)	EPA Methods 325.1 & 325.2	EPA Methods 325.1 & 325.2, The Determination of Anions in Aqueous Matrices using the Kone Spectrophotometric Analysers	46.92	
SE 1	Wastewater/Sewer	Volumetric flow	composite	Continuous	Monthly	180	All values < ELV	179.13	m3/day	yes	SELECT	SELECT		24903.32	

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

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

Continuous monitoring

		Additional Information
5 Does your site carry out continuous emissions to water/sewer monitoring?	No	

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/Pipeline testing template Lic No: W0196-01 Year 2016

Bund testing — dropdown menu click to see options

			Additional information
1	Are you required by your licence to undertake integrity testing on bunds and containment structures ? if yes please fill out table B1 below listing all **new bunds and containment structures** on site, in addition to **all bunds which failed** the integrity test-**all bunding structures which failed including mobile bunds must be listed in the table below, please include all bunds outside the licenced testing period** (mobile bunds and chemstore included)	Yes	
2	Please provide integrity testing frequency period	3 years	
3	Does the site maintain a register of bunds, underground pipelines (including stormwater and foul), Tanks, sumps and containers? (containers refers to "Chemstore" type units and mobile bunds)	Yes	
4	How many bunds are on site?	9	
5	How many of these bunds have been tested within the required test schedule?	9	
6	How many mobile bunds are on site?	1	
7	Are the mobile bunds included in the bund test schedule?	Yes	
8	How many of these mobile bunds have been tested within the required test schedule?	1	
9	How many sumps on site are included in the integrity test schedule?	0	
10	How many of these sumps are integrity tested within the test schedule?	0	
	Please list any sump integrity failures in table B1		
11	Do all sumps and chambers have high level liquid alarms?	N/A	
12	If yes to Q11 are these failsafe systems included in a maintenance and testing programme?	N/A	
13	Is the Fire Water Retention Pond included in your integrity test programme?	N/A	

Table B1: Summary details of bund /containment structure integrity test

Bund/Containment structure ID	Type	Specify Other type	Product containment	Actual capacity	Capacity required*	Type of integrity test	Other test type	Test date	Integrity reports maintained on site?	Results of test	Integrity test failure explanation <50 words	Corrective action taken	Scheduled date for retest	Results of retest(if in current reporting year)

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

			Commentary
15	Has integrity testing been carried out in accordance with licence requirements and are all structures tested in line with BS8007/EPA Guidance? (bunding and storage guidelines)	Yes	
16	Are channels/transfer systems to remote containment systems tested?	No	
17	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.	Yes	

Pipeline/underground structure testing

1	Are you required by your licence to undertake integrity testing* on underground structures e.g. pipelines or sumps etc ? if yes please fill out table 2 below listing all underground structures and pipelines on site **which failed the integrity test and all which have not been tested withing the integrity test period as specified**	Yes	
2	Please provide integrity testing frequency period	3 years	

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

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

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

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

Groundwater/Soil monitoring template	Lic No:	W0196-01	Year	2016

			Comments	
1	Are you required to carry out groundwater monitoring as part of your licence requirements?	yes		Please provide an interpretation of groundwater monitoring data in the interpretation box below or if you require additional space please include a groundwater/contaminated land monitoring results interpretaion as an additional section in this AER
2	Are you required to carry out soil monitoring as part of your licence requirements?	no		
3	Do you extract groundwater for use on site? If yes please specify use in comment section	no		
4	Do monitoring results show that groundwater generic assessment criteria such as GTVs or IGVs are exceeded or is there an upward trend in results for a substance? If yes, please complete the Groundwater Monitoring Guideline Template Report (link in cell G8) and submit separately through ALDER as a licensee return AND answer questions 5-12 below. Groundwater monitoring template	no		Quarterly reports are submitted as per licence conditions and interpretation of data also included in these. This monitoring includes the following parameters: pH, temperature, mineral oil, dissolved oxygen, conductvity and BTEX. Both the mineral oil and BTEX were consistantly found to be below the LOD.
5	Is the contamination related to operations at the facility (either current and/or historic)	N/A		
6	Have actions been taken to address contamination issues?If yes please summarise remediation strategies proposed/undertaken for the site	N/A		
7	Please specify the proposed time frame for the remediation strategy	N/A		
8	Is there a licence condition to carry out/update ELRA for the site?	N/A		
9	Has any type of risk assesment been carried out for the site?	N/A		
10	Has a Conceptual Site Model been developed for the site?	N/A		
11	Have potential receptors been identified on and off site?	N/A		
12	Is there evidence that contamination is migrating offsite?	N/A		

Table 1: Upgradient Groundwater monitoring results

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

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.

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:	W0196-01	Year	2016

*please note exceedance of generic assessment criteria (GAC) such as a Groundwater Threshold Value (GTV) or an Interim Guideline Value (IGV) or an upward trend in results for a substance indicates that further interpretation of monitoring results is required. In addition to completing the above table, please complete the Groundwater Monitoring Guideline Template Report at the link provided and submit separately through ALDER as a licensee return or as otherwise instructed by the EPA.	Groundwater monitoring template
More information on the use of soil and groundwater standards/ generic assessment criteria (GAC) and risk assessment tools is available in the EPA published guidance (see the link in G31)	Guidance on the Management of Contaminated Land and Groundwater at EPA Licensed Sites (EPA 2013).

**Depending on location of the site and proximity to other sensitive receptors alternative Receptor based Water Quality standards should be used in addition to the GTV e.g. if the site is close to surface water compare to Surface Water Environmental Quality Standards (SWEQS), If the site is close to a drinking water supply compare results to the Drinking Water Standards (DWS)	Surface water EQS	Groundwater regulations GTV's	Drinking water (private supply) standards	Drinking water (public supply) standards	Interim Guideline Values (IGV)

Groundwater/Soil monitoring template Lic No: W0196-01 Year 2016

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:	W0196-01	Year	2016

Click here to access EPA guidance on Environmental Liabilities and Financial provision

			Commentary
1	ELRA initial agreement status	Submitted and agreed by EPA	
2	ELRA review status	Review required and completed	
3	Amount of Financial Provision cover required as determined by the latest ELRA	20,500	Pending bond agreement with Agency
4	Financial Provision for ELRA status	Required but not submitted	
5	Financial Provision for ELRA - amount of cover	TBC	
6	Financial Provision for ELRA - type	SELECT	
7	Financial provision for ELRA expiry date	Enter expiry date	
8	Closure plan initial agreement status	Closure plan submitted and agreed by EPA	
9	Closure plan review status	Review required and completed	
10	Financial Provision for Closure status	Required but not submitted	
11	Financial Provision for Closure - amount of cover	20,700	Pending bond agreement with Agency
12	Financial Provision for Closure - type		
13	Financial provision for Closure expiry date	TBC	

Environmental Management Programme/Continuous Improvement Programme template	Lic No:	W0196-01	Year	2016

	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	
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
Additional improvements	Reduction of fugitive odour emissions. Installation of carbon filters on the effluent holding tanks	Complete	Carbon filters have been installed and are working to great effect.	Operations Manager	Increased compliance with licence conditions
Additional improvements	Installation of autmatic weighbridge / waste delivery system	New	Currently designing the installation of an automatic weighbridge/waste delivery system to accurately/automatically track the delivery and export of waste material to and from site.	Operations Manager	Increased compliance with licence conditions
Groundwater protection	Site surface integrity will continue to be monitored, as vehiculer movements and weathering can reduce integrity. Further works will be carried out in 2016 including repair of front yard and installation of new manlid covers.	80	Repairs to yard and yard integrity are ongoing. New manlids were installed in 2016.	Operations Manager	Increased compliance with licence conditions
Reduction of emissions to Wastewater	To improve the quality of effluent release monitoring.	Complete	Ensure operatives are trained in relevant procedures and good laboratory practice onsite in order to allow for the more frequent checks to occur.	Operations Manager	Increased compliance with licence conditions
Reduction of emissions to Wastewater	To improve the quality of effluent release monitoring.	New	Installation of SCADA system to control and record mechanical operations and effluent release from the tank farm.	Operations Manager	Increased compliance with licence conditions
Energy Efficiency/Utility conservation	Review lighting onsite.	50	LED lighting has been installed in main office. Use of LED lighting in the yard area to be reviewed for installation in 2017.	Operations Manager	Improved Environmental Management Practices
Energy Efficiency/Utility conservation	Rainwater conservation	0	Review capture rainwater used to fill the vehicles with water.	Operations Manager	Improved Environmental Management Practices

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.

