Facility Information Summary	
AER Reporting Year	2015
Licence Register Number	W0049-02
Name of site	Clonbullogue Ash Repository
Site Location	Cloncreen Clonbullogue Co Offaly
NACE Code	3821
Class/Classes of Activity	3.1
National Grid Reference (6E, 6 N)	259444, 225189

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 facility is licensed to accept 70,000 tonnes per annum of bottom and fly ash generated from the combustion of Peat/Biomass/MBM at Edenderry Power Ltd. In the reporting year a total of 24,369 tonnes of ash was delivered and placed in the site. This was made up of 2,068 tonnes of bottom ash and 22,301 tonnes of fly ash. There were no complaints of an environmental nature during the reporting period. There was 1 non compliances which related to an elevated dust result at DM-01. The Agency was informed through the ALDER portal at the time. In relation to all remaining site monitoring and laboratory analysis, all results were fully compliant. Cell 2 was successfully capped as per the submitted SEW with Cell 3A also in progress.The leachate management works as submitted were 90% complete at the end of the reporting period. Future cell development was ongoing during the reporting period, works consisting of general preparatory earthworks.

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.

E. Mulhall	21-3-16
Signature Group/Facility manager (or nominated, suitably qualified and experienced deputy)	Date

AIR-summary template

Lic No: #REF! Year #REF!

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	Fugitive Dust Monitoring. Results entered in Table A2 as instructed by the Agency

Periodic/Non-Continuous Monitoring

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

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

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
DM-01	Total Particulates	28 - 32 Day intervals	No single result > 350mg/m2/day	100 % of values < ELV	1260	mg/m2/day	no (if no please enter details in comments box)	VDI2199 BLATT 2/Pa	NA	Reported to the Agency ref
	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:	#REF!	Year	#REF!

Continuous Monitoring

4	Does your site carry out continuous air emissions monitoring?	No	
	If yes please review your continuous monitoring data and report the required fields below in Table A2 and compare it to its relevant Emission Limit Value (ELV)		
5	Did continuous monitoring equipment experience downtime? If yes please record downtime in table A2 below	No	
6	Do you have a proactive service agreement for each piece of continuous monitoring equipment?	No	
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
DM-01	Total Particulates	350 mg/m2/day	140	Daily average < ELV	mg/m2/day	1597	1260	0	1	EPA ref:INCI008137
DM-02	Total Particulates	350 mg/m2/day	140	Daily average < ELV	mg/m2/day	534	167	0	0	
DM-03	Total Particulates	350 mg/m2/day	140	Daily average < ELV	mg/m2/day	318	83	0	0	
DM-04	Total Particulates	350 mg/m2/day	140	Daily average < ELV	mg/m2/day	405	172	0	0	
	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:	#REF!	Year	#REF!

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.	Solvents destroyed onsite through	Total emission of Solvent to air (kg)
							Total	

AER Monitoring returns summary template-WATER/WASTEWATER(SEWER) Lic No: #REF! Year #REF!

			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	All monitoring results are attached seperately as advised by the EPA
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	All monitoring results are attached seperately as advised by the EPA

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		No	
4	Was all monitoring carried out in accordance with EPA guidance and checklists for Quality of Aqueous Monitoring Data Reported to the EPA? If no please detail what areas require improvement in additional information box	External /Internal Lab Quality checklist / Assessment of results checklist	Yes	

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

Emission reference no:	Emission released to	Parameter/ SubstanceNote 1	Type of sample	Frequency of monitoring	Averaging period	ELV or trigger values in licence or any revision therof[Note 2]	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence	Method of analysis	Procedural reference source	Procedural reference standard number	Annual mass load (kg)	Comments

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: #REF! Year #REF!

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

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: #REF! Year #REF!

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	2 Yearly	
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?	0	
5	How many of these bunds have been tested within the required test schedule?	NA	
6	How many mobile bunds are on site?	3	This includes barrel trays located within lock up container
7	Are the mobile bunds included in the bund test schedule?	No	
8	How many of these mobile bunds have been tested within the required test schedule?	NA	
9	How many sumps on site are included in the integrity test schedule?	NA	
10	How many of these sumps are integrity tested within the test schedule? **Please list any sump integrity failures in table B1**	NA	
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?	NA	
13	Is the Fire Water Retention Pond included in your integrity test programme?	SELECT	

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

bunding and storage guidelines

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**	SELECT	
2	Please provide integrity testing frequency period	SELECT	

*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:	#REF!	Year	#REF!

			Comments	
1	Are you required to carry out groundwater monitoring as part of your licence requirements?	yes	Monitoring results are attached seperately as advised by the EPA	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		
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	NA		
7	Please specify the proposed time frame for the remediation strategy	NA		
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
							SELECT			SELECT
							SELECT			SELECT

Groundwater/Soil monitoring template	Lic No:	#REF!	Year	#REF!

*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

Groundwater/Soil monitoring template Lic No: #REF! Year #REF!

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:	#REF!	Year	#REF!

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	€579,246	
4	Financial Provision for ELRA status	Submitted and not agreed by EPA;	
5	Financial Provision for ELRA - amount of cover	€579,246	
6	Financial Provision for ELRA - type	Other please specify	PCG
7	Financial provision for ELRA expiry date	Yet to be agreed	
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	Submitted and not agreed by EPA;	
11	Financial Provision for Closure - amount of cover	€2,409,326	
12	Financial Provision for Closure - type	bond	
13	Financial provision for Closure expiry date	Yet to be agreed	

Environmental Management Programme/Continuous Improvement Programme template

Lic No: #REF! Year #REF!

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	Unacreddited internal EMS

Environmental Management Programme (EMP) report

Objective Category	Target	Status (% completed)	How target was progressed	Responsibility	Intermediate outcomes
Additional improvements	Conduct all operations on site in accordance with the schedules and conditions of the waste licence and also in conjunction with the restoration and aftercare programme	70	All site operations were carried out in compliance with licence conditions. There was however 1 non-compliance in relation to dust at DM-01.	Individual	Increased compliance with licence conditions
Materials Handling/Storage/Bunding	Future cell development	60	Construction works took place at cell 5. This work comprised of stripping back the cell floor to formation level and the formation of cell embankments with the material.	Section Head	Installation of infrastructure
Reduction of emissions to Water	Improved capping system	90	Cell 2 was fully recapped to the specification submitted.Initial observations would suggest this was successful.It is a priority to complete the recapping of Cell 3A in the 2016 reporting year.	Section Head	Reduced emissions

Environmental Management Programme/Continuous Improvement Programme template				Lic No:	#REF!	Year	#REF!
Additional improvements	Leachate Management Plan	80	An improved Leachate management system is currently in operation. This allows for better leachate management.	Individual	Increased compliance with licence conditions		
Materials Handling/Storage/Bunding	Alternative Ash/Leachate use	70	The viability of alternative uses for both ash and leachate is ongoing.	Section Head	Improved Environmental Management Practices		

Noise monitoring summary report	Lic No:	#REF!	Year	#REF!

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)	NA
3	Does your site have a noise reduction plan	NA
4	When was the noise reduction plan last updated?	Enter date
5	Have there been changes relevant to site noise emissions (e.g. plant or operational changes) since the last noise survey?	No

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:	#REF!	Year	#REF!

