Facility Information Summary	
AER Reporting Year	2013
Licence Register Number	P0694-01
Name of site	Rhode Generating Station
Site Location	Coolcor, Rhode, Co. Offaly.
NACE Code	3511
Class/Classes of Activity	Production and supply of electricity
National Grid Reference (6E, 6 N)	121266 E, 372497 N

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.

The Rhode PCP is located in County Offaly, approximately 1 mile north of Rhode village on the eastern edge of the Derragreenagh bog. The surrounding catchment area is the Yellow River. It uses gasoil as fuel for electricity generation. There are two electricity generating units, each having a capacity of 52 MW. The plant has a total generating capacity of 104 MW. Each generator is driven by two gas turbine engines, manufactured by Pratt and Whitney. Demineralised water injection is used for NOx suppression. This equipment is suitable for peaking capacity supply to the electricity grid as it starts very quickly and can produce 104 MW of electricity in about eight minutes (full load mode). During 2013, there was a further reduction in overall running hours for the station. The total overall running hours for 2013 was 17.45 hrs, which was down 35% on 2012 hours. A further trend of decrease for the stations total running hours is predicted for the coming years. This is attributable to a lower demand from the National Grid. Emissions to atmosphere (CO2, NOx & SOx) were lower than previous years. Demineralised water and gas oil consumed in 2013 was also lower.

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.

Caroline O'Connell	31/03/2014
Signature	Date
Environmental Co-ordinator	
(or nominated, suitably qualified and experienced deputy)	

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Answer all questions and complete all tables where relevant

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

Periodic/Non-Continuous Monitoring

2	Are there any results in breach of licence requirements? If yes please provide brief details in the comment section of TableA1 below		No	
3	Was all monitoring carried out in accordance with EPA guidance note AG2 and using the basic air monitoring checklist?	Basic air monitoring checklist	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 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
A1	Nitrogen oxides (NOx/NO2)	Annually	120	SELECT	112.6	mg/Nm3	yes	EN 14792:2005		
	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

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Continuous Monitoring

4	Does your site carry out continuous air emissions monitoring?	Yes	
	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	Yes	Nox monitoring equipment error on 22/03/2013
6	Do you have a proactive service agreement for each piece of continuous monitoring equipment?	Yes	
7	Did your site experience any abatement system bypasses? If yes please detail them in table A3 below	No	

Table A2: Summary of average emissions -continuous monitoring

Emission reference no:	Parameter/ Substance	ELV in licence or any revision 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
A1	Nitrogen oxides (NOx/NO2)	120	Daily	Daily average < ELV	mg/Nm3	102		0	0	22/03/2013
A1	Nitrogen oxides (NOx/NO2)	120	Daily	Daily average < ELV	mg/Nm3	111		0	0	17/08/2013
A1	Nitrogen oxides (NOx/NO2)	120	Daily	Daily average < ELV	mg/Nm3	112		0	0	30/09/2013
A1	Nitrogen oxides (NOx/NO2)	120	Daily	Daily average < ELV	mg/Nm3	120		0	0	09/11/2013
A1	Nitrogen oxides (NOx/NO2)	120	Daily	Daily average < ELV	mg/Nm3	136		0	0	19/12/2013
A1	volumetric flow	314500	Hourly	All 1-hour averages < ELV	Nm3/hour	155892		0	0	22/03/2013
A1	volumetric flow	314500	Hourly	All 1-hour averages < ELV	Nm3/hour	185576		0	0	17/08/2013
A1	volumetric flow	314500	Hourly	All 1-hour averages < ELV	Nm3/hour	194586		0	0	30/09/2013
A1	volumetric flow	314500	Hourly	All 1-hour averages < ELV	Nm3/hour	262024		0	0	09/11/2013
A1	volumetric flow	314500	Hourly	All 1-hour averages < ELV	Nm3/hour	125370		0	0	19/12/2013
A2	Nitrogen oxides (NOx/NO2)	120	Daily	Daily average < ELV	mg/Nm3	105		0	0	22/03/2013
A2	Nitrogen oxides (NOx/NO2)	120	Daily	Daily average < ELV	mg/Nm3	77		0	0	17/08/2013
A2	Nitrogen oxides (NOx/NO2)	120	Daily	Daily average < ELV	mg/Nm3	74		0	0	30/09/2013
A2	Nitrogen oxides (NOx/NO2)	120	Daily	Daily average < ELV	mg/Nm3	109		0	0	09/11/2013
A2	volumetric flow	314500	Hourly	All 1-hour averages < ELV	Nm3/hour	186653		0	0	22/03/2013
A2	volumetric flow	314500	Hourly	All 1-hour averages < ELV	Nm3/hour	187163		0	0	17/08/2013
A2	volumetric flow	314500	Hourly	All 1-hour averages < ELV	Nm3/hour	199955		0	0	30/09/2013
A2	volumetric flow	314500	Hourly	All 1-hour averages < ELV	Nm3/hour	225509		0	0	09/11/2013
A3	Nitrogen oxides (NOx/NO2)	120	Daily	Daily average < ELV	mg/Nm3	Error		3 hours Nox monitoring equipment error	0	22/03/2013
A3	Nitrogen oxides (NOx/NO2)	120	Daily	Daily average < ELV	mg/Nm3	124		0	1	17/08/2013
A3	Nitrogen oxides (NOx/NO2)	120	Daily	Daily average < ELV	mg/Nm3	121		0	1	30/09/2013
A3	Nitrogen oxides (NOx/NO2)	120	Daily	Daily average < ELV	mg/Nm3	87		0	0	31/10/2013
A3	Nitrogen oxides (NOx/NO2)	120	Daily	Daily average < ELV	mg/Nm3	114		0	0	19/12/2013
A3	volumetric flow	314500	Hourly	All 1-hour averages < ELV	Nm3/hour	137006		0	0	22/03/2013
A3	volumetric flow	314500	Hourly	All 1-hour averages < ELV	Nm3/hour	174857		0	0	17/08/2013
A3	volumetric flow	314500	Hourly	All 1-hour averages < ELV	Nm3/hour	256668		0	0	30/09/2013