Noise monitoring summary report	Lic No:	W0196-01	Year	2016

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? (Noise Guidance note NG4)	Yes
3	Does your site have a noise reduction plan	No
4	When was the noise reduction plan last updated?	Not Applicable
5	Have there been changes relevant to site noise emissions (e.g. plant or operational changes) since the last noise survey?	No

Table N1: Noise monitoring summary

Date of monitoring	Time period	Noise location (on site)	Noise sensitive location -NSL (if applicable)	LA_{eq}	LA_{90}	LA_{10}	LA_{max}	Tonal or Impulsive noise* (Y/N)	If tonal /impulsive noise was identified was 5dB penalty applied?	Comments (ex. main noise sources on site, & extraneous noise ex. road traffic)	Is site compliant with noise limits (day/evening/night)?
25/11/2016	10:35	NB1		54	50	56	62	No		Enva Activity: hum from security speaker, truck unloading filter cake, tanker unloading at run down screen. Extraneous Activity : Traffic on local industrial road dominant (especially HGVs).	Yes
25/11/2016	11:05	NB1		53	48	56	61	No		Enva activity: hum from security speaker, tanker unloading at run down screen, forklift. Extraneous Activity : Traffic on local industrial road dominant (especially HGVs) and helicopter overhead.	Yes
25/11/2016	11:35	NB1		53	49	56	61	No		Enva activity: hum from security speaker, run down screen (pumps), truck movement, forklift. Extraneous Activity : Traffic on local industrial road dominant (especially HGVs) and helicopter overhead.	Yes
25/11/2016	12:21	NB2		54	49	56	63	No		Enva Activity: hum from security speaker, forklift, tanker unloading. Extraneous Activity : Traffic on the local industrial road audible (dominant in the absence of vehicle movement onsite).	Yes
25/11/2016	12:52	NB2		54	49	54	60	No		Enva Activity: hum from security speaker, forklift, tanker unloading to screen. Extraneous Activity : Traffic on the local industrial road audible (dominant in the absence of vehicle movement onsite).	Yes
25/11/2016	13:23	NB2		53	48	56	61	No		Enva Activity: hum from security speaker, forklift, truck movement. Extraneous Activity: Traffic on the local industrial road audible (dominant in the absence of vehicle movement onsite).	Yes
25/11/2016	10:42	NB3		59	55	60	69	No		Enva Activity: run down screen (pumps), truck unloading filter cake (dominant), forklift, truck movement. Extraneous Activity: neighbouring facility (fans, forklift)	Yes
25/11/2016	11:12	NB3		56	53	55	65	No		Enva Activity: run down screen (pumps), forklift and teleporter, truck movement. Extraneous Activity: neighbouring facility (fans, forklift), helicopter overhead.	Yes
25/11/2016	11:42	NB3		56	53	55	64	No		Enva Activity: run down screen (pumps), forklift and teleporter, truck movement. Extraneous Activity: neighbouring facility (fans, forklift), helicopter overhead.	Yes
25/11/2016	12:24	NB4		64	57	62	76	No		Enva Activity: tanker movement, forklift, run down screen (pumps). Extraneous Activity : Traffic on the local industrial road audible (in the absence of activity at run down screen).	Yes
25/11/2016	12:54	NB4		68	61	71	77	No		Enva Activity: tanker unloading to run down screen, forklift, run down screen (pumps). Extraneous Activity : Traffic on the local industrial road audible (in the absence of activity at run down screen).	Yes
25/11/2016	13:24	NB4		58	52	57	71	No		Enva Activity: run down screen (pumps), forklift. Extraneous Activity : Traffic on the local industrial road audible (in the absence of activity at run down screen).	Yes
25/11/2016	14:08	NSL1	Place of Worship to the West	65	56	61	75	No		Dominant noise : local industrial traffic passing NSL (almost continuous and included HGVs). Enva Activity: Minimal (occasional hiss) noise audible from the Enva facility.	Yes

25/11/2016	14:38	NSL1	Place of Worship to the West	65	56	65	77	No		Dominant noise : local industrial traffic passing NSL (almost continuous and included HGVs). Enva Activity: Minimal (occasional hiss) noise audible from the Enva facility.	Yes
25/11/2016	15:10	NSL1	Place of Worship to the West	64	55	61	75	No		Dominant noise : local industrial traffic passing NSL (almost continuous and included HGVs). Enva Activity: Minimal (occasional hiss) noise audible from the Enva facility.	Yes
30/11/2016	22:05	NSL1	Place of Worship to the West	54	51	55	60	No		Dominant noise : Industrial noise from the E/SE and traffic on Naas Road / Killeen road. Traffic from the west. is audible. Occasional hiss from Enva audible. Local traffic passes NSL1: 24 cars	Yes
30/11/2016	22:36	NSL1	Place of Worship to the West	53	51	54	59	No		Dominant noise : Industrial noise from the E/SE and traffic on Naas Road / Killeen road. Traffic from the west. is audible. Occasional hiss from Enva audible. Local traffic passes NSL1: 22 cars	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?

SELECT

** 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:	W0196-01	Year	2016

			Additional information
1	When did the site carry out the most recent energy efficiency audit? Please list the recommendations in table 3 below	Not Applicable	
2	Is the site a member of any accredited programmes for reducing energy usage/water conservation such as the SEAI programme linked to the right? If yes please list them in additional information	SEAI - Large Industry Energy Network (LIEN) — No	
3	Where Fuel Oil is used in boilers on site is the sulphur content compliant with licence conditions? Please state percentage in additional information	N/A	

Table R1 Energy usage on site

Energy Use	Previous year	Current year	Production +/- % compared to previous reporting year**	Energy Consumption +/- % vs overall site production*	
Total Energy Used (MWHrs)	71.5	72.31			
Total Energy Generated (MWHrs)	NA	NA	NA	NA	
Total Renewable Energy Generated (M	NA	NA	NA	NA	
Electricity Consumption (MWHrs)	71.5	72.31			
Fossil Fuels Consumption:	NA	NA	NA	NA	
Heavy Fuel Oil (m3)	NA	NA	NA	NA	
Light Fuel Oil (m3)	2.001				Green Diesel
Natural gas (m3)	NA	NA	NA	NA	
Coal/Solid fuel (metric tonnes)	NA	NA	NA	NA	
Peat (metric tonnes)	NA	NA	NA	NA	
Renewable Biomass	NA	NA	NA	NA	
Renewable energy generated on site	NA	NA	NA	NA	

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

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

Table R2 Water usage on site

					Water Emissions	Water Consumption	
Water use	Water extracted Previous year m3/yr.	Water extracted Current year m3/yr.	Production +/- % compared to previous reporting year**	Energy Consumption +/- % vs overall site production*	Volume Discharged back to environment(m^3yr):	Volume used i.e not discharged to environment e.g. released as steam m3/yr	Unaccounted for Water:
Groundwater							
Surface water							
Public supply	66	98.33			98.33		0
Recycled water							
Total	66	98.33			98.33		0

* 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)	4893.61				
Non-Hazardous (Tonnes)	29634.41				

Resource Usage/Energy efficiency summary

Lic No: W0196-01 Year 2016

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
			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					
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					

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.

Complaints and Incidents summary template Lic No: W0196-01 Year 2016

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

Table 1 Complaints summary

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

Total complaints open at start of reporting year	0
Total new complaints received during reporting year	0
Total complaints closed during reporting year	0
Balance of complaints end of reporting year	0

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.