			Additional information
1	When did the site carry out the most recent energy efficiency audit? Please list the recommendations in table 3 below	Enter date of audit	
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	Yes	SEAI - Large Industry Energy Network (LIEN)
3	Where Fuel Oil is used in boilers on site is the sulphur content compliant with licence conditions? Please state percentage in additional information	NA	

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)	1772.382	2013.697	13	-17
Total Energy Generated (MWHrs)				
Total Renewable Energy Generated (MWHrs)				
Electricity Consumption (MWHrs)	2	2	0	0
Fossil Fuels Consumption:				
Heavy Fuel Oil (m3)				
Light Fuel Oil (m3)	174.096	198.023	13	-17
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							
Surface water							
Public supply							
Recycled water							
Total							

* 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)	0	0	0	0	0
Non-Hazardous (Tonnes)	1.606	1.606	0	0	0

Resource Usage/Energy efficiency summary Lic No: #REF! Year #REF!

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					

Complaints and Incidents summary template Lic No: #REF! Year #REF!

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

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
19/05/2015	Breach of ELV	DM-01	1. Minor	Air	Other (add details)	Debris from an excavator working near the dust monitoring point fell into the gauge.	Normal activities	EPA INCI008137	New	Personnel have been told to be more careful when operating near monitoring points.	Personnel reminded of their duties and to take more care when discharging their duties	Complete	19/06/2015	Low

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

WASTE SUMMARY Lic No: #REF! Year #REF!

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	No	
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 -
70,000	100103	10- WASTES FROM THERMAL PROCESSES	Fly Ash from Peat and Untreated Wood.	22,301	23,624	-6%	More tonnes of peat/biomass used at Power Station	NA	D5- Specially engineered landfill	457,618	Total tonnes deposited since 2000. Fly & Bottom ash
70,000	100101	10- WASTES FROM THERMAL PROCESSES	Bottom Ash	2068	2460	-16%	More tonnes of peat/biomass used at Power Station	NA	D5- Specially engineered landfill		

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

SECTION D-TO BE COMPLETED BY LANDFILL SITES ONLY

Table 2 Waste type and tonnage-landfill only

Waste types permitted for disposal	Authorised/licenced annual intake for disposal (tpa)	Actual intake for disposal in reporting year (tpa)	Remaining licensed capacity at end of reporting year (m3)	Comments
Fly &Bottom Ash	70,000	24,369	658,723	Tonnes

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
										ha	ha	SELECT UNIT	

WASTE SUMMARY					Lic No:	#REF!	Year	#REF!					
Clonbullogue Ash Reposi	Nov-00	Ongoing	Yes	Private	Inert		No	No	No	8.125	8.125	NA	HDPE & GCL

WASTE SUMMARY

Lic No: #REF! Year #REF!

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
Yes	Yes	NA	Yes	Yes	Yes	Yes	No	The waste is not subject to a landfill levy

.+ 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
ha	SELECT UNIT					
2.175	1.335	NA	4.615	5.95	Capped as per licence condition 10.3. 80/20 Peat/Subsoil	Agreed lining system on cells 1 and 3b.

*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?	No
10	Is leachate released to surface water? If yes please complete leachate mass load information below	Yes

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
18421.2	n/a	702.17	5.027	n/a	18421200 litres	Dilution with SW	

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
N/A			SELECT	

Cloncreen Ash Repository
Monitoring Results

Monitoring Location: SW4

Parameter	Date	25/02/2015	25/05/2015	17/09/2015	17/12/2015
Ammonia mg/l	**Quarterly**	0.27	0.09	0.02	0.49
COD (mg/l)	**Quarterly**	41	51	58	51
pH (pH units)	**Quarterly**	7.7	8.4	8.1	7.6
Total Suspended Solids (mg/l)	**Quarterly**	7	5	14	7

Monitoring Location: SW5

Parameter	Date	25/02/2015	03/06/2015	17/09/2015	17/12/2015
Ammonia mg/l	**Quarterly**	0.35	0.17	0.14	0.22
COD (mg/l)	**Quarterly**	75	44	49	73
pH (pH units)	**Quarterly**	7.7	7.9	7.9	7.6
Total Suspended Solids (mg/l)	**Quarterly**	19	5	5	10

Monitoring Location: SW6

Parameter	Date	25/02/2015	03/06/2015	17/09/2015	17/12/2015
Ammonia mg/l	**Quarterly**	0.34	0.24	0.18	0.2
COD (mg/l)	**Quarterly**	55	37	46	49
pH (pH units)	**Quarterly**	7.7	7.9	8.4	7.6
Total Suspended Solids (mg/l)	**Quarterly**	16	5	5	12

Monitoring Location: SW7

Parameter	Date	25/02/2015	03/06/2015	17/09/2015	17/12/2015
Ammonia mg/l	**Quarterly**	0.11	1.1	0.18	0.29
COD (mg/l)	**Quarterly**	52	42	47	75
pH (pH units)	**Quarterly**	7.7	7.7	7.8	7.6
Suspended Solids (mg/l)	**Quarterly**	9	9	9	13

Monitoring Location: SW8

Parameter	Date	25/02/2015	25/05/2015	17/09/2015	17/12/2015
Ammonia mg/l	**Quarterly**	0.19	0.08	0.03	0.41
COD (mg/l)	**Quarterly**	42	52	38	48
pH (pH units)	**Quarterly**	7.9	8.3	7.6	7.6
Suspended Solids (mg/l)	**Quarterly**	10	5	6	7

Cloncreen Ash Repository
Monitoring Results

Monitoring Location: SWR1

Parameter	Date	25/02/2015	25/05/2015	17/09/2015	17/12/2015
Ammonia mg/l	**Quarterly**	0.08	0.09	0.09	0.85
COD (mg/l)	**Quarterly**	43	53	22	62
pH (pH units)	**Quarterly**	7.6	7.9	8.1	7.5
Suspended Solids (mg/l)	**Quarterly**	6	8	5	26