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A3	volumetric flow	314500	Hourly	All 1-hour averages < ELV	Nm3/hour	163126		0	0	31/10/2013
A3	volumetric flow	314500	Hourly	All 1-hour averages < ELV	Nm3/hour	241472		0	0	19/12/2013
A4	Nitrogen oxides (NOx/NO2)	120	Daily	Daily average < ELV	mg/Nm3	Error		3 hours Nox monitoring equipment error	0	22/03/2013
A4	Nitrogen oxides (NOx/NO2)	120	Daily	Daily average < ELV	mg/Nm3	81		0	0	17/08/2013
A4	Nitrogen oxides (NOx/NO2)	120	Daily	Daily average < ELV	mg/Nm3	113		0	0	30/09/2013
A4	Nitrogen oxides (NOx/NO2)	120	Daily	Daily average < ELV	mg/Nm3	68		0	0	31/10/2013
A4	Nitrogen oxides (NOx/NO2)	120	Daily	Daily average < ELV	mg/Nm3	112		0	0	19/12/2013
A4	volumetric flow	314500	Hourly	All 1-hour averages < ELV	Nm3/hour	166276		0	0	22/03/2013
A4	volumetric flow	314500	Hourly	All 1-hour averages < ELV	Nm3/hour	163759		0	0	17/08/2013
A4	volumetric flow	314500	Hourly	All 1-hour averages < ELV	Nm3/hour	254282		0	0	30/09/2013
A4	volumetric flow	314500	Hourly	All 1-hour averages < ELV	Nm3/hour	140323		0	0	31/10/2013
A4	volumetric flow	314500	Hourly	All 1-hour averages < ELV	Nm3/hour	275635		0	0	19/12/2013
	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

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Solvent use and management on site

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

No	

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

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

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

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

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
	SELECT	SELECT	SELECT			SELECT		SELECT	SELECT	
	SELECT	SELECT	SELECT			SELECT		SELECT	SELECT	

*trigger values may be agreed by the Agency outside of licence conditions

Table W2 Visual inspections-Please only enter details where contamination was observed.

Location Reference	Date of inspection	Description of contamination	Source of contamination	Corrective action	Comments
			SELECT		
			SELECT		

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

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	Assessment of results checklist	Yes	

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

Emission reference no:	Emission released to	Parameter/ 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
S2	Water	pH	discrete	Monthly	Monthly	8.87	No pH value shall deviate from	8.5	pH units	yes	pH Meter (Electrode)	APHA / AWWA			09/01/13
S2	Water	pH	discrete	Monthly	Monthly	8.87	No pH value shall deviate from	8.0	pH units	yes	pH Meter (Electrode)	APHA / AWWA			04/02/13
S2	Water	pH	discrete	Monthly	Monthly	8.87	No pH value shall deviate from	7.7	pH units	yes	pH Meter (Electrode)	APHA / AWWA			04/03/13
S2	Water	pH	discrete	Monthly	Monthly	8.87	No pH value shall deviate from	7.8	pH units	yes	pH Meter (Electrode)	APHA / AWWA			02/04/13
S2	Water	pH	discrete	Monthly	Monthly	8.87	No pH value shall deviate from	7.1	pH units	yes	pH Meter (Electrode)	APHA / AWWA			07/05/13
S2	Water	pH	discrete	Monthly	Monthly	8.87	No pH value shall deviate from	7.8	pH units	yes	pH Meter (Electrode)	APHA / AWWA			05/06/13
S2	Water	pH	discrete	Monthly	Monthly	8.87	No pH value shall deviate from	7.8	pH units	yes	pH Meter (Electrode)	APHA / AWWA			01/07/13
S2	Water	pH	discrete	Monthly	Monthly	8.87	No pH value shall deviate from	7.6	pH units	yes	pH Meter (Electrode)	APHA / AWWA			06/08/13
S2	Water	pH	discrete	Monthly	Monthly	8.87	No pH value shall deviate from	7.8	pH units	yes	pH Meter (Electrode)	APHA / AWWA			02/09/13
S2	Water	pH	discrete	Monthly	Monthly	8.87	No pH value shall deviate from	7.7	pH units	yes	pH Meter (Electrode)	APHA / AWWA			30/09/13
S2	Water	pH	discrete	Monthly	Monthly	8.87	No pH value shall deviate from	8.6	pH units	yes	pH Meter (Electrode)	APHA / AWWA			04/11/13
S2	Water	pH	discrete	Monthly	Monthly	8.87	No pH value shall deviate from	8.1	pH units	yes	pH Meter (Electrode)	APHA / AWWA			02/12/13
S2	Water	COD	discrete	Monthly	Monthly	51.71	All results < 1.2 x ELV	<10	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA			09/01/13
S2	Water	COD	discrete	Monthly	Monthly	51.71	All results < 1.2 x ELV	<10	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA			04/02/13
S2	Water	COD	discrete	Monthly	Monthly	51.71	All results < 1.2 x ELV	14.0	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA			04/03/13
S2	Water	COD	discrete	Monthly	Monthly	51.71	All results < 1.2 x ELV	30.0	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA			02/04/13
S2	Water	COD	discrete	Monthly	Monthly	51.71	All results < 1.2 x ELV	28.0	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA			07/05/13
S2	Water	COD	discrete	Monthly	Monthly	51.71	All results < 1.2 x ELV	35.0	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA			05/06/13
S2	Water	COD	discrete	Monthly	Monthly	51.71	All results < 1.2 x ELV	18.0	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA			01/07/13
S2	Water	COD	discrete	Monthly	Monthly	51.71	All results < 1.2 x ELV	34.0	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA			06/08/13
S2	Water	COD	discrete	Monthly	Monthly	51.71	All results < 1.2 x ELV	36.0	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA			02/09/13
S2	Water	COD	discrete	Monthly	Monthly	51.71	All results < 1.2 x ELV	26.0	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA			30/09/13
S2	Water	COD	discrete	Monthly	Monthly	51.71	All results < 1.2 x ELV	20.0	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA			04/11/13
S2	Water	COD	discrete	Monthly	Monthly	51.71	All results < 1.2 x ELV	30.0	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA			02/12/13
S2	Water	BOD	discrete	Monthly	Monthly	4.99	All results < 1.2 x ELV	<2	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA			09/01/13
S2	Water	BOD	discrete	Monthly	Monthly	4.99	All results < 1.2 x ELV	2.0	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA			04/02/13
S2	Water	BOD	discrete	Monthly	Monthly	4.99	All results < 1.2 x ELV	<2	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA			04/03/13
S2	Water	BOD	discrete	Monthly	Monthly	4.99	All results < 1.2 x ELV	<2	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA			02/04/13
S2	Water	BOD	discrete	Monthly	Monthly	4.99	All results < 1.2 x ELV	3.0	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA			07/05/13