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

*For information on how to report and what constitutes an incident	What is an incident

Table 2 Incidents summary

Date of occurrence	Incident nature	Location of occurrence	Incident category*please refer to guidance	Receptor	Cause of incident	Other cause(please specify)	Activity in progress at time of incident	Communication	Occurrence	Corrective action<20 words	Preventative action <20 words	Resolution status	Resolution date	Likelihood of reoccurence
04/03/2016	Trigger level reached	Licenced discharge point (SE-1)	1. Minor	Sewer	Other (add details)	Elevated Ammonia levels in release sample.	Normal activities	EPA	New	Additional pre-release checks	Additional pre-release checks	Complete	16/03/2017	Low
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT

Total number of incidents current year	1
Total number of incidents previous year	1
% reduction/ increase	0

WASTE SUMMARY Lic No: W0196-01 Year 2016

SECTION A-PRTR ON SITE WASTE TREATMENT AND WASTE TRANSFERS TAB- TO BE COMPLETED BY ALL IPPC AND WASTE FACILITIES

PRTR facility logon dropdown list click to see options

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

			Additional Information
1	Were any wastes accepted onto your site for recovery or disposal or treatment prior to recovery or disposal within the boundaries of your facility ?; (waste generated within your boundaries is to be captured through PRTR reporting) If yes please enter details in table 1 below	Yes	
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	Yes	16/09/2016 - WTF C023636 - Waste rejected due to very high COD levels. 23/09/2016 - Landfill leachate rejected due to very low pH and very high sulfate levels.
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	No	

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

Licenced annual tonnage limit for your site (total tonnes/annum)	EWC code European Waste Catalogue EWC codes	Source of waste accepted	Description of waste accepted **Please enter an accurate and detailed description - which applies to relevant EWC code** European Waste Catalogue EWC codes	Quantity of waste accepted in current reporting year (tonnes)	Quantity of waste accepted in previous reporting year (tonnes)	Reduction/ Increase over previous year +/ - %	Reason for reduction/ increase from previous reporting year	Packaging Content (%)- only applies if the waste has a packaging component	Disposal/Recovery or treatment operation carried out at your site and the description of this operation	Quantity of waste remaining on site at the end of reporting year (tonnes)	Comments -
30500 (Non Haz per annum)	10 01 26	*10- WASTES FROM THERMAL PROCESSES*	Cooling Water	95.7	4.12	2222.82%	Variance in business and waste streams from jobs	N/A	*D9-Physico-Chemical treatment not specified elsewhere which results in fial compounds or*		
4900 (Haz per annum)	13 02 08*	*13- OIL WASTES AND WASTES OF LIQUID FUELS (except edible oils, and those in chapters 05,*	Waste Oil	120.08	106.77	12.47%	Variance in business and waste streams from jobs	N/A	*R13-Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary*		
4900 (Haz per annum)	13 04 03*	*13- OIL WASTES AND WASTES OF LIQUID FUELS (except edible oils, and those in chapters 05,*	Bilge Oily Water	19.06	265.82	-92.83%	Variance in business and waste streams from jobs	N/A	*D9-Physico-Chemical treatment not specified elsewhere which results in fial compounds or*		
4900 (Haz per annum)	13 05 02*	*13- OIL WASTES AND WASTES OF LIQUID FUELS (except edible oils, and those in chapters 05,*	Sludge from Interceptors	29.02	11.6	150.17%	Variance in business and waste streams from jobs	N/A	*D9-Physico-Chemical treatment not specified elsewhere which results in fial compounds or*		
4900 (Haz per annum)	13 05 03*	*13- OIL WASTES AND WASTES OF LIQUID FUELS (except edible oils, and those in chapters 05,*	Sludge from Interceptors	505.27	162.66	210.63%	Variance in business and waste streams from jobs	N/A	*D9-Physico-Chemical treatment not specified elsewhere which results in fial compounds or*		
4900 (Haz per annum)	13 05 06*	*13- OIL WASTES AND WASTES OF LIQUID FUELS (except edible oils, and those in chapters 05,*	Oils from Interceptors	2.94	41.2	-92.86%	Variance in business and waste streams from jobs	N/A	*D9-Physico-Chemical treatment not specified elsewhere which results in fial compounds or*		
4900 (Haz per annum)	13 05 07*	*13- OIL WASTES AND WASTES OF LIQUID FUELS (except edible oils, and those in chapters 05,*	Oily water from Interceptors	2199.31	2702.41	-18.62%	Variance in business and waste streams from jobs	N/A	*D9-Physico-Chemical treatment not specified elsewhere which results in fial compounds or*		
4900 (Haz per annum)	13 05 08*	*13- OIL WASTES AND WASTES OF LIQUID FUELS (except edible oils, and those in chapters 05,*	Mixtures of waste from Interceptors	971.32	613.54	58.31%	Variance in business and waste streams from jobs	N/A	*D9-Physico-Chemical treatment not specified elsewhere which results in fial compounds or*		
4900 (Haz per annum)	13 07 01*	*13- OIL WASTES AND WASTES OF LIQUID FUELS (except edible oils, and those in chapters 05,*	Fuel oil / water	49.94	411.28	-87.86%	Variance in business and waste streams from jobs	N/A	*D9-Physico-Chemical treatment not specified elsewhere which results in fial compounds or*		
4900 (Haz per annum)	13 07 03*	*13- OIL WASTES AND WASTES OF LIQUID FUELS (except edible oils, and those in chapters 05,*	Mixtures of fuels	45.03	148.02	-69.58%	Variance in business and waste streams from jobs	N/A	*D9-Physico-Chemical treatment not specified elsewhere which results in fial compounds or*		
4900 (Haz per annum)	13 08 02*	*13- OIL WASTES AND WASTES OF LIQUID FUELS (except edible oils, and those in chapters 05,*	Oily water	829.57	2014.835	-58.83%	Variance in business and waste streams from jobs	N/A	*D9-Physico-Chemical treatment not specified elsewhere which results in fial compounds or*		
4900 (Haz per annum)	16 07 08*	*16- WASTES NOT OTHERWISE SPECIFIED IN THE LIST*	Wastes containing oil	0.04	0	0.04%	Variance in business and waste streams from jobs	N/A	*R13-Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary*		
4900 (Haz per annum)	16 10 01*	*16- WASTES NOT OTHERWISE SPECIFIED IN THE LIST*	Hazardous Aqueous Liquids	109.46	62.74	74.47%	Variance in business and waste streams from jobs	N/A	*D9-Physico-Chemical treatment not specified elsewhere which results in fial compounds or*		
30500 (Non Haz per annum)	16 10 02	*16- WASTES NOT OTHERWISE SPECIFIED IN THE LIST*	Aqueous Liquids	2603.88	90.14	2788.71%	Variance in business and waste streams from jobs	N/A	*D9-Physico-Chemical treatment not specified elsewhere which results in fial compounds or*		
4900 (Haz per annum)	17 02 04*	*17- CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL*	Contaminated Wood	5.96	25.88	-76.97%	Variance in business and waste streams from jobs	N/A	*R13-Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary*		
30500 (Non Haz per annum)	19 07 03	*19- WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER*	Leachate	17460.37	19478.504	-10.36%	Variance in business and waste streams from jobs	N/A	*D9-Physico-Chemical treatment not specified elsewhere which results in fial compounds or*		
30500 (Non Haz per annum)	19 09 02	*19- WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER*	Waste Water / Sludges	8692.52	0	N/A	New Waste Stream	N/A	*R13-Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary*		
30500 (Non Haz per annum)	20 01 25	*20- MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL,*	Grease Trap Waste	102.04	42.5	140.09%	Variance in business and waste streams from jobs	N/A	*R13-Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary*		
30500 (Non Haz per annum)	20 03 06	*20- MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL,*	Sewage Waste	686.52	582.48	17.86%	Variance in business and waste streams from jobs	N/A	*D9-Physico-Chemical treatment not specified elsewhere which results in fial compounds or*		

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.