CLONCREEN ASH REPOSITORY
MONITORING RESULTS

Monitoring Location: LC1A

Parameter	Date	19/03/2015	09/07/2015	17/09/2015
COD (mg/l)	**Bi-Annually**	296		297
Amonical nitrogen (mg/l NH4-N)	**Bi-Annually**	7.7		6.2
Temperature (0C)	**Bi-Annually**	11.9		13.3
Electrical Conductivity (µS/cm)	**Bi-Annually**	10790		10700
pH (pH units)	**Bi-Annually**	12.36		12.19
Total oxidised nitrogen (mg/l)	**Annually**		0.2	
Boron	**Annually**		135	
Arsenic (µg/l)	**Annually**		56.5	
Silver (µg/l)	**Annually**		2	
Aluminium (µg/l)	**Annually**		91.5	
Berylium (µg/l)	**Annually**		1	
Barium (µg/l)	**Annually**		1220	
calcium (mg/l)	**Annually**		696	
chromium (µg/l)	**Annually**		7.04	
Cadmium (µg/l)	**Annually**		0.5	
Cobalt (µg/l)	**Annually**		2.24	
Copper (µg/l)	**Annually**		8.96	
Iron (mg/l)	**Annually**		0.0481	
Potassium (mg/l)	**Annually**		592	
Magnesium (mg/l)	**Annually**		0.05	
Manganese (µg/l)	**Annually**		0.77	
Sodium (mg/l)	**Annually**		539	
Nickel (µg/l)	**Annually**		42.3	
Lead (µg/l)	**Annually**		1.68	
Antimony (µg/l)	**Annually**		4	
Selenium (µg/l)	**Annually**		165	
Tin (µg/l)	**Annually**		3	
Zinc (µg/l)	**Annually**		106	
Phosphorus (mg/l)	**Annually**		0.06	
Flouride (mg/l)	**Annually**		0.1	
PO4-P (mg/l)	**Annually**		0.01	
VOC's USEPA 524.2 (µg/l)	**Annually**		All<1*	
SVOC'S (µg/l)	**Annually**		All<1**	
Comb Pesticide suite (µg/l)	**Annually**		All <0.01	
VOC's by GC-FID	**Annually**		All<0.5	

*Dichloromethene = <3
**Phenol = 18.4

Cloncreen Ash Repository
Monitoring Results
Monitoring Location: LC2A

Parameter	Date	19/03/2015	09/07/2015	17/09/2015
COD (mg/l)	**Bi-Annually**	63		138
Amonical nitrogen (mg/l NH4)	**Bi-Annually**	2.6		2.1
Temperature (0C)	**Bi-Annually**	11.8		13.9
Electrical Conductivity (µS/cm)	**Bi-Annually**	17640		11050
pH (pH units)	**Bi-Annually**	12.72		12.1
Total oxidised nitrogen (mg/l)	**Annually**		0.2	
Boron	**Annually**		135	
Arsenic (µg/l)	**Annually**		168	
Silver (µg/l)	**Annually**		2	
Aluminium (µg/l)	**Annually**		50	
Berylium (µg/l)	**Annually**		1	
Barium (µg/l)	**Annually**		239	
calcium (mg/l)	**Annually**		169	
chromium (µg/l)	**Annually**		6.4	
Cadmium (µg/l)	**Annually**		0.5	
Cobalt (µg/l)	**Annually**		0.5	
Copper (µg/l)	**Annually**		7.4	
Iron (mg/l)	**Annually**		0.24	
Potassium (mg/l)	**Annually**		3810	
Magnesium (mg/l)	**Annually**		0.549	
Manganese (µg/l)	**Annually**		0.5	
Sodium (mg/l)	**Annually**		1770	
Nickel (µg/l)	**Annually**		13.2	
Lead (µg/l)	**Annually**		5.92	
Antimony (µg/l)	**Annually**		4	
Selenium (µg/l)	**Annually**		538	
Tin (µg/l)	**Annually**		3	
Zinc (µg/l)	**Annually**		356	
Phosphorus (mg/l)	**Annually**		0.05	
Flouride (mg/l)	**Annually**		0.1	
PO4-P (mg/l)	**Annually**		0.01	
VOC's USEPA 524.2 (µg/l)	**Annually**		All <1**	
SVOC'S (µg/l)	**Annually**		All <1*	
Comb Pesticide suite (µg/l)	**Annually**		All<0.01	
VOC's by GC-FID	**Annually**		All<0.5	

*Phenol = 3.64
*Isophorone =1.52
**Dichloromethane = <3

Cloncreen Ash Repository
Monitoring Results

Monitoring Location: LC3A

Parameter	Date	19/03/2015	09/07/2015	17/09/2015
COD (mg/l)	**Bi-Annually**	16		68
Amonical nitrogen (mg/l NH4)	**Bi-Annually**	0.35		0.43
Temperature (0C)	**Bi-Annually**	12		13.9
Electrical Conductivity (µS/cm)	**Bi-Annually**	7260		9780
pH (pH units)	**Bi-Annually**	12.13		11.93
Total oxidised nitrogen (mg/l)	**Annually**		0.47	
Boron	**Annually**		135	
Arsenic (µg/l)	**Annually**		22.1	
Silver (µg/l)	**Annually**		2	
Aluminium (µg/l)	**Annually**		91.4	
Berylium (µg/l)	**Annually**		1	
Barium (µg/l)	**Annually**		1050	
calcium (mg/l)	**Annually**		270	
chromium (µg/l)	**Annually**		11.4	
Cadmium (µg/l)	**Annually**		0.5	
Cobalt (µg/l)	**Annually**		0.5	
Copper (µg/l)	**Annually**		4.36	
Iron (mg/l)	**Annually**		0.024	
Potassium (mg/l)	**Annually**		373	
Magnesium (mg/l)	**Annually**		0.0613	
Manganese (µg/l)	**Annually**		0.5	
Sodium (mg/l)	**Annually**		220	
Nickel (µg/l)	**Annually**		2.55	
Lead (µg/l)	**Annually**		2.32	
Antimony (µg/l)	**Annually**		4	
Selenium (µg/l)	**Annually**		68.7	
Tin (µg/l)	**Annually**		3	
Zinc (µg/l)	**Annually**		61.9	
Phosphorus (mg/l)	**Annually**		0.05	
Flouride (mg/l)	**Annually**		0.1	
PO4-P (mg/l)	**Annually**		0.01	
VOC's USEPA 524.2 (µg/l)	**Annually**		All<1*	
SVOC'S (µg/l)	**Annually**		All<1	
Comb Pesticide suite (µg/l)	**Annually**		All<0.01	
VOC's by GC-FID	**Annually**		All<0.5	

*Dichloromethane = <3

Cloncreen Ash Repository
Monitoring Results

Monitoring Location: LC3B

Parameter	Date	19/03/2015	09/07/2015	17/09/2015
COD (mg/l)	**Bi-Annually**	19		365
Amonical nitrogen (mg/l NH4)	**Bi-Annually**	0.33		4.9
Temperature (0C)	**Bi-Annually**	12.1		13.8
Electrical Conductivity (µS/cm)	**Bi-Annually**	3680		42100
pH (pH units)	**Bi-Annually**	11.75		12.59
Total oxidised nitrogen (mg/l)	**Annually**		0.2	
Boron	**Annually**		135	
Arsenic (µg/l)	**Annually**		295	
Silver (µg/l)	**Annually**		2	
Aluminium (µg/l)	**Annually**		55.4	
Berylium (µg/l)	**Annually**		1	
Barium (µg/l)	**Annually**		91.2	
calcium (mg/l)	**Annually**		113	
chromium (µg/l)	**Annually**		7.12	
Cadmium (µg/l)	**Annually**		0.5	
Cobalt (µg/l)	**Annually**		0.785	
Copper (µg/l)	**Annually**		6.58	
Iron (mg/l)	**Annually**		2.4	
Potassium (mg/l)	**Annually**		4960	
Magnesium (mg/l)	**Annually**		5	
Manganese (µg/l)	**Annually**		2.42	
Sodium (mg/l)	**Annually**		2640	
Nickel (µg/l)	**Annually**		24.8	
Lead (µg/l)	**Annually**		2.44	
Antimony (µg/l)	**Annually**		4	
Selenium (µg/l)	**Annually**		972	
Tin (µg/l)	**Annually**		3	
Zinc (µg/l)	**Annually**		413	
Phosphorus (mg/l)	**Annually**		0.05	
Flouride (mg/l)	**Annually**		0.1	
PO4-P (mg/l)	**Annually**		0.01	
VOC's USEPA 524.2 (µg/l)	**Annually**		All<1*	
SVOC'S (µg/l)	**Annually**		All <1**	
Comb Pesticide suite (µg/l)	**Annually**		All<0.01	
VOC's by GC-FID	**Annually**		All<0.5	