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S2	Water	BOD	discrete	Monthly	Monthly	4.99	All results < 1.2 x ELV	<2	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA			05/06/13
S2	Water	BOD	discrete	Monthly	Monthly	4.99	All results < 1.2 x ELV	<2	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA			01/07/13
S2	Water	BOD	discrete	Monthly	Monthly	4.99	All results < 1.2 x ELV	4.0	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA			06/08/13
S2	Water	BOD	discrete	Monthly	Monthly	4.99	All results < 1.2 x ELV	2.0	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA			02/09/13
S2	Water	BOD	discrete	Monthly	Monthly	4.99	All results < 1.2 x ELV	2.0	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA			30/09/13
S2	Water	BOD	discrete	Monthly	Monthly	4.99	All results < 1.2 x ELV	<2	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA			04/11/13
S2	Water	BOD	discrete	Monthly	Monthly	4.99	All results < 1.2 x ELV	<2	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA			02/12/13
S2	Water	Volatile organic	discrete	Monthly	Monthly	>10	All results < 1.2 x ELV	<10	µg/L	yes	GCMS (Gas Chromatography Mass Spectroscopy)				09/01/13
S2	Water	Volatile organic	discrete	Monthly	Monthly	>10	All results < 1.2 x ELV	<10	µg/L	yes	GCMS (Gas Chromatography Mass Spectroscopy)				04/02/13
S2	Water	Volatile organic	discrete	Monthly	Monthly	>10	All results < 1.2 x ELV	<10	µg/L	yes	GCMS (Gas Chromatography Mass Spectroscopy)				04/03/13
S2	Water	Volatile organic	discrete	Monthly	Monthly	>10	All results < 1.2 x ELV	<10	µg/L	yes	GCMS (Gas Chromatography Mass Spectroscopy)				02/04/13
S2	Water	Volatile organic	discrete	Monthly	Monthly	>10	All results < 1.2 x ELV	<10	µg/L	yes	GCMS (Gas Chromatography Mass Spectroscopy)				07/05/13
S2	Water	Volatile organic	discrete	Monthly	Monthly	>10	All results < 1.2 x ELV	<10	µg/L	yes	GCMS (Gas Chromatography Mass Spectroscopy)				05/06/13
S2	Water	Volatile organic	discrete	Monthly	Monthly	>10	All results < 1.2 x ELV	<10	µg/L	yes	GCMS (Gas Chromatography Mass Spectroscopy)				01/07/13
S2	Water	Volatile organic	discrete	Monthly	Monthly	>10	All results < 1.2 x ELV	<10	µg/L	yes	GCMS (Gas Chromatography Mass Spectroscopy)				06/08/13
S2	Water	Volatile organic	discrete	Monthly	Monthly	>10	All results < 1.2 x ELV	<10	µg/L	yes	GCMS (Gas Chromatography Mass Spectroscopy)				02/09/13
S2	Water	Volatile organic	discrete	Monthly	Monthly	>10	All results < 1.2 x ELV	<10	µg/L	yes	GCMS (Gas Chromatography Mass Spectroscopy)				30/09/13
S2	Water	Volatile organic	discrete	Monthly	Monthly	>10	All results < 1.2 x ELV	<10	µg/L	yes	GCMS (Gas Chromatography Mass Spectroscopy)				04/11/13
S2	Water	Volatile organic	discrete	Monthly	Monthly	>10	All results < 1.2 x ELV	<10	µg/L	yes	GCMS (Gas Chromatography Mass Spectroscopy)				02/12/13
S3	Water	pH	discrete	Monthly	Monthly	8.94	No pH value shall deviate from	8.4	pH units	yes	pH Meter (Electrode)	APHA / AWWA			09/01/13
S3	Water	pH	discrete	Monthly	Monthly	8.94	No pH value shall deviate from	8.6	pH units	yes	pH Meter (Electrode)	APHA / AWWA			04/02/13
S3	Water	pH	discrete	Monthly	Monthly	8.94	No pH value shall deviate from	7.9	pH units	yes	pH Meter (Electrode)	APHA / AWWA			04/03/13
S3	Water	pH	discrete	Monthly	Monthly	8.94	No pH value shall deviate from	8.0	pH units	yes	pH Meter (Electrode)	APHA / AWWA			02/04/13
S3	Water	pH	discrete	Monthly	Monthly	8.94	No pH value shall deviate from	7.8	pH units	yes	pH Meter (Electrode)	APHA / AWWA			07/05/13
S3	Water	pH	discrete	Monthly	Monthly	8.94	No pH value shall deviate from	7.9	pH units	yes	pH Meter (Electrode)	APHA / AWWA			05/06/13
S3	Water	pH	discrete	Monthly	Monthly	8.94	No pH value shall deviate from	7.8	pH units	yes	pH Meter (Electrode)	APHA / AWWA			01/07/13
S3	Water	pH	discrete	Monthly	Monthly	8.94	No pH value shall deviate from	8.1	pH units	yes	pH Meter (Electrode)	APHA / AWWA			06/08/13
S3	Water	pH	discrete	Monthly	Monthly	8.94	No pH value shall deviate from	7.9	pH units	yes	pH Meter (Electrode)	APHA / AWWA			02/09/13
S3	Water	pH	discrete	Monthly	Monthly	8.94	No pH value shall deviate from	7.8	pH units	yes	pH Meter (Electrode)	APHA / AWWA			30/09/13
S3	Water	pH	discrete	Monthly	Monthly	8.94	No pH value shall deviate from	8.1	pH units	yes	pH Meter (Electrode)	APHA / AWWA			04/11/13
S3	Water	pH	discrete	Monthly	Monthly	8.94	No pH value shall deviate from	7.9	pH units	yes	pH Meter (Electrode)	APHA / AWWA			02/12/13
S3	Water	COD	discrete	Monthly	Monthly	41.16	All results < 1.2 x ELV	<10	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA			09/01/13
S3	Water	COD	discrete	Monthly	Monthly	41.16	All results < 1.2 x ELV	11.0	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA			04/02/13
S3	Water	COD	discrete	Monthly	Monthly	41.16	All results < 1.2 x ELV	<10	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA			04/03/13