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	Yes	
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	Yes	
6	Does your facility have relevant nuisance controls in place?	Yes	
7	Do you have an odour management system in place for your facility? If no why?	Yes	
8	Do you maintain a sludge register on site?	No	

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

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

Table 5 Capping-Landfill only

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

*please note this includes daily cover area

Table 6 Leachate-Landfill only

9	Is leachate from your site treated in a Waste Water Treatment Plant?	SELECT	
10	Is leachate released to surface water? If yes please complete leachate mass load information below	SELECT	

Volume of leachate in reporting year(m3)	Leachate (BOD) mass load (kg/annum)	Leachate (COD) mass load (kg/annum)	Leachate (NH4) mass load (kg/annum)	Leachate (Chloride) mass load kg/annum	Leachate treatment on-site	Specify type of leachate treatment	Comments

Please ensure that all information reported in the landfill gas section is consistent with the Landfill Gas Survey submitted in conjunction with PRTR returns

Table 7 Landfill Gas-Landfill only

Gas Captured& Treated by LFG System m3	Power generated (MW / KWh)	Used on-site or to national grid	Was surface emissions monitoring performed during the reporting year?	Comments
			SELECT	

Appendix 1

Noise Report

WRIGHT ENVIRONMENTAL SERVICES

CONFIDENTIAL REPORT

Client

Enva Ireland Ltd

JFK Industrial Estate

Naas Road

Dublin 12

Attn. Mr. Tom Keogh

Title

Annual Environmental

Noise Survey 2016

Enva Ireland Ltd. – Dublin

EPA Waste Licence Reg. No. 196-1

Report Ref:	1658	Survey and Report by:	Frances Wright *LFOH, BSc, PgDip Env, Dip SHWW*
Date recd:		Approved by:	Paddy Wright *BSc, PgDip ChemEng, CertOH*
Copies to:		Date:	19th January 2017

CONTENTS PAGE

1. INTRODUCTION:

Enva Ireland Ltd. (Enva) operate a waste recovery facility at JFK Industrial Estate, JFK Road, Naas Road, Dublin 12 which is licensed under the EPA Waste Licence system (Reg. No. 196-1). Schedule D of the company's licence requires an annual Environmental Noise Survey to be undertaken.

At the request of Mr. Tom Keogh of Enva Ireland Ltd., Wright Environmental Services carried out this Noise Survey on the 25th (day time) and 30th (night time) November 2016.

This report presents and interprets the results of the survey with reference to the company's waste licence noise limits. The methodology used for the survey is described in Appendix I. Instrumentation and calibration is described in Appendix II. Monitoring locations are shown in the site map in Appendix III.

2. SUMMARY

In accordance with their EPA Waste Licence (Reg. No. 196), Enva Ireland Ltd are required to have an annual noise survey undertaken to ensure compliance with their noise criteria set out in their licence. Wright Environmental Services carried out this environmental noise survey on the 25th (day time) and 30th (night time) November 2016 at the following locations.

	NB1	NB2	NB3	NB4	NSL1
Day Time Survey	**3 sampling periods**	**3 sampling periods**	**3 sampling periods**	**3 sampling periods**	**3 sampling periods**
Night Time Survey	-	-	-	-	**2 sampling periods**

Noise was measured at one noise sensitive location and four site boundary locations. The dominant noise source at the noise sensitive location was traffic noise and external industrial noise. The main noise sources onsite during the daytime survey were unloading tankers, run down screen, filter press, and vehicle movement. The Enva facility is closed at night however there is minimum equipment operating (e.g. fans) to maintain the site.

The noise levels measured at NSL 1 were above the criterion levels set out in the licence. There was an occasional hiss audible from Enva (run down screen) at this location however extraneous noise (traffic and industrial noise) were the dominant noise sources at this location. From observations during the testing, noise from Enva had little to no impact on the L_{eq} noise level at this location. It is therefore concluded that the elevated noise levels at this location were attributable to extraneous noise and not Enva. Noise measurements were measured at the four boundary locations. Using the inverse square law, the highest noise level measured at NB4 (closest to NSL1) was used to calculate the resultant noise levels at NSL1. This was below the criterion levels. The noise was also perceived at the noise monitoring locations to investigate the presence of tones. There were no tones perceived at any of the monitoring locations.

It is therefore concluded that the facility are in compliance with the various noise criteria in their Waste Licence.

3. MONITORING RESULTS AND DISCUSSION:

Wright Environmental Services carried out the day and night Environmental Noise Survey on the 25th (day time) and 30th (night time) November 2016. Noise was measured at one noise sensitive location and four site boundary locations.

The monitoring locations are described below and are shown in the site map in Appendix III.

Location **NB 1**: This is a boundary location to the south/east of the site.

Location **NB 2**: This is a boundary location to the east of the site.

Location **NB 3**: This is a boundary location to the north/east of the site.

Location **NB 4**: This is a boundary location to the west of the site (approximately 5m from run down screen).

Location **NSL 1**: This noise sensitive locations is the neighbouring facility to the west. It is near the roadside on the busy JFK road in the JFK industrial estate. The neighbouring facility is a place of worship.

The following "A-Weighted" data was determined for each discrete sampling period.

L_{eq} : The equivalent continuous noise level for the measurement period. (This is defined as the sound level of a steady sound having the same energy as a fluctuating sound over the specified measuring period).

$L_{(1)}$: The noise level exceeded for 1% of the measurement period. (This parameter gives a good indication of typical maximum levels.)

$L_{(10)}$: The noise level exceeded for 10% of the measurement period.

$L_{(90)}$: The noise level exceeded for 90% of the measurement period. (This is taken to represent the background noise level).

Detailed results are presented in Table 1 and 5 below along with appropriate comments regarding noise in the monitoring environment.

Table 1

NB 1 - Monitoring Location - Daytime

Start Time t = 30mins	L_{eq} (dBA)	L_1 (dBA)	L_{10} (dBA)	L_{90} (dBA)	Comments
10:35	**54**	62	56	50	Enva activity: hum from security speaker, truck unloading filter cake, tanker unloading at run down screen. Extraneous Activity : Traffic on local industrial road dominant (especially HGVs).
11:05	**53**	61	56	48	Enva activity: hum from security speaker, tanker unloading at run down screen, forklift Extraneous Activity : Traffic on local industrial road dominant (especially HGVs) and helicopter overhead. .
11:35	**53**	61	56	49	Enva activity: hum from security speaker, run down screen (pumps), truck movement, forklift. Extraneous Activity : Traffic on local industrial road dominant (especially HGVs) and helicopter overhead.

Table 2

NB 2 - Monitoring Location - Daytime

Start Time t = 30mins	L_{eq} (dBA)	L_1 (dBA)	L_{10} (dBA)	L_{90} (dBA)	Comments
12:21	**54**	63	56	49	Enva Activity: hum from security speaker, forklift, tanker unloading. Extraneous Activity : Traffic on the local industrial road audible (dominant in the absence of vehicle movement onsite).
12:52	**54**	60	54	49	Enva Activity: hum from security speaker, forklift, tanker unloading to screen. Extraneous Activity : Traffic on the local industrial road audible (dominant in the absence of vehicle movement onsite).
13:23	**53**	61	56	48	Enva Activity: hum from security speaker, forklift, truck movement. Extraneous Activity: Traffic on the local industrial road audible (dominant in the absence of vehicle movement onsite).

Table 3

NB 3 - Monitoring Location - Daytime

Start Time t = 30mins	L_{eq} (dBA)	L_1 (dBA)	L_{10} (dBA)	L_{90} (dBA)	Comments
10:42	**59**	69	60	55	Enva Activity: run down screen (pumps), truck unloading filter cake (dominant), forklift, truck movement. Extraneous Activity: neighbouring facility (fans, forklift)
11:12	**56**	65	55	53	Enva Activity: run down screen (pumps), forklift and teleporter, truck movement. Extraneous Activity: neighbouring facility (fans, forklift), helicopter overhead.
11:42	**56**	64	55	53	Enva Activity: run down screen (pumps), forklift and teleporter, truck movement. Extraneous Activity: neighbouring facility (fans, forklift), helicopter overhead.

Table 4

NB 4 - Monitoring Location - Daytime

Start Time t = 30mins	L_{eq} (dBA)	L_1 (dBA)	L_{10} (dBA)	L_{90} (dBA)	Comments
12:24	**64**	76	62	57	Enva Activity: tanker movement, forklift, run down screen (pumps). Extraneous Activity : Traffic on the local industrial road audible (in the absence of activity at run down screen).
12:54	**68**	77	71	61	Enva Activity: tanker unloading to run down screen, forklift, run down screen (pumps). Extraneous Activity : Traffic on the local industrial road audible (in the absence of activity at run down screen).
13:24	**58**	71	57	52	Enva Activity: run down screen (pumps), forklift. Extraneous Activity : Traffic on the local industrial road audible (in the absence of activity at run down screen).