*Dichloromethane = <3
**Phenol = 3.11

Cloncreen Ash Repository
Monitoring Results

Monitoring Location: LC4A

Parameter	Date	19/03/2015	09/07/2015	17/09/2015
COD (mg/l)	**Bi-Annually**	61		537
Amonical nitrogen (mg/l NH4)	**Bi-Annually**	0.35		5.2
Temperature (0C)	**Bi-Annually**	11.9		13.4
Electrical Conductivity (µS/cm)	**Bi-Annually**	13160		36200
pH (pH units)	**Bi-Annually**	11.02		12.3
Total oxidised nitrogen (mg/l)	**Annually**		0.2	
Arsenic (µg/l)	**Annually**		86.6	
Silver (µg/l)	**Annually**		2	
Aluminium (µg/l)	**Annually**		7750	
Berylium (µg/l)	**Annually**		1	
Barium (µg/l)	**Annually**		17.1	
calcium (mg/l)	**Annually**		7.32	
chromium (µg/l)	**Annually**		13.1	
Cadmium (µg/l)	**Annually**		0.5	
Cobalt (µg/l)	**Annually**		0.5	
Copper (µg/l)	**Annually**		8.44	
Iron (mg/l)	**Annually**		0.0836	
Potassium (mg/l)	**Annually**		4770	
Magnesium (mg/l)	**Annually**		0.187	
Manganese (µg/l)	**Annually**		2.94	
Sodium (mg/l)	**Annually**		342	
Nickel (µg/l)	**Annually**		5.11	
Lead (µg/l)	**Annually**		0.796	
Antimony (µg/l)	**Annually**		4	
Selenium (µg/l)	**Annually**		255	
Tin (µg/l)	**Annually**		3	
Zinc (µg/l)	**Annually**		156	
Phosphorus (mg/l)	**Annually**		0.26	
Flouride (mg/l)	**Annually**		0.1	
PO4-P (mg/l)	**Annually**		0.06	
VOC's USEPA 524.2 (µg/l)	**Annually**		All<1*	
SVOC'S (µg/l)	**Annually**		All <1**	
Comb Pesticide suite (µg/l)	**Annually**		All<0.01	
VOC's by GC-FID	**Annually**		All<0.5	

*Dichloromethane = <3

**Bis(2-ethylhexyl)phthalate = <10

**Methylphenol = 4.41

**Phenol =18.6

**Isophorone =<4

Monitoring Results

Monitoring Location: L1

Parameter	Date	19/03/2015	09/07/2015	17/09/2015
COD (mg/l)	**Bi-Annually**	33		107
Amonical nitrogen (mg/l NH4)	**Bi-Annually**	0.18		0.1
Temperature (0C)	**Bi-Annually**	10.1		13.4
Electrical Conductivity (µS/cm)	**Bi-Annually**	868		14830
pH (pH units)	**Bi-Annually**	8.7		11.42
Total oxidised nitrogen (mg/l)	**Annually**		3	
Arsenic (µg/l)	**Annually**		5.92	
Silver (µg/l)	**Annually**		2	
Aluminium (µg/l)	**Annually**		50	
Berylium (µg/l)	**Annually**		1	
Barium (µg/l)	**Annually**		52.3	
calcium (mg/l)	**Annually**		53.9	
chromium (µg/l)	**Annually**		8.67	
Cadmium (µg/l)	**Annually**		0.5	
Cobalt (µg/l)	**Annually**		0.5	
Copper (µg/l)	**Annually**		4.27	
Iron (mg/l)	**Annually**		0.349	
Potassium (mg/l)	**Annually**		31.2	
Magnesium (mg/l)	**Annually**		3.56	
Manganese (µg/l)	**Annually**		32.5	
Sodium (mg/l)	**Annually**		28.3	
Nickel (µg/l)	**Annually**		3.79	
Lead (µg/l)	**Annually**		0.606	
Antimony (µg/l)	**Annually**		4	
Selenium (µg/l)	**Annually**		10.7	
Tin (µg/l)	**Annually**		3	
Phosphorus (mg/l)	**Annually**		0.05	
Flouride (mg/l)	**Annually**		0.1	
PO4-P (mg/l)	**Annually**		0.01	
VOC's USEPA 524.2 (µg/l)	**Annually**		All<1	
SVOC'S (µg/l)	**Annually**		All<1*	
Comb Pesticide suite (µg/l)	**Annually**		All<0.01	
VOC's by GC-FID	**Annually**		All<0.5	

*Isophorone

Cloncreen Ash Repository
Monitoring Results

Monitoring Location: L2

Parameter	Date	25/02/2015	25/05/2015	17/09/2015	21/12/2015	
COD (mg/l)	**Quarterly**	36	35	No sample	52	
Dissolved oxygen (%)	**Quarterly**	29.1	28.3		26.1	
Dissolved oxygen (mg/l)	**Quarterly**	3.79	3.68		2.94	
Electrical Conductivity (µS/cm)	**Quarterly**	801	846		490	
Ammoniacal Nitrogen (mg/l NH4)	**Quarterly**	0.47	0.11		0.31	
pH (pH units)	**Quarterly**	8.8	8.6		9	
Total Suspended Solids (mg/l)	**Quarterly**	12	5		11	
Boron	**Annually**					
Arsenic (µg/l)	**Annually**					
Silver (µg/l)	**Annually**					
Aluminium (µg/l)	**Annually**					
Berylium (µg/l)	**Annually**					
Barium (µg/l)	**Annually**					
calcium (mg/l)	**Annually**					
chromium (µg/l)	**Annually**					
Cadmium (µg/l)	**Annually**					
Cobalt (µg/l)	**Annually**					
Copper (µg/l)	**Annually**					
Iron (mg/l)	**Annually**					
Potassium (mg/l)	**Annually**					
Magnesium (mg/l)	**Annually**					
Manganese (µg/l)	**Annually**					
Sodium (mg/l)	**Annually**					
Nickel (µg/l)	**Annually**					
Lead (µg/l)	**Annually**					
Antimony (µg/l)	**Annually**					
Selenium (µg/l)	**Annually**					
Tin (µg/l)	**Annually**					
Zinc (µg/l)	**Annually**					
Mercury (µg/l)	**Annually**					
PO4-P (mg/l)	**Annually**					
VOC's USEPA 524.2 (µg/l)	**Annually**					
SVOC'S (µg/l)	**Annually**					
Comb Pesticide suite (µg/l)	**Annually**					