S3	Water	COD	discrete	Monthly	Monthly	41.16	All results < 1.2 x ELV	<10	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA			02/04/13
S3	Water	COD	discrete	Monthly	Monthly	41.16	All results < 1.2 x ELV	15.0	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA			07/05/13
S3	Water	COD	discrete	Monthly	Monthly	41.16	All results < 1.2 x ELV	25.0	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA			05/06/13
S3	Water	COD	discrete	Monthly	Monthly	41.16	All results < 1.2 x ELV	<10	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA			01/07/13
S3	Water	COD	discrete	Monthly	Monthly	41.16	All results < 1.2 x ELV	15.0	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA			06/08/13
S3	Water	COD	discrete	Monthly	Monthly	41.16	All results < 1.2 x ELV	11.0	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA			02/09/13
S3	Water	COD	discrete	Monthly	Monthly	41.16	All results < 1.2 x ELV	<10	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA			30/09/13
S3	Water	COD	discrete	Monthly	Monthly	41.16	All results < 1.2 x ELV	31.0	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA			04/11/13
S3	Water	COD	discrete	Monthly	Monthly	41.16	All results < 1.2 x ELV	10.0	mg/L	yes	Spectrophotometry (Colorimetry)	APHA / AWWA			02/12/13
S3	Water	BOD	discrete	Monthly	Monthly	2.75	All results < 1.2 x ELV	<2	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA			09/01/13
S3	Water	BOD	discrete	Monthly	Monthly	2.75	All results < 1.2 x ELV	<2	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA			04/02/13
S3	Water	BOD	discrete	Monthly	Monthly	2.75	All results < 1.2 x ELV	<2	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA			04/03/13
S3	Water	BOD	discrete	Monthly	Monthly	2.75	All results < 1.2 x ELV	<2	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA			02/04/13
S3	Water	BOD	discrete	Monthly	Monthly	2.75	All results < 1.2 x ELV	<2	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA			07/05/13
S3	Water	BOD	discrete	Monthly	Monthly	2.75	All results < 1.2 x ELV	<2	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA			05/06/13
S3	Water	BOD	discrete	Monthly	Monthly	2.75	All results < 1.2 x ELV	<2	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA			01/07/13
S3	Water	BOD	discrete	Monthly	Monthly	2.75	All results < 1.2 x ELV	<2	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA			06/08/13
S3	Water	BOD	discrete	Monthly	Monthly	2.75	All results < 1.2 x ELV	<2	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA			02/09/13
S3	Water	BOD	discrete	Monthly	Monthly	2.75	All results < 1.2 x ELV	<2	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA			30/09/13
S3	Water	BOD	discrete	Monthly	Monthly	2.75	All results < 1.2 x ELV	<2	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA			04/11/13
S3	Water	BOD	discrete	Monthly	Monthly	2.75	All results < 1.2 x ELV	<2	mg/L	yes	Dissolved Oxygen Meter (Electrode)	APHA / AWWA			02/12/13
S3	Water	Volatile organic	discrete	Monthly	Monthly	>10	All results < 1.2 x ELV	<10	µg/L	yes	GCMS (Gas Chromatography Mass Spectroscopy)				09/01/13
S3	Water	Volatile organic	discrete	Monthly	Monthly	>10	All results < 1.2 x ELV	<10	µg/L	yes	GCMS (Gas Chromatography Mass Spectroscopy)				04/02/13
S3	Water	Volatile organic	discrete	Monthly	Monthly	>10	All results < 1.2 x ELV	<10	µg/L	yes	GCMS (Gas Chromatography Mass Spectroscopy)				04/03/13
S3	Water	Volatile organic	discrete	Monthly	Monthly	>10	All results < 1.2 x ELV	<10	µg/L	yes	GCMS (Gas Chromatography Mass Spectroscopy)				02/04/13
S3	Water	Volatile organic	discrete	Monthly	Monthly	>10	All results < 1.2 x ELV	<10	µg/L	yes	GCMS (Gas Chromatography Mass Spectroscopy)				07/05/13
S3	Water	Volatile organic	discrete	Monthly	Monthly	>10	All results < 1.2 x ELV	<10	µg/L	yes	GCMS (Gas Chromatography Mass Spectroscopy)				05/06/13
S3	Water	Volatile organic	discrete	Monthly	Monthly	>10	All results < 1.2 x ELV	<10	µg/L	yes	GCMS (Gas Chromatography Mass Spectroscopy)				01/07/13
S3	Water	Volatile organic	discrete	Monthly	Monthly	>10	All results < 1.2 x ELV	<10	µg/L	yes	GCMS (Gas Chromatography Mass Spectroscopy)				06/08/13
S3	Water	Volatile organic	discrete	Monthly	Monthly	>10	All results < 1.2 x ELV	<10	µg/L	yes	GCMS (Gas Chromatography Mass Spectroscopy)				02/09/13
S3	Water	Volatile organic	discrete	Monthly	Monthly	>10	All results < 1.2 x ELV	<10	µg/L	yes	GCMS (Gas Chromatography Mass Spectroscopy)				30/09/13
S3	Water	Volatile organic	discrete	Monthly	Monthly	>10	All results < 1.2 x ELV	<10	µg/L	yes	GCMS (Gas Chromatography Mass Spectroscopy)				04/11/13
S3	Water	Volatile organic compounds (as TOC)	discrete	Monthly	Monthly	>10	All results < 1.2 x ELV	600.0	µg/L	no (if no please enter details in comments box)	GCMS (Gas Chromatography Mass Spectroscopy)				02/12/2013 elevated level recorded. S3 was re-sampled and second results were in compliavne with trigger level.