Table 5

NSL 1 - Monitoring Location

Start Time t = 30mins	L_{eq} (dBA)	L_1 (dBA)	L_{10} (dBA)	L_{90} (dBA)	Comments	
14:08	**65**	75	61	56	Dominant noise : local industrial traffic passing NSL (almost continuous and included HGVs). Enva Activity: Minimal (occasional hiss) noise audible from the Enva facility.	DAY
14:38	**65**	77	65	56	Dominant noise : local industrial traffic passing NSL (almost continuous and included HGVs). Enva Activity: Minimal (occasional hiss) noise audible from the Enva facility.	
15:10	**64**	75	61	55	Dominant noise : local industrial traffic passing NSL (almost continuous and included HGVs). Enva Activity: Minimal (occasional hiss) noise audible from the Enva facility.	
22:05	**54**	60	55	51	Dominant noise : Industrial noise from the E/SE and traffic on Naas Road / Killeen road. Traffic from the west. is audible. Occasional hiss from Enva audible. Local traffic passes NSL1: 24 cars	NIGHT
22:36	**53**	59	54	51	Dominant noise : Industrial noise from the E/SE and traffic on Naas Road / Killeen road. Traffic from the west. is audible. Occasional hiss from Enva audible. Local traffic passes NSL1: 22 cars	

In accordance with their waste licence, Enva Ireland Ltd are required to comply with maximum noise limit values. Criterion noise levels are set for day and night time and apply at noise sensitive locations. They are presented in the licence as follows:

C.1 Noise Emissions: (Measured at any noise sensitive location).

Day	*55*	*dB(A) LAeq(30 minutes)*
Night	*45*	*dB(A) LAeq(30 minutes)*

The dominant noise source at the noise sensitive location was traffic noise and external industrial noise. The main noise sources onsite during the daytime survey were unloading tankers, run down screen pumps, filter cake press, and vehicle movement. The Enva facility is closed at night however there is minimum equipment operating (e.g. fans) to maintain the site.

Noise was measured at one noise sensitive monitoring location, NSL 1, adjacent to Enva. The L_{eq} noise levels measured at this location ranged from 64dB(A) to 65dB(A) for the day time measurements and 53dB(A) to 54dB(A) for the night time measurements. There was an occasional hiss audible from Enva (run down screen) at this location however extraneous noise (traffic and industrial noise) were the dominant noise sources at this location. From observations during the testing, noise from Enva had little to no impact on the L_{eq} noise level at this location. It is therefore concluded that the elevated noise levels at this location were attributable to extraneous noise and not Enva.

Noise measurements were taken at the four boundary locations. The L_{eq} noise levels were above 55dB(A) at NB3 and NB4. Vehicle movement, tanker unloading to the run down screen and tanker unloading to the filter cake press were the likely cause of the elevated noise levels. The Inverse Square Law (see Appendix I for details) can be used to calculate the expected reduction in noise levels as one moves away from a given noise source, which is assumed to radiate uniformly in all directions. The noise measured at NB4 were higher

than NB3. NB4 is also closer to the adjacent noise sensitive location. Therefore the highest noise levels measured at NB4 (68dB(A)) was used to calculate the expected noise level at the noise sensitive location. Applying the inverse square law, the expected noise levels at NSL1 due the prescribed noise sources would be less than 55dB(A), hence below the criterion levels at the noise sensitive location. The surrounding area is an industrial estate, with no other noise sensitive locations identified within the close vicinity.

Section 6.6 of the company's licence states that

> *"There shall be no clearly audible tonal component or impulsive component in the noise emissions from the activity at the noise sensitive locations."*

The noise was perceived at each of the monitoring locations to investigate the presence of tones. There were no tones perceived at any of the noise sensitive locations.

Therefore it is concluded that the facility are in compliance with this requirement of their licence.

APPENDIX I

Methodology

METHODOLOGY

The methodology of the survey was based upon procedures set out in the International Standard, ISO 1996-2:2007 (Acoustics – description, measurement and assessment of environmental noise Part 2: Determination of Environmental Noise Levels.). The survey was carried out in accordance with EPA published document *(NG4) Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities.*

Environmental noise levels were determined by using a Pulsar Model 33 , Type 1 Real Time Sound Level Meter, with half inch condenser microphone and a B&K Type 2250 Light. The instruments were calibrated directly before and after the noise measurements. Details of the instrumentation and external calibration are presented in Appendix II of this report.

Results reported were determined using the fast response, A-Weighting (ref. 20 μPa) and are rounded off to the nearest whole decibel. Monitoring was conducted in relatively calm, dry weather conditions during the day (08:00 – 22:00) and night (22:00 – 08:00). Throughout the monitoring, the microphone was situated 1.5 m above ground level, away from any reflective surfaces. The monitoring equipment was manned throughout the sampling intervals and comments were recorded in order to aid the interpretation of the results.

During the survey air temperature and humidity measurements were undertaken using a Delta Ohm Hygrometer HD 8501 H. Wind speed measurements were taken using a TSI VelociCalc and the wind direction was noted using a compass. Details of the weather conditions are presented in Table below.

Summary of Weather Conditions

Date	Time	Air Temperature ºC	Relative Humidity %	Wind Direction	Wind Speed m/s	General Conditions
25.11.2016	11:30	8	76	ENE	3.2	Dry – no precipitation
30.11.2016	22:20	6	87	ENE	4.1	Dry – no precipitation

The Inverse Square Law is used to calculate the expected reduction in noise levels as one moves away from a given noise source, which is assumed to radiate uniformly in all directions:

$$L_{p2} = L_{p1} - 20 \text{ Log } (R2/R1)$$

where:

- L_{p1} is the measured reference Sound Pressure Level (SPL) at a distance of R1 metres from the source.
- L_{p2} is the calculated SPL at a distance of R2 metres from the source.

APPENDIX II

Instrumentation and External Calibration Details

Certificate of Calibration

pulsar Instruments Plc

Equipment Details

Instrument Manufacturer	Pulsar Instruments plc
Instrument Type	Model 100B
Description	Acoustic Calibrator
Serial Number	42171

Calibration Procedure

The acoustic calibrator detailed above has been calibrated to the published data as described in the operating manual. The procedures and techniques used to follow the recommendations of the IEC standard Electroacoustics – Sound Calibrators IEC 60942:2003, IEC 60942:1997, BS EN 60942:1998 and BS EN 60942:2003 where applicable.. The calibrator's main output is 94.00 dB (1 Pa) and this was set within the 0.01 dB resolution of the test system, i.e. one hundredth of a decibel. Numbers in {parenthesis} refer to the paragraph in IEC 60942.

Calibration Traceability

The calibrator above was calibrated against the calibration laboratory standards held by Cirrus Research plc. These are traceable to International Standards {A.0.6}. The standards are:

Microphone Type	B&K 4192	Serial Number	19207921	Calibration Ref.	S6450
Pistonphone Type	B&K 4220	Serial Number	613843	Calibration Ref.	S6388

Calibration Climate Conditions

The climatic test conditions were all maintained within the permitted limits of IEC 60942:1997.

Temperature	{B.3.2}	Permitted band 15°C to 25°C
Humidity	{B.3.2}	Permitted band 30% to 90% RH
Static Pressure	{B.3.2}	Permitted band 85 kPa to 105 kPa
Ambient Noise Level	{B.3.3.6}	Max permitted level 64 dB(Z)

Measurement Results

The figures below are the Calibration Laboratory test limits for this model calibrator and have a smaller tolerance than those permitted in IEC 60942.

94 dB Output	94.02 dB	Permitted band	93.95 to 94.05dB
104 dB Output	103.98 dB	Permitted band	103.80 to 104.30dB
Frequency	995.1 Hz	Permitted band	990 to 1010Hz

Uncertainty

With an uncertainty coefficient of k=2, i.e. a 95% confidence level, the uncertainty of each measure is

94 dB Output	± 0.13 dB	104 dB Output	± 0.14 dB
Frequency	± 0.1 Hz	Level Stability	± 0.04 dB

Calibrated by M. BERRY

Calibration Date 10 February 2015

Calibration Certificate Number 225813

This Calibration Certificate is valid for 24 months from the date above.