*Bis(2-ethylhexyl)phthalate
**Methyl Parathion
**Malathion
**Azinphos Methyl

Cloncreen Ash Repository
Monitoring Results

Monitoring Location: MW02

Parameter	**Date**	22/01/2015	12/02/2015	05/03/2015	15/04/2015	07/05/2015	04/06/2015	15/07/2015	24/08/2015	09/09/2015	01/10/2015	19/11/2015	03/12/2015
Visual/Odour	**Monthly**	Slightly milky, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour
Groundwater level (m AOD)	**Monthly**	68.502	68.452	68.502	68.402	68.552	68.402	67.652	67.202	68.102	68.102	68.652	68.652
pH (pH units)	**Monthly**	7.3	7.4	7.4	7.3	7.3	7.5	7.7	7.4	7.4	7.3	7.4	7.4
Electrical Conductivity (µS/cm)	**Monthly**	713	703	714	721	734	763	603	714	682	743	646	713.5
Total Ammonia mg/l	**Monthly**	6	5.8	5.9	5.8	6	5.9	5.7	6.2	6	6.3	6.2	6.2
Sulphate(SO4) mg/l	**Monthly**	8.3	7.3	10	9.7	12	11	0.16	3.2	3.3	2.8	7	6.5
Arsenic (µg/l)	**Annually**							16					
Boron (µg/l)	**Annually**							11					
Silver (µg/l)	**Annually**							2					
Aluminium (µg/l)	**Annually**							2					
Berylium (µg/l)	**Annually**							2					
Barium (µg/l)	**Annually**							972					
calcium (mg/l)	**Annually**							83					
chromium (µg/l)	**Annually**							2					
Cadmium (µg/l)	**Annually**							2					
Cobalt (µg/l)	**Annually**							2					
Copper (µg/l)	**Annually**							2					
Iron (mg/l)	**Annually**							0.1					
Potassium (mg/l)	**Annually**							1.8					
Magnesium (mg/l)	**Annually**							14					
Manganese (µg/l)	**Annually**							147					
Sodium (mg/l)	**Annually**							5.8					
Nickel (µg/l)	**Annually**							7					
Lead (µg/l)	**Annually**							2					
Antimony (µg/l)	**Annually**							2					
Selenium (µg/l)	**Annually**							2					
Tin (µg/l)	**Annually**							2					
Zinc (µg/l)	**Annually**							2					
Mercury (µg/l)	**Annually**							1					
Flouride (mg/l)	**Annually**							0.14					
PO4-P (mg/l)	**Annually**							0.16					
VOC's USEPA 524.2 (µg/l)	**Annually**							All <1*					
SVOC'S (µg/l)	**Annually**							All <1**					
Comb Pesticide suite (µg/l)	**Annually**							All <0.01					
VOC's by GC-FID	**Annually**							All <0.5					

*Except Dichloromethane <3
**Except Bis(2-ethylhexyl)phthalate <2

Cloncreen Ash Repository
Monitoring Results

Monitoring Location: MW03

Parameter	**Date**	22/01/2015	12/02/2015	05/03/2015	15/04/2015	07/05/2015	04/06/2015	15/07/2015	24/08/2015	09/09/2015	01/10/2015	19/11/2015	03/12/2015
Visual/Odour	**Monthly**	Milky yellow, no odour	Milky yellow, no odour	Milky with peat odour	Yellow/brown, no odour	Milky yellow, no odour	Milky yellow, no odour	Milky yellow, no odour	Milky yellow, no odour	Milky yellow, no odour	Milky yellow, no odour	Milky yellow, no odour	Slightly milky, no odour
Groundwater level (m AOD)	**Monthly**	68.456	68.356	68.456	68.206	68.356	68.156	67.756	68.356	67.756	67.756	68.556	68.506
pH (pH units)	**Monthly**	7.4	7.4	7.6	7.3	7.4	7.2	7.5	7.3	7.1	7.1	7.6	7.5
Electrical Conductivity (µS/cm)	**Monthly**	415	496	364	537	417	767	773	703	702	816	378.5	535
Total Ammonia mg/l	**Monthly**	0.02	0.02	0.02	0.1	0.06	0.13	0.42	0.21	0.16	0.21	0.02	0.07
Sulphate(SO4) mg/l	**Monthly**	24	39	18	46	29	105	110	84	47	106	37	48
Arsenic (µg/l)	**Annually**							2					
Boron (µg/l)	**Annually**							41					
Silver (µg/l)	**Annually**							2					
Aluminium (µg/l)	**Annually**							3					
Berylium (µg/l)	**Annually**							2					
Barium (µg/l)	**Annually**							155					
calcium (mg/l)	**Annually**							138					
chromium (µg/l)	**Annually**							2					
Cadmium (µg/l)	**Annually**							2					
Cobalt (µg/l)	**Annually**							2					
Copper (µg/l)	**Annually**							2					
Iron (mg/l)	**Annually**							0.6					
Potassium (mg/l)	**Annually**							0.8					
Magnesium (mg/l)	**Annually**							7					
Manganese (µg/l)	**Annually**							784					
Sodium (mg/l)	**Annually**							3.9					
Nickel (µg/l)	**Annually**							8					
Lead (µg/l)	**Annually**							2					
Antimony (µg/l)	**Annually**							2					
Selenium (µg/l)	**Annually**							2					
Tin (µg/l)	**Annually**							2					
Zinc (µg/l)	**Annually**							17					
Mercury (µg/l)	**Annually**							1					
Flouride (mg/l)	**Annually**							0.1					
PO4-P (mg/l)	**Annually**							0.16					
VOC's USEPA 524.2 (µg/l)	**Annually**							All < 1*					
SVOC'S (µg/l)	**Annually**							All < 1**					
Comb Pesticide suite (µg/l)	**Annually**							All <0.01					
VOC's by GC-FID	**Annually**							All 0.5					

*Except Dichloromethane <3
**Except Bis(2-ethylhexyl)phthalate <2
*** Except Malathion <0.02
*** Except Azinphos Methyl <0.02
*** Except Methyl Parathion <0.09
*** Except Heptachlor Epoxide <0.05

Cloncreen Ash Repository
Monitoring Results

Monitoring Location: MW04

Parameter	**Date**	22/01/2015	12/02/2015	05/03/2015	15/04/2015	07/05/2015	04/06/2015	15/07/2015	24/08/2015	09/09/2015	01/10/2015	19/11/2015	03/12/2015
Visual/Odour	**Monthly**	Bore well Dry	Bore well Dry	Bore well Dry	Bore well Dry	Bore well Dry	Bore well Dry	Bore well Dry	Bore well Dry	Bore well Dry	Bore well Dry	Bore well Dry	Bore well Dry
Groundwater level (m AOD)	**Monthly**												
pH (pH units)	**Monthly**												
Electrical Conductivity (µS/cm)	**Monthly**												
Total Ammonia mg/l	**Monthly**												
Sulphate(SO4) mg/l	**Monthly**												
Boron (µg/l)	**Annually**												
Arsenic (µg/l)	**Annually**												
Silver (µg/l)	**Annually**												
Aluminium (µg/l)	**Annually**												
Berylium (µg/l)	**Annually**												
Barium (µg/l)	**Annually**												
calcium (mg/l)	**Annually**												
chromium (µg/l)	**Annually**												
Cadmium (µg/l)	**Annually**												
Cobalt (µg/l)	**Annually**												
Copper (µg/l)	**Annually**												
Iron (mg/l)	**Annually**												
Potassium (mg/l)	**Annually**												
Magnesium (mg/l)	**Annually**												
Manganese (µg/l)	**Annually**												
Sodium (mg/l)	**Annually**												
Nickel (µg/l)	**Annually**												
Lead (µg/l)	**Annually**												
Antimony (µg/l)	**Annually**												
Selenium (µg/l)	**Annually**												
Tin (µg/l)	**Annually**												
Zinc (µg/l)	**Annually**												
Mercury (µg/l)	**Annually**												
Flouride (mg/l)	**Annually**												
PO4-P (mg/l)	**Annually**												
VOC's USEPA 524.2 (µg/l)	**Annually**												
SVOC'S (µg/l)	**Annually**												
Comb Pesticide suite (µg/l)	**Annually**												