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

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER) Lic No: P0694-01 Year 2013

Continuous monitoring

			Additional Information
5	Does your site carry out continuous emissions to water/sewer monitoring?	Yes	No demineralisation water was produced during 2013 therefore, no neutralised effluent was created.

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**	SELECT	
7	Do you have a proactive service contract for each piece of continuous monitoring equipment on site?	SELECT	
8	Did abatement system bypass occur during the reporting year? **If yes please complete table W5 below**	SELECT	

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: P0694-01 Year 2013

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?	15	
5	How many of these bunds have been tested within the required test schedule?	15	
6	How many mobile bunds are on site?	2	
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?	2	
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?	No	
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)
	SELECT					SELECT			SELECT	SELECT		SELECT		
	SELECT					SELECT			SELECT	SELECT		SELECT		

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

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

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)
Section 7	Storm	other(please specify) Flexi	No	N/A	CCTV	Yes	Fail	Pipe broken in sections	To be reviewed during 2014	2016	SELECT
Section 10	Foul	pvc	No	N/A	CCTV	Yes	Fail	Pipe deformed, no leaks detected.	To be reviewed during 2014	2016	
Section 11	Foul	pvc	No	N/A	CCTV	Yes	Fail	Dips in pipework but no leaks detected.	To be reviewed during 2014	2016	
Section 18	Storm	pvc	No	N/A	CCTV	Yes	Fail	Hole in pipe	To be reviewed during 2014	2016	

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

Groundwater/Soil monitoring template	Lic No:	P0694-01	Year	2013

			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	yes	Use as raw water source for demineralisation water treatment plant	
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)	no		
6	Have actions been taken to address contamination issues?If yes please summarise remediation strategies proposed/undertaken for the site	no		
7	Please specify the proposed time frame for the remediation strategy	N/A		
8	Is there a licence condition to carry out/update ELRA for the site?	yes		
9	Has any type of risk assesment been carried out for the site?	yes		
10	Has a Conceptual Site Model been developed for the site?	no		
11	Have potential receptors been identified on and off site?	yes		
12	Is there evidence that contamination is migrating offsite?	no		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
07/05/13 02/09/13	BH1	Chloride	Ion chromatography	Bi-annual	12	12	mg/l	24-187.5		SELECT
07/05/13 02/09/13	BH1	Fluoride	Ion chromatography	Bi-annual	0.11	0.11	mg/l			
07/05/13 02/09/13	BH1	Ortho-phosphate	Ion chromatography	Bi-annual	<0.16	<0.16	mg/l			