Pulsar Instruments plc, The Evron Centre, John Street, Filey, North Yorkshire, YO14 9DW

Certificate of Calibration

pulsar Instruments Plc

Equipment Details

Instrument Manufacturer	Pulsar Instruments plc
Instrument Type	Model 33
Description	Sound Level Meter
Serial Number	T223417

Calibration Procedure

The instrument detailed above has been calibrated to the publish test and calibration data as detailed in the instrument hand book, using the techniques recommended in the latest revisions of the International Standards IEC 61672-1:2002, IEC 60651:1979, IEC 60804:2001,IEC 61260:1995, IEC 60942:1997, IEC 61252:1993, ANSI S1.4-1983, ANSI S1.11-1986 and ANSI S1.43-1997 where applicable.
Sound Level Meters: All Calibration procedures were carried out by subsitituting the microphone capsule with a suitable electrical signal, apart from the final acoustic calibration.

Calibration Traceability

The equipment detailed above was calibrated against the calibration laboratory standards held by Cirrus Research plc. These are traceable to International Standards {A.0.6}. The standards are:

Microphone Type	B&K 4192	Serial Number	19207921	Calibration Ref.	S6450
Pistonphone Type	B&K 4220	Serial Number	613843	Calibration Ref.	S6388

Calibrated by M. BERRY

Calibration Date	10 February 2015
Calibration Certificate Number	225812

This Calibration Certificate is valid for 24 months from the date above.

Pulsar Instruments plc, The Evron Centre, John Street, Filey, North Yorkshire, YO14 9DW
Telephone: +44 (0) 1723 518011 Fax: +44 (0) 1723 518043
Email: sales@pulsarinstruments.com

Brüel & Kjær

The Calibration Laboratory
Skodsborgvej 307, DK-2850 Nærum, Denmark

ilac-MRA DANAK CAL Reg.nr. 307

CERTIFICATE OF CALIBRATION

No: CDK1331010 Page 1 of 10

Sound Level Meter:	Brüel & Kjær Type 2250 Light	No: 3001350	Id: -
Microphone:	Brüel & Kjær Type 4950	No: 2778447	
Preamplifier:	Brüel & Kjær Type ZC-0032	No: 16741	
Supplied Calibrator:	None		
Software version:	BZ7130 Version 3.5.1	Pattern Approval:	PENDING
Instruction manual:	BE-1774-14		

CUSTOMER

Enfonic Ltd
Tecpro House, IDA Business & Technology Park, Clonshaugh
Clonshaugh
Dublin 17
Ireland

CALIBRATION CONDITIONS

Preconditioning: 4 hours at 23°C ± 3°C
Environment conditions: *See actual values in **Environmental conditions** sections.*

SPECIFICATIONS

The Sound Level Meter Brüel & Kjær Type 2250 Light has been calibrated in accordance with the requirements as specified in IEC61672-1:2002 class 1. Procedures from IEC 61672-3:2006 were used to perform the periodic tests. The accreditation assures the traceability to the international units system SI.

PROCEDURE

The measurements have been performed with the assistance of Brüel & Kjær Sound Level Meter Calibration System 3630 with application software type 7763 (version 4.9 - DB: 4.90) by using procedure 2250-L-4950.

RESULTS

Calibration Mode: **Calibration after repair/adjustment.**

The reported expanded uncertainty is based on the standard uncertainty multiplied by a coverage factor $k = 2$ providing a level of confidence of approximately 95 %. The uncertainty evaluation has been carried out in accordance with EA-4/02 from elements originating from the standards, calibration method, effect of environmental conditions and any short time contribution from the device under calibration.

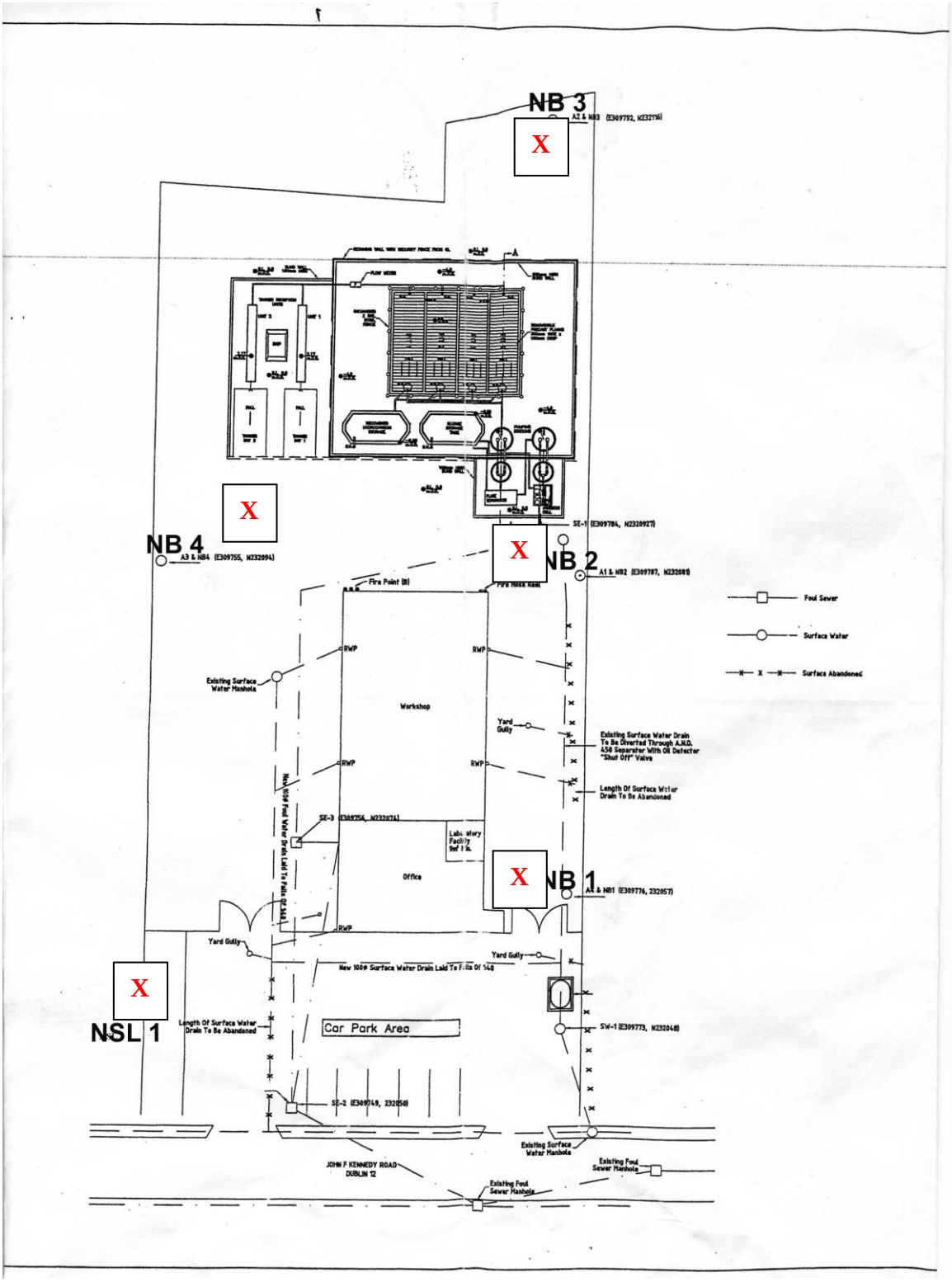
Date of calibration: 2014-10-10 Date of issue: 2014-10-10

M. Önder
Mikail Önder
Calibration Technician

Jonas Johannessen
Approved Signatory

APPENDIX III

Site Plan showing Noise Monitoring Positions


NB 3
X
X
NB 4
X
NB 2
Foul Sewer
Surface Water
Surface Abandoned
Existing Surface Water Manhole
Workshop
Yard Gully
Existing Surface Water Drain To Be Diverted Through A.N.D. 450 Separator With Oil Detector "Shut Off" Valve
Length Of Surface Water Drain To Be Abandoned
Office
X
NB 1
X
NSL 1
Car Park Area
JOHN F KENNEDY ROAD DUBLIN 12
Existing Foul Sewer Manhole

Environmental Protection Agency

Guidance to completing the PRTR workbook

PRTR Returns Workbook

Version 1.1.19

REFERENCE YEAR	2016

1. FACILITY IDENTIFICATION

Parent Company Name	Enva Ireland Limited
Facility Name	Enva Ireland Limited (Naas Road)
PRTR Identification Number	W0196
Licence Number	W0196-01