Cloncreen Ash Repository
Monitoring Results

Monitoring Location: MW05

Parameter	**Date**	22/01/2015	12/02/2015	05/03/2015	15/04/2015	07/05/2015	04/06/2015	15/07/2015	24/08/2015	09/09/2015	01/10/2015	19/11/2015	03/12/2015
Visual/Odour	**Monthly**	Milky with peat odour	Milky with peat odour	Milky with peat odour	Milky with peat odour	Milky with peat odour	Milky with peat odour	Milky with peat odour	Milky with peat odour	Milky with peat odour	Milky with peat odour	Milky with peat odour	Milky with peat odour
Groundwater level (m AOD)	**Monthly**	66.534	66.484	66.584	66.484	66.534	66.384	66.284	66.434	66.334	66.384	66.584	66.534
pH (pH units)	**Monthly**	7	7.1	7.1	7.1	7.1	7.1	7.5	7.3	7.1	7.1	7.2	7.2
Electrical Conductivity (µS/cm)	**Monthly**	604	602	595	608	595	666.5	547	591	559	587	515	567
Total Ammonia mg/l	**Monthly**	5.8	5.7	5.7	5.7	5.7	5.4	5.7	5.7	5.6	5.4	5.8	5.8
Sulphate(SO4) mg/l	**Monthly**	0.57	0.5	3.9	0.73	0.77	0.82	1.2	1	0.97	1.5	1.1	0.52
Arsenic (µg/l)	**Annually**							3					
Boron (µg/l)	**Annually**							5					
Silver (µg/l)	**Annually**							2					
Aluminium (µg/l)	**Annually**							6					
Berylium (µg/l)	**Annually**							2					
Barium (µg/l)	**Annually**							63					
calcium (mg/l)	**Annually**							85					
chromium (µg/l)	**Annually**							2					
Cadmium (µg/l)	**Annually**							2					
Cobalt (µg/l)	**Annually**							2					
Copper (µg/l)	**Annually**							2					
Iron (mg/l)	**Annually**							0.8					
Potassium (mg/l)	**Annually**							0.8					
Magnesium (mg/l)	**Annually**							5					
Manganese (µg/l)	**Annually**							216					
Sodium (mg/l)	**Annually**							6.6					
Nickel (µg/l)	**Annually**							4					
Lead (µg/l)	**Annually**							3					
Antimony (µg/l)	**Annually**							2					
Selenium (µg/l)	**Annually**							2					
Tin (µg/l)	**Annually**							2					
Zinc (µg/l)	**Annually**							3					
Mercury (µg/l)	**Annually**							1					
Flouride (mg/l)	**Annually**							0.1					
PO4-P (mg/l)	**Annually**							0.16					
VOC's USEPA 524.2 (µg/l)	**Annually**							All <1					
SVOC'S (µg/l)	**Annually**							All <1*					
Comb Pesticide suite (µg/l)	**Annually**							All <0.01					
VOC's by GC-FID	**Annually**							All<0.5					

*Except Bis(2-ethylhexyl)phthalate <2

Cloncreen Ash Repository
Monitoring Results

Monitoring Location: MW06

Parameter	**Date**	22/01/2015	12/02/2015	05/03/2015	15/04/2015	07/05/2015	04/06/2015	15/07/2015	24/08/2015	09/09/2015	01/10/2015	19/11/2015	03/12/2015
Visual/Odour	**Monthly**	Slightly yellow, no odour	Clear, no odour	Slightly yellow, no odour	Clear, no odour	Slightly yellow, no odour	Clear, no odour	Clear, no odour	Slightly milky, no odour	Slightly yellow, no odour	Slightly yellow, no odour	Slightly yellow, no odour	Slightly yellow, no odour
Groundwater level (m AOD)	**Monthly**	68.363	68.263	68.363	68.313	68.363	68.213	67.913	67.963	68.013	67.963	68.363	68.413
pH (pH units)	**Monthly**	6.8	6.8	6.9	6.7	6.8	6.7	7.2	7	6.7	6.8	7	7
Electrical Conductivity (µS/cm)	**Monthly**	714	778	684	776	709	790	752	807	770	823	601	712
Total Ammonia mg/l	**Monthly**	5.6	6.3	5.2	6.2	6	6.5	7.4	8	7.9	8.2	4.6	5.6
Sulphate(SO4) mg/l	**Monthly**	6	4.3	7.4	4.6	7.6	5.1	0.94	1.5	2.1	0.79	28	15
Arsenic (µg/l)	**Annually**							4					
Boron (µg/l)	**Annually**							5					
Silver (µg/l)	**Annually**							2					
Aluminium (µg/l)	**Annually**							2					
Berylium (µg/l)	**Annually**							2					
Barium (µg/l)	**Annually**							165					
calcium (mg/l)	**Annually**							124					
chromium (µg/l)	**Annually**							2					
Cadmium (µg/l)	**Annually**							2					
Cobalt (µg/l)	**Annually**							3					
Copper (µg/l)	**Annually**							2					
Iron (mg/l)	**Annually**							2.3					
Potassium (mg/l)	**Annually**							0.8					
Magnesium (mg/l)	**Annually**							3.5					
Manganese (µg/l)	**Annually**							397					
Sodium (mg/l)	**Annually**							6.4					
Nickel (µg/l)	**Annually**							6					
Lead (µg/l)	**Annually**							2					
Antimony (µg/l)	**Annually**							2					
Selenium (µg/l)	**Annually**							2					
Tin (µg/l)	**Annually**							2					
Zinc (µg/l)	**Annually**							6					
Mercury (µg/l)	**Annually**							1					
Flouride (mg/l)	**Annually**							0.1					
PO4-P (mg/l)	**Annually**							0.16					
VOC's USEPA 524.2 (µg/l)	**Annually**							All <1*					
SVOC'S (µg/l)	**Annually**							All <1**					
Comb Pesticide suite (µg/l)	**Annually**							All <0.01					
VOC's by GC-FID	**Annually**							All <0.5					