Groundwater/Soil monitoring template					Lic No:	P0694-01		Year	2013	
07/05/13 02/09/13	BH1	Nitrate	Ion chromatography	Bi-annual	0.05	0.045	mg/l	37.5		
07/05/13 02/09/13	BH1	Nitrite	Spectrophotometry	Bi-annual	<0.03	<0.03	mg/l	0.375		
07/05/13 02/09/13	BH1	pH	pH meter	Bi-annual	7.4	7.35	mg/l			
07/05/13 02/09/13	BH1	Calcium	Spectrophotometry	Bi-annual	110	109	mg/l			
07/05/13 02/09/13	BH1	Potassium	Spectrophotometry	Bi-annual	1.6	1.5	mg/l			
07/05/13 02/09/13	BH1	Magnesium	Spectrophotometry	Bi-annual	39	36.5	mg/l			
07/05/13 02/09/13	BH1	Sodium	Spectrophotometry	Bi-annual	8.9	8.1	mg/l			
07/05/13 02/09/13	BH1	DRO	GC-MS	Bi-annual	<10	<10	ug/l			
07/05/13 02/09/13	BH1	Mineral Oil	GC-MS	Bi-annual	<10	<10	ug/l			
07/05/13 02/09/13	BH2	Chloride	Ion chromatography	Bi-annual	14	14	mg/l	24-187.5		
07/05/13 02/09/13	BH2	Fluoride	Ion chromatography	Bi-annual	0.13	0.13	mg/l			
07/05/13 02/09/13	BH2	Ortho-phosphate	Ion chromatography	Bi-annual	<0.16	<0.16	mg/l			
07/05/13 02/09/13	BH2	Nitrate	Ion chromatography	Bi-annual	0.08	0.065	mg/l	37.5		
07/05/13 02/09/13	BH2	Nitrite	Spectrophotometry	Bi-annual	<0.03	<0.03	mg/l	0.375		
07/05/13 02/09/13	BH2	pH	pH meter	Bi-annual	7.3	7.3	mg/l			
07/05/13 02/09/13	BH2	Calcium	Spectrophotometry	Bi-annual	107	54.4	mg/l			
07/05/13 02/09/13	BH2	Potassium	Spectrophotometry	Bi-annual	1.4	1.4	mg/l			
07/05/13 02/09/13	BH2	Magnesium	Spectrophotometry	Bi-annual	40	39	mg/l			
07/05/13 02/09/13	BH2	Sodium	Spectrophotometry	Bi-annual	9.4	9.2	mg/l			
07/05/13 02/09/13	BH2	DRO	GC-MS	Bi-annual	<10	<10	ug/l			
07/05/13 02/09/13	BH2	Mineral Oil	GC-MS	Bi-annual	<10	<10	ug/l			
							SELECT			SELECT

*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: P0694-01 Year 2013

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:	P0694-01	Year	2013

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	€78,000	
4	Financial Provision for ELRA status	Required but not submitted	
5	Financial Provision for ELRA - amount of cover	€78,000	
6	Financial Provision for ELRA - type	Public Liability Insurance with Environmental Impairment Liability cover	
7	Financial provision for ELRA expiry date	None	
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	€1,260,000	
12	Financial Provision for Closure - type	Other please specify dismantling provision in annual accounts	
13	Financial provision for Closure expiry date	None	

Environmental Management Programme/Continuous Improvement Programme template	Lic No:	P0694-01	Year	2013

	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
Materials Handling/Storage/Bunding	Fuel tank leak prevention	50	Locks installed. Safety Shut off values not installed. Leak detection system to be installed instead during 2014.	Individual	Improved Environmental Management Practices
Additional improvements	Investigate implementing the PEMS system for air emission monitoring	100	PEMs data to date sent to Agency in June. Currently, not enough data to justify migrating to PEMs	Individual	Increased compliance with licence conditions
Additional improvements	ISO 14001 Compliance	100	No major non conformances during external audit	Individual	Improved Environmental Management Practices
Materials Handling/Storage/Bunding	Bund inspection programme 2013	100	All bunds tested in July and passed	Individual	Improved Environmental Management Practices
Waste reduction/Raw material usage efficiency	Visit Waste Contractor site to determine compliance	0	Date for another visit to Enva premises to be agreed.	Individual	Improved Environmental Management Practices
Reduction of emissions to Water	Diesel Generator Bund drainage to SW interceptor	100	Complete	Individual	Reduced emissions
Materials Handling/Storage/Bunding	Gas oil (GO) Filtration to prevent corrosion of tanks	100	Complete	Individual	Improved Environmental Management Practices
Additional improvements	Conduct a process hazard review (PHR) for all processes on-site	100	PHR has been completed. High environmental actions idientified to be completed in 2014/2015.	Individual	Improved Environmental Management Practices
Additional improvements	SDS project to ensure REACH compliance.	100	Complete however US products are not REACH compliant	Individual	Reduced emissions
Additional improvements	Implementation of computer maintenance management system MAXIMO	100	Successfully implemented in April	Individual	Improved Environmental Management Practices