Classes of Activity

No.	**class_name**
-	Refer to PRTR class activities below

Address 1	John F. Kennedy Industrial Estate
Address 2	John F. Kennedy Road
Address 3	Naas Road
Address 4	
	Dublin
Country	Ireland
Coordinates of Location	-6.35314 53.3279
River Basin District	IEEA
NACE Code	3821
Main Economic Activity	Treatment and disposal of non-hazardous waste
AER Returns Contact Name	Sarah Malone
AER Returns Contact Email Address	sarah.malone@enva.com
AER Returns Contact Position	Site Administrator
AER Returns Contact Telephone Number	01 42 42201
AER Returns Contact Mobile Phone Number	
AER Returns Contact Fax Number	01 45 68197
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	3
User Feedback/Comments	Some parameters have an increase/decrease due to different ranges of jobs carried out and variance in waste streams in 2016.
Web Address	http://enva.com/

2. PRTR CLASS ACTIVITIES

Activity Number	**Activity Name**
5(a)	Installations for the recovery or disposal of hazardous waste
5(a) 5(c) 50.1	Installations for the recovery or disposal of hazardous waste Installations for the disposal of non-hazardous waste General

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

Is it applicable?	No
Have you been granted an exemption ?	No
If applicable which activity class applies (as per Schedule 2 of the regulations) ?	N/A
Is the reduction scheme compliance route being used ?	N/A

4. WASTE IMPORTED/ACCEPTED ONTO SITE

Guidance on waste imported/accepted onto site

Do you import/accept waste onto your site for on-site treatment (either recovery or disposal activities) ?	Yes

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

SECTION A : PRTR POLLUTANTS

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			QUANTITY			
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
78	Xylenes	C	OTH	Determination of GRO by Headspace in waters, By GC-FID	0.24	0.24	0.0	0.0
20	Copper and compounds (as Cu)	C	OTH	Standard Methods for the Examination of Water and Wastewater, 18th edition, Metals by Flame Atomic Absorption Spectrometry-Direct Air-Acetylene Flame Method 3111B - Modified	0.94	0.94	0.0	0.0
24	Zinc and compounds (as Zn)	C	OTH	Standard Methods for the Examination of Water and astewater, 18th edition, Metals by Flame Atomic Absorption Spectrometry-Direct Air-Aceylene Flame	3.97	3.97	0.0	0.0

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

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

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			QUANTITY			
			Method Used					
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
303	BOD	C	OTH	Determination of BOD5 (ATU) Filtered by Oxygen Meter on liquids, MEWAM BOD5 2nd Ed.HMSO 1988 / Method 5210B, AWWA/APHA, 20th Ed., 1999; SCA Blue Book 130	1543.68	1543.68	0.0	0.0
306	**COD**	C	OTH	Standard Methods for the Examination of Water and Wastewater, 21st edition, 2005 - Chemical Oxygen Demand	23213.23	23213.23	0.0	0.0
324	Mineral oils	C	OTH	EPH in Waters, Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	17.64	17.64	0.0	0.0
240	Suspended Solids	C	OTH	Standard Methods for the Examination of water and wastewater, 18th edition, 1995, Part 2540, D-Solids	497.48	497.48	0.0	0.0
343	Sulphate	C	OTH	Standard Methods for the Examination of Water and Wastewater, 18th edition, 1995, Part 4500 - SO4 - E	3500.75	3500.75	0.0	0.0
238	Ammonia (as N)	C	OTH	Standard Methods for the Examination of Water and Wastewater, 21th edition, 1995, Part 4000, section 4500 –Nitrogen (Ammonia) F Phenate Method.	4138.76	4138.76	0.0	0.0
308	Detergents (as MBAS)	C	OTH	The Determination of Methylene Blue Active Substances in Waters, Standard Methods for the Examination of Water and Wastewater. 20th Edition. 1998	7.92	7.92	0.0	0.0

352	Total Organic Carbon (as Toluene)	C	OTH	Determination of GRO by Headspace in waters, By GC-FID	0.1595	0.1595	0.0	0.0
332	Ortho-phosphate (as PO4)	C	OTH	The Determination of Anions in Aqueous Matrices using the Kone Spectrophotometric Analysers, EPA Methods 325.1 & 325.2,	46.92	46.92	0.0	0.0

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

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

Please enter all quantities on this sheet in Tonnes

0

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
Within the Country	13 02 08	Yes	108.32	other engine, gear and lubricating oils	R9	M	Weighed	Offsite in Ireland	Enva Ireland Ltd,W0-184/1	Clonminam Industrial Estate,Portlaoise,Co Laois,Co Laois,Ireland	Lindeschmidt,471498089,Krombacher Strasse,42 - 46,Kreutzal,D57223,Germany	Krombacher Strasse,42 - 46,Kreutzal,D57223,Germany
Within the Country	13 05 01	Yes	173.74	solids from grit chambers and oil/water separators	D15	M	Weighed	Offsite in Ireland	Enva Ireland Ltd,W0-184/1	Clonminam Industrial Estate,Portlaoise,Co Laois,Co Laois,Ireland	Enva Ireland,W0184-1,Clonminam Industrial Estate,Portlaoise,Laois,0,Ireland	Clonminam Industrial Estate,Portlaoise,Laois,.,Ireland
Within the Country	13 08 02	Yes	70.72	other emulsions	D9	M	Weighed	Offsite in Ireland	Enva Ireland Ltd,W0-184/1	Clonminam Industrial Estate,Portlaoise,Co Laois,Co Laois,Ireland	Enva Ireland,W0184-1,Clonminam Industrial Estate,Portlaoise,Laois,0,Ireland	Clonminam Industrial Estate,Portlaoise,Laois,.,Ireland
Within the Country	20 01 25	No	48.64	edible oil and fat	R13	M	Weighed	Offsite in Ireland	Ringsend Waste Water Treatment,D0034-01	Ringsend Wastewater Treatment Works ,Pigeon House Road ,Dublin,NA,Ireland		
Within the Country	20 01 25	No	45.68	edible oil and fat	R13	M	Weighed	Offsite in Ireland	Ormonde Organics Ltd.,W0287-01	.,Killowen,Portlaw,Co. Waterford,Ireland		
Within the Country	19 09 02	No	8408.79	sludges from water clarification	R11a	M	Weighed	Offsite in Ireland	Cavan County Council/Corranure Landfill,W0077-04	Lismagratty & Corranure Townlands,Cootehill Road,.,Co. Cavan,Ireland		
Within the Country	02 07 04	No	1.58	materials unsuitable for consumption or processing	D13	M	Weighed	Offsite in Ireland	Future Pigs Ltd. T/A Green Generation Ltd.,P0420-03	Gorteen Lower,.,Nurney,Co. Kildare,Ireland		
Within the Country	13 05 02	Yes	19.62	sludges from oil/water separators	D15	M	Weighed	Offsite in Ireland	Enva Ireland Ltd,W0-184/1	Clonminam Industrial Estate,Portlaoise,Co Laois,Co Laois,Ireland	Enva Ireland,W0184-1,Clonminam Industrial Estate,Portlaoise,Laois,0,Ireland	Clonminam Industrial Estate,Portlaoise,Laois,.,Ireland
Within the Country	13 05 03	Yes	25.16	interceptor sludges	D9	M	Weighed	Offsite in Ireland	Enva Ireland Ltd,W0-184/1	Clonminam Industrial Estate,Portlaoise,Co Laois,Co Laois,Ireland	Enva Ireland,W0184-1,Clonminam Industrial Estate,Portlaoise,Laois,0,Ireland	Clonminam Industrial Estate,Portlaoise,Laois,.,Ireland
Within the Country	13 05 08	Yes	3.0	mixtures of wastes from grit chambers and oil/water separators	D9	M	Weighed	Offsite in Ireland	Enva Ireland Ltd,W0-184/1	Clonminam Industrial Estate,Portlaoise,Co Laois,Co Laois,Ireland	Enva Ireland,W0184-1,Clonminam Industrial Estate,Portlaoise,Laois,0,Ireland	Clonminam Industrial Estate,Portlaoise,Laois,.,Ireland
Within the Country	15 02 02	Yes	0.66	absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances	R13	M	Weighed	Offsite in Ireland	Enva Ireland Ltd,W0-184/1	Clonminam Industrial Estate,Portlaoise,Co Laois,Co Laois,Ireland	Kreis Weseler Abfallgesellschaft mbH & Co. KG (KWA),498/1713/Efb,Graft Strasse 25,47475,Kamp-Lintfort,.,Germany	KWA Asdonkshof,Graft Strasse 25,47475,Kamp-Lintfort,Germany
Within the Country	16 01 14	Yes	9.96	antifreeze fluids containing dangerous substances	R13	M	Weighed	Offsite in Ireland	Enva Ireland Ltd,W0-184/1	Clonminam Industrial Estate,Portlaoise,Co Laois,Co Laois,Ireland	KS Recycling GmbH & Co. KG,12 150 13987 TMS,Raiffeisenstraße 38,D-47665,Sonsbeck,.,Germany	Raiffeisenstraße 38,D-47665,Sonsbeck,.,Germany
Within the Country	16 01 15	No	18.0	antifreeze fluids other than those mentioned in 16 01 14	R13	M	Weighed	Offsite in Ireland	Enva Ireland Ltd,W0-184/1	Clonminam Industrial Estate,Portlaoise,Co Laois,Co Laois,Ireland		
Within the Country	17 05 04	No	63.94	soil and stones other than those mentioned in 17 05 03	R13	M	Weighed	Offsite in Ireland	Enva Ireland Ltd,W0-184/1	Clonminam Industrial Estate,Portlaoise,Co Laois,Co Laois,Ireland		