*Except Dichloromethane <3
**Except Bis(2-ethylhexyl)phthalate <2

Cloncreen Ash Repository
Monitoring Results

Monitoring Location: MW07													
Parameter	**Date**	22/01/2015	12/02/2015	05/03/2015	15/04/2015	07/05/2015	04/06/2015	15/07/2015	24/08/2015	09/09/2015	01/10/2015	19/11/2015	03/12/2015
Visual/Odour	**Monthly**	Clear, no odour	Clear, slight gas odour	Clear, slight gas odour	Yellowish with slight gas odour	Slightly yellow, no odour	Yellowish with slight gas odour	Clear, slight gas odour	Yellowish with slight gas odour	Slightly milky, no odour	Clear, no odour	Clear, no odour	Clear, no odour
Groundwater level (m AOD)	**Monthly**	67.616	67.616	67.266	67.116	67.266	67.366	66.766	66.916	66.866	66.816	67.666	67.616
pH (pH units)	**Monthly**	6.8	6.8	7	6.8	6.9	6.9	7.3	7.2	6.9	6.9	6.6	7
Electrical Conductivity (µS/cm)	**Monthly**	1073	1131	1047	968	1004	938	984	1134	1092	1177	963	984
Total Ammonia mg/l	**Monthly**	3	3.4	2.7	2.2	2.5	2.7	3.3	3.3	3.9	3.7	2.9	2.9
Sulphate(SO4) mg/l	**Monthly**	4.2	2.6	5.9	7.5	6.8	7.4	3.2	1.6	1.2	0.9	4.8	5.6
Arsenic (µg/l)	**Annually**							2					
Boron (µg/l)	**Annually**							9					
Silver (µg/l)	**Annually**							2					
Aluminium (µg/l)	**Annually**							5					
Berylium (µg/l)	**Annually**							2					
Barium (µg/l)	**Annually**							229					
calcium (mg/l)	**Annually**							219					
chromium (µg/l)	**Annually**							2					
Cadmium (µg/l)	**Annually**							2					
Cobalt (µg/l)	**Annually**							2					
Copper (µg/l)	**Annually**							2					
Iron (mg/l)	**Annually**							0.3					
Potassium (mg/l)	**Annually**							32					
Magnesium (mg/l)	**Annually**							6.4					
Manganese (µg/l)	**Annually**							344					
Sodium (mg/l)	**Annually**							41					
Nickel (µg/l)	**Annually**							2					
Lead (µg/l)	**Annually**							2					
Antimony (µg/l)	**Annually**							2					
Selenium (µg/l)	**Annually**							2					
Tin (µg/l)	**Annually**							2					
Zinc (µg/l)	**Annually**							4					
Mercury (µg/l)	**Annually**							1					
Flouride (mg/l)	**Annually**							0.1					
PO4-P (mg/l)	**Annually**							0.16					
VOC's USEPA 524.2 (µg/l)	**Annually**							All <1*					
SVOC'S (µg/l)	**Annually**							All <1**					
Comb Pesticide suite (µg/l)	**Annually**							All <0.01					
VOC's by GC-FID	**Annually**							All <0.5					

*Except Dichloromethane <3
**Except Bis(2-ethylhexyl)phthalate <2

Cloncreen Ash Repository
Monitoring Results

Monitoring Location: MW08

Parameter	**Date**	22/01/2015	12/02/2015	05/03/2015	15/04/2015	07/05/2015	04/06/2015	15/07/2015	24/08/2015	09/09/2015	01/10/2015	19/11/2015	03/12/2015
Visual/Odour	**Monthly**	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour
Groundwater level (m AOD)	**Monthly**	68.612	68.312	68.712	68.612	68.962	68.062	67.362	67.162	67.512	67.462	68.912	68.862
pH (pH units)	**Monthly**	6.8	6.9	6.8	6.8	6.8	6.9	7.2	7.2	6.9	7	6.7	7
Electrical Conductivity (µS/cm)	**Monthly**	896	893	880	870	933	898	801	830	831	878	778	856
Total Ammonia mg/l	**Monthly**	1.5	2.3	1.5	1.7	0.94	2.5	2.6	3.2	3.6	3	1.3	1.4
Sulphate(SO4) mg/l	**Monthly**	64	61	90	60	84	76	56	47	46	47	57	58
Arsenic (µg/l)	**Annually**							10					
Boron (µg/l)	**Annually**							13					
Silver (µg/l)	**Annually**							2					
Aluminium (µg/l)	**Annually**							2					
Berylium (µg/l)	**Annually**							2					
Barium (µg/l)	**Annually**							459					
calcium (mg/l)	**Annually**							19					
chromium (µg/l)	**Annually**							2					
Cadmium (µg/l)	**Annually**							2					
Cobalt (µg/l)	**Annually**							6					
Copper (µg/l)	**Annually**							2					
Iron (mg/l)	**Annually**							3					
Potassium (mg/l)	**Annually**							0.6					
Magnesium (mg/l)	**Annually**							3.9					
Manganese (µg/l)	**Annually**							492					
Sodium (mg/l)	**Annually**							3.6					
Nickel (µg/l)	**Annually**							34					
Lead (µg/l)	**Annually**							2					
Antimony (µg/l)	**Annually**							2					
Selenium (µg/l)	**Annually**							2					
Tin (µg/l)	**Annually**							2					
Zinc (µg/l)	**Annually**							5					
Mercury (µg/l)	**Annually**							1					
Flouride (mg/l)	**Annually**							0.1					
PO4-P (mg/l)	**Annually**							0.16					
VOC's USEPA 524.2 (µg/l)	**Annually**							All <1*					
SVOC'S (µg/l)	**Annually**							All <1**					
Comb Pesticide suite (µg/l)	**Annually**							All <0.01					
VOC's by GC-FID	**Annually**							All <0.5					

*Except Dichloromethane <3
**Except Bis(2-ethylhexyl)phthalate <2

Cloncreen Ash Repository
Monitoring Results

Monitoring Location: MW09

Parameter	**Date**	22/01/2015	12/02/2015	05/03/2015	15/04/2015	07/05/2015	04/06/2015	15/07/2015	24/08/2015	09/09/2015	01/10/2015	19/11/2015	03/12/2015
Visual/Odour	**Monthly**	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour
Groundwater level (m AOD)	**Monthly**	67.568	67.418	67.618	67.568	67.468	67.368	66.418	66.918	67.018	66.868	67.718	67.793
pH (pH units)	**Monthly**	6.9	6.9	7	6.8	7	6.9	7.3	7	6.9	6.9	7	7.1
Electrical Conductivity (µS/cm)	**Monthly**	782	801.5	744	758	733	871	690	814	783	828	703	753
Total Ammonia mg/l	**Monthly**	2.4	2.3	2.4	2.3	2.4	2.3	2.7	2.1	2.6	2.3	2.1	2.4
Sulphate(SO4) mg/l	**Monthly**	5.1	0.5	3.6	4.4	4	8.4	4	18	8.1	9.3	9.2	8.2
Arsenic (µg/l)	**Annually**							23					
Boron (µg/l)	**Annually**							6					
Silver (µg/l)	**Annually**							2					
Aluminium (µg/l)	**Annually**							2					
Berylium (µg/l)	**Annually**							2					
Barium (µg/l)	**Annually**							435					
calcium (mg/l)	**Annually**							121					
chromium (µg/l)	**Annually**							2					
Cadmium (µg/l)	**Annually**							2					
Cobalt (µg/l)	**Annually**							5					
Copper (µg/l)	**Annually**							2					
Iron (mg/l)	**Annually**							0.4					
Potassium (mg/l)	**Annually**							0.6					
Magnesium (mg/l)	**Annually**							5.5					
Manganese (µg/l)	**Annually**							184					
Sodium (mg/l)	**Annually**							4.6					
Nickel (µg/l)	**Annually**							36					
Lead (µg/l)	**Annually**							2					
Antimony (µg/l)	**Annually**							2					
Selenium (µg/l)	**Annually**							2					
Tin (µg/l)	**Annually**							2					
Zinc (µg/l)	**Annually**							2					
Mercury (µg/l)	**Annually**							1					
Flouride (mg/l)	**Annually**							0.1					
PO4-P (mg/l)	**Annually**							0.16					
VOC's USEPA 524.2 (µg/l)	**Annually**							All <1*					
SVOC'S (µg/l)	**Annually**							All <1**					
Comb Pesticide suite (µg/l)	**Annually**							All <0.01					
VOC's by GC-FID	**Annually**							All <0.5					

*Except Dichloromethane <3
**Except Bis(2-ethylhexyl)phthalate <2

Cloncreen Ash Repository
Monitoring Results

Monitoring Location: MW10

Parameter	**Date**	22/01/2015	12/02/2015	05/03/2015	15/04/2015	07/05/2015	04/06/2015	15/07/2015	24/08/2015	09/09/2015	01/10/2015	19/11/2015	03/12/2015
Visual/Odour	**Monthly**	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour
Groundwater level (m AOD)	**Monthly**	68.24	68.44	68.29	68.24	68.29	68.09	67.84	67.89	67.94	67.89	68.19	68.29
pH (pH units)	**Monthly**	7	6.9	7	7	6.9	6.9	7.2	7.1	7	7	7	7.2
Electrical Conductivity (µS/cm)	**Monthly**	736	741	722	743	745	766	691	731	726	759.5	658	671
Total Ammonia mg/l	**Monthly**	2.9	2.9	2.9	2.9	3.1	3	3.2	3.6	3.9	3.4	3.5	3.1
Sulphate(SO4) mg/l	**Monthly**	0.5	0.58	0.5	0.51	0.5	0.51	0.5	1.5	0.5	0.5	0.5	0.5
Arsenic (µg/l)	**Annually**							7					
Boron (µg/l)	**Annually**							7					
Silver (µg/l)	**Annually**							2					
Aluminium (µg/l)	**Annually**							2					
Berylium (µg/l)	**Annually**							2					
Barium (µg/l)	**Annually**							316					
calcium (mg/l)	**Annually**							56					
chromium (µg/l)	**Annually**							2					
Cadmium (µg/l)	**Annually**							2					
Cobalt (µg/l)	**Annually**							6					
Copper (µg/l)	**Annually**							2					
Iron (mg/l)	**Annually**							1.6					
Potassium (mg/l)	**Annually**							0.5					
Magnesium (mg/l)	**Annually**							3					
Manganese (µg/l)	**Annually**							234					
Sodium (mg/l)	**Annually**							6.3					
Nickel (µg/l)	**Annually**							33					
Lead (µg/l)	**Annually**							2					
Antimony (µg/l)	**Annually**							2					
Selenium (µg/l)	**Annually**							2					
Tin (µg/l)	**Annually**							2					
Zinc (µg/l)	**Annually**							10					
Mercury (µg/l)	**Annually**							1					
Flouride (mg/l)	**Annually**							0.1					
PO4-P (mg/l)	**Annually**							0.16					
VOC's USEPA 524.2 (µg/l)	**Annually**							All <1*					
SVOC'S (µg/l)	**Annually**							All <1**					
Comb Pesticide suite (µg/l)	**Annually**							All <0.01					
VOC's by GC-FID	**Annually**							All <0.5					

*Except Dichloromethane <3
**Except Bis(2-ethylhexyl)phthalate <2

Cloncreen Ash Repository
Monitoring Results

Monitoring Location: MW11

Parameter	**Date**	22/01/2015	12/02/2015	05/03/2015	15/04/2015	07/05/2015	04/06/2015	15/07/2015	24/08/2015	09/09/2015	01/10/2015	19/11/2015	03/12/2015
Visual/Odour	**Monthly**	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour	Clear, no odour
Groundwater level (m AOD)	**Monthly**	67.119	67.169	66.819	66.569	66.769	66.919	66.319	66.319	66.469	66.519	67.369	67.169
pH (pH units)	**Monthly**	7	6.9	7	7	7	6.9	7.2	7.1	6.9	6.9	6.8	7.1
Electrical Conductivity (µS/cm)	**Monthly**	1037	1033	1008	899	1013	1235	970	1038	971	1000	898	947
Total Ammonia mg/l	**Monthly**	2.8	2.7	2.7	2.9	2.7	2.6	2.7	2.3	2.8	2.5	2.6	2.8
sulphate(SO4) mg/l	**Monthly**	5	52	5.3	1.4	4.1	0.5	3.4	1.9	1.3	0.98	1.2	2.2
Arsenic (µg/l)	**Annually**							3					
Boron (µg/l)	**Annually**							7					
Silver (µg/l)	**Annually**							2					
Aluminium (µg/l)	**Annually**							2					
Berylium (µg/l)	**Annually**							2					
Barium (µg/l)	**Annually**							334					
calcium (mg/l)	**Annually**							169					
chromium (µg/l)	**Annually**							2					
Cadmium (µg/l)	**Annually**							2					
Cobalt (µg/l)	**Annually**							2					
Copper (µg/l)	**Annually**							2					
Iron (mg/l)	**Annually**							0.1					
Potassium (mg/l)	**Annually**							33					
Magnesium (mg/l)	**Annually**							8.1					
Manganese (µg/l)	**Annually**							615					
Sodium (mg/l)	**Annually**							18					
Nickel (µg/l)	**Annually**							2					
Lead (µg/l)	**Annually**							2					
Antimony (µg/l)	**Annually**							2					
Selenium (µg/l)	**Annually**							2					
Tin (µg/l)	**Annually**							2					
Zinc (µg/l)	**Annually**							6					
Mercury (µg/l)	**Annually**							1					
Flouride (mg/l)	**Annually**							0.1					
PO4-P (mg/l)	**Annually**							0.16					
VOC's USEPA 524.2 (µg/l)	**Annually**							All <1*					
SVOC'S (µg/l)	**Annually**							All <1**					
Comb Pesticide suite (µg/l)	**Annually**							All <0.01					
VOC's by GC-FID	**Annually**							All <0.5					

*Except Dichloromethane <3
**Except Bis(2-ethylhexyl)phthalate <2

| PRTR# : W0049 | Facility Name : Clonbulloge Ash Repository | Filename : W0049_2015.xls | Return Year : 2015 |

Guidance to completing the PRTR workbook

PRTR Returns Workbook

Version 1.1.19

REFERENCE YEAR	2015

1. FACILITY IDENTIFICATION

Parent Company Name	Bord na Mona Energy Limited
Facility