Noise monitoring summary report	Lic No:	P0694-01	Year	2013

1	Was noise monitoring a licence requirement for the AER period? If yes please fill in table N1 noise summary below	No
2	Was noise monitoring carried out using the EPA Guidance note, including completion of the "Checklist for noise measurement report" included in the guidance note as table 6? (Noise Guidance note NG4)	SELECT
3	Does your site have a noise reduction plan	SELECT
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?	SELECT

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)?
								SELECT	SELECT		SELECT

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

If noise limits exceeded as a result of noise attributed to site activities, please choose the corrective action from the following options? 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:	P0694-01	Year	2013

			Additional information
1	When did the site carry out the most recent energy efficiency audit? Please list the recommendations in table 3 below		
2	Is the site a member of any accredited programmes for reducing energy usage/water conservation such as the SEAI programme linked to the right? If yes please list them in additional information	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	Yes	0.0009

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)				
Total Energy Generated (MWHrs)	830	376	-55%	
Total Renewable Energy Generated (MWHrs)				
Electricity Consumption (MWHrs)				
Fossil Fuels Consumption:				
Heavy Fuel Oil (m3)				
Light Fuel Oil (m3)	225.6 tonnes	118.15 tonnes	-48%	
Natural gas (m3)				
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

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		56					
Surface water							
Public supply		129					
Recycled water							
Total		185					

* 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)	18.7		0.24	18.46	
Non-Hazardous (Tonnes)	0.92	0.35		0.57	

Resource Usage/Energy efficiency summary Lic No: P0694-01 Year 2013

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	Gas Turbine	Gas Turbine			
Primary Fuel	LFO	LFO			
Thermal Efficiency					
Unit Date of Commission					
Total Starts for year	26	24			50
Total Running Time	08:10:00	09:17:00			17:27:00
Total Electricity Generated (GWH)	0.13	0.25			0.38
House Load (GWH)					
KWH per Litre of Process Water					
KWH per Litre of Total Water used on Site					2.03

Complaints and Incidents summary template

Lic No: P0694-01 Year 2013

Complaints

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

Table 1 Complaints summary

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

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

Incidents

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

*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
22/03/2013	Monitoring equipment offline	Licenced discharge point (type in reference here)	1. Minor	No Uncontrolled release	Plant or equipment issues		Normal activities	EPA	New	Maintenance contractor called to investigate malfunction	CEMs calibration and service carried out. All components on analyser passed calibration checks. All systems reported as fully operational.	Complete	25/03/2013	Low
17/08/2013	Breach of ELV	Licenced discharge point (type in reference here)	1. Minor	Air	Plant or equipment issues		Routine maintenance	EPA	New	Engine was brought off load when higher emissions were idientified.	The possibility of running the units for a longer period during the monthly testing was idientifed.	Complete		Low
30/09/2013	Breach of ELV	Licenced discharge point (type in reference here)	1. Minor	Air	Plant or equipment issues		Normal activities	EPA	New	Maintenance contractor was called on site to investigate	There is a possibility that excess lube oil is being burned in the unit, causing excess NOx emissions. Stand alone lube oil tests will now only operate during engine operation.	Complete		Low
15/10/2013	Monitoring equipment offline	Licenced discharge point (type in reference here)	1. Minor	Air	Plant or equipment issues		Normal activities	EPA	New	Maintenance contractor was called on site to investigate	Ensure CEMS servicing is up to date.	Complete		Low

Complaints and Incidents summary template					Lic No:	P0694-01		Year	2013					
02/12/2013	Trigger level reached	Licenced discharge point (type in reference here)	2. Limited	Water	Adverse weather		Normal activities	EPA	New	Test results were confirmed with laboratory. An additional sample was taken at taken on the 06/01/14.	Increase the frequency of filter inspection of the intreceptors to every two months	Complete		Low

Total number of incidents current year	5
Total number of incidents previous year	0
% reduction/ increase	500%

WASTE SUMMARY	Lic No:	P0694-01	Year	2013
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)	No	
	If yes please enter details in table 1 below		
2	Did your site have any rejected consignments of waste in the current reporting year? If yes please give a brief explanation in the additional information	SELECT	
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)

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

SECTION C-TO BE COMPLETED BY ALL WASTE FACILITIES (waste transfer stations, Composters, Material recovery facilities etc) EXCEPT LANDFILL SITES

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

SECTION D-TO BE COMPLETED BY LANDFILL SITES ONLY

Table 2 Waste type and tonnage-landfill only

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

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													

WASTE SUMMARY Lic No: P0694-01 Year 2013

Table 4 Environmental monitoring-landfill only

Landfill Manual-Monitoring Standards

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

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

Table 5 Capping-Landfill only

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

*please note this includes daily cover area

Table 6 Leachate-Landfill only

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

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

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

Table 7 Landfill Gas-Landfill only

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

Guidance to completing the PRTR workbook

AER Returns Workbook

Version 1.1.18

REFERENCE YEAR	2013

1. FACILITY IDENTIFICATION

Parent Company Name	SSE Generation Ireland Limited
Facility Name	SSE Generation Ireland Limited
PRTR Identification Number	P0694
Licence Number	P0694-01

Waste or IPPC Classes of Activity

No.	class_name
2.1	The operation of combustion installations with a rated thermal input equal to or greater than 50MW