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

Link to previous years waste data
Link to previous years waste summary data & percentage change
Link to Waste Guidance

Previous years data is correct as at 30/03/2017 14:58

Release_To	Year	Pollutant_Number	Pollutant_Description	M_C_E	Method_Code	Method_Description	Total
WasteWater	2015	20	Copper and compounds (as Cu)	C	OTH	Standard Methods for the Examination of Water and astewater, 18th edition, Metals by Flame Atomic A	2.82
WasteWater	2015	24	Zinc and compounds (as Zn)	C	OTH	Standard Methods for the Examination of Water and Wastewater, 18th edition, Metals by Flame Atomic	8.15
WasteWater	2015	240	Suspended Solids	C	OTH	Standard Methods for the Examination of water and wastewater, 18th edition, 1995, Part 2540, D-Solid	479.84
WasteWater	2015	303	BOD	C	OTH	Determination of BOD5 (ATU) Filtered by Oxygen Meter on liquids, MEWAM BOD5 2nd Ed.HMSO 1988 / Method 5210B, AWWA/APHA, 20th Ed., 1999; SCA Blue Book 130	1267.44
WasteWater	2015	306	COD	C	OTH	Standard Methods for the Examination of Water and Wastewater, 21st edition, 2005 - Chemical Oxyge	38135.4
WasteWater	2015	308	Detergents (as MBAS)	C	OTH	The Determination of Methylene Blue Active Substances in Waters, Standard Methods for the Examination of Water and Wastewater. 20th Edition. 1998	11.33
WasteWater	2015	324	Mineral oils	C	OTH	EPH in Waters, Analysis of Petroleum Hydrocarbons in Environmental Media ? Total Petroleum Hydrocarbon Criteria	4.04
WasteWater	2015	332	Ortho-phosphate (as PO4)	C	OTH	The Determination of Anions in Aqueous Matrices using the Kone Spectrophotometric Analysers, EPA Methods 325.1 & 325.2,	410.76
WasteWater	2015	343	Sulphate	C	OTH	Standard Methods for the Examination of Water and Wastewater, 18th edition, 1995, Part 4500 - SO4	3066.61
WasteWater	2015	352	Total Organic Carbon (as Toluene)	C	OTH	Determination of GRO by Headspace in waters, By GC-FID	0.106
WasteWater	2015	78	Xylenes	C	OTH	Determination of GRO by Headspace in waters, By GC-FID	0.606

Previous years data is correct as at 30/03/2017 14:58

Year	Destination	EWC	Hazardous	Total	Description	TreatmentOperation	M	C	E	MethodCode	TreatmentLocation	Name_Licence_Permit_No	Address	Final_Recoverer_Disposer	Actual_Address_Final_Destination
2015	Within the Country	13 02 08	Y	103.04	other engine, gear and lubricating oils	R9	M			Weighed	Offsite in Ireland	Enva Ireland Ltd,W0-184/1	Clonminam Industrial Estate,Portlaoise,Co Laois,Co Laois,Ireland	Lindeschmidt,471498089,Krombacher Strasse,42 - 46,Kreutzal,D57223,Germany	Krombacher Strasse,42 - 46,Kreutzal,D57223,Germany
2015	Within the Country	13 05 01	Y	215.08	solids from grit chambers and oil/water separators	D15	M			Weighed	Offsite in Ireland	Enva Ireland Ltd,W0-184/1	Clonminam Industrial Estate,Portlaoise,Co Laois,Co Laois,Ireland	Enva Ireland,W0184-1,Clonminam Industrial Estate,Portlaoise,Laois,0,Ireland	Clonminam Industrial Estate,Portlaoise,Laois,,,Ireland
2015	Within the Country	13 08 02	Y	103.08	other emulsions	D9	M			Weighed	Offsite in Ireland	Enva Ireland Ltd,W0-184/1	Clonminam Industrial Estate,Portlaoise,Co Laois,Co Laois,Ireland	Enva Ireland,W0184-1,Clonminam Industrial Estate,Portlaoise,Laois,0,Ireland	Clonminam Industrial Estate,Portlaoise,Laois,,,Ireland
2015	Within the Country	16 05 06	Y	0.04	laboratory chemicals, consisting of or containing dangerous substances, including mixtures of labora	D13	M			Weighed	Offsite in Ireland	Enva Ireland Shannon,W0041-01	Smithstown Industrial Estate,Shannon,Co Clare,Musnster,Ireland	Lindeschmidt,471498089,Krombacher Strasse,42 - 46,Kreutzal,D57223,Germany	Krombacher Strasse,42 - 46,Kreutzal,D57223,Germany
2015	Within the Country	16 07 09	Y	33.12	wastes containing other dangerous substances	D9	M			Weighed	Offsite in Ireland	Enva Ireland Shannon,W0041-01	Smithstown Industrial Estate,Shannon,Co Clare,Musnster,Ireland	Lindeschmidt,471498089,Krombacher Strasse,42 - 46,Kreutzal,D57223,Germany	Krombacher Strasse,42 - 46,Kreutzal,D57223,Germany
2015	Within the Country	16 10 02	N	25896.73	aqueous liquid wastes other than those mentioned in 16 10 01	D9	M			Volume Calculation	Offsite in Ireland	Ringsend Waste Water Treatment,D0034-01	Ringsend Wastewater Treatment Works ,Pigeon House Road ,Dublin,NA,Ireland		
2015	Within the Country	19 08 05	N	54.68	sludges from treatment of urban waste water	D9	M			Weighed	Offsite in Ireland	Lower Liffey Valley Regional Sewarge Scheme,D004-01	...,Leixlip,Co Kildare,Ireland		
2015	Within the Country	20 01 25	N	52.12	edible oil and fat	R13	M			Weighed	Offsite in Ireland	AQS,WCP-KK-12-583-01	1,Archerstown Industrial Estate,Thurles,Co Tipperary,Ireland		
2015	Within the Country	20 03 06	N	534.52	waste from sewage cleaning	D9	M			Volume Calculation	Offsite in Ireland	Ringsend Waste Water Treatment,D0034-01	Ringsend Wastewater Treatment Works ,Pigeon House Road ,Dublin,NA,Ireland		

Previous years data is correct as at 30/03/2017 14:58

Type of Waste	Previous Year Total	Current Year Total	Percentage Change
Hazardous Waste inside the country for disposal	351.32	292.24	-16.81657748
Hazardous Waste inside the country for recovery	103.04	118.94	15.43090062
Hazardous Waste outside the country for disposal	0	0	0
Hazardous Waste outside the country for recovery	0	0	0
Non-Hazardous Waste for disposal	26485.93	1.58	-99.99403457
Non-Hazardous Waste for recovery	52.12	8585.05	16371.69992