Address 1	Rhode PCG
Address 2	Coolcor
Address 3	Rhode, Tullamore
Address 4	Co Offally
	Offaly
Country	Ireland
Coordinates of Location	-7.21144 53.3589
River Basin District	IEEA
NACE Code	3511
Main Economic Activity	Production of electricity
AER Returns Contact Name	Caroline O'Connell
AER Returns Contact Email Address	caroline.o'connell@ssegeneration.ie
AER Returns Contact Position	Environmental Co-ordinator
AER Returns Contact Telephone Number	00353 (0)68 29206
AER Returns Contact Mobile Phone Number	00353 86 8216392
AER Returns Contact Fax Number	00353 (0)68 36156
Production Volume	104.0
Production Volume Units	MW
Number of Installations	1
Number of Operating Hours in Year	17.45
Number of Employees	2
User Feedback/Comments	
Web Address	

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
1(c)	Thermal power stations and other combustion installations

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

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

4. WASTE IMPORTED/ACCEPTED ONTO SITE

Guidance on waste imported/accepted onto site

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

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

4.1 RELEASES TO AIR

Link to previous years emissions data

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

RELEASES TO AIR					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			QUANTITY			
			Method Used					
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
03	Carbon dioxide (CO2)	C	ETS		375084.8	375084.8	0.0	0.0
08	Nitrogen oxides (NOx/NO2)	M	EN 14792:2005		460.8	460.8	0.0	0.0
				tonnes of gas oil used*0.1/100 % sulphur*				
11	**Sulphur oxides (SOx/SO2)**	C	OTH	1.998	236.2	236.2	0.0	0.0

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

SECTION B : REMAINING PRTR POLLUTANTS

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

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

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

RELEASES TO AIR					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
					0.0	0.0	0.0	0.0

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

Additional Data Requested from Landfill operators

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

Landfill: SSE Generation Ireland Limited

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

4.2 RELEASES TO WATERS

Link to previous years emissions data

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

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

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

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

SECTION B : REMAINING PRTR POLLUTANTS

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

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

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

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

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

4.3 RELEASES TO WASTEWATER OR SEWER

Link to previous years emissions data

SECTION A : PRTR POLLUTANTS

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			QUANTITY			
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

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

SECTION 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
					0.0	0.0	0.0	0.0

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

4.4 RELEASES TO LAND Link to previous years emissions data

SECTION A : PRTR POLLUTANTS

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

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

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

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

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

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

Please enter all quantities on this sheet in Tonnes

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	10 11 03	No	0.0	waste glass-based fibrous materials	R5	M	Weighed	Offsite in Ireland	ENVA,W1084-01	.,Clonamin Industrial Estate,Portlaoise,Laois,Ireland		
Within the Country	13 02 08	Yes	16.14	other engine, gear and lubricating oils	R9	C	Volume Calculation	Offsite in Ireland	ENVA,W1084-01	.,Clonamin Industrial Estate,Portlaoise,Laois,Ireland	ENVA,W0184-01,.,Clonamin Industrial Estate,Portlaoise,Laois,Ireland	.,Clonamin Industrial Estate,Portlaoise,Laois,Ireland
Within the Country	15 01 06	No	0.43	mixed packaging	R3	M	Weighed	Offsite in Ireland	AES,W104-01	.,Cappincur ,Tullamore,Co. Offaly,Ireland		
To Other Countries	15 02 02	Yes	0.24	absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances	D10	C	Volume Calculation	Abroad	ENVA,W1084-01	.,Clonamin Industrial Estate,Portlaoise,Laois,Ireland	KWA,E17012100,.,.,Kamp - Linfprt,.,Germany	.,.,Kamp - Linfprt,.,Germany
Within the Country	16 01 07	Yes	2.32	oil filters	R4	M	Weighed	Offsite in Ireland	ENVA,W1084-01	.,Clonamin Industrial Estate,Portlaoise,Laois,Ireland	ENVA,W0184-01,.,Clonamin Industrial Estate,Portlaoise,Laois,Ireland	.,Clonamin Industrial Estate,Portlaoise,Laois,Ireland
To Other Countries	16 06 01	Yes	0.0	lead batteries	R4	M	Weighed	Abroad	ENVA,W1084-01	.,Clonamin Industrial Estate,Portlaoise,Laois,Ireland	Campine,O 474955451,Campine,.,.,Beerse,Belgium	Campine,.,.,Beerse,Belgium
Within the Country	16 06 04	No	0.0	alkaline batteries (except 16 06 03)	R4	M	Weighed	Offsite in Ireland	ENVA,W1084-01	.,Clonamin Industrial Estate,Portlaoise,Laois,Ireland		
Within the Country	20 03 01	No	0.35	mixed municipal waste	D1	M	Weighed	Offsite in Ireland	AES,W104-01	.,Cappincur ,Tullamore,Co. Offaly,Ireland		
Within the Country	20 03 04	No	0.0	septic tank sludge	D8	C	Volume Calculation	Offsite in Ireland	Accelerated Drains,158(2)/OY/433/06	.,.,Edenderry,.,Ireland		
Within the Country	**16 02 16**	**No**	0.14	components removed from discarded equipment other than those mentioned in 16 02 15	R4	M	Weighed	Offsite in Ireland	AES,W104-01	.,Cappincur ,Tullamore,Co. Offaly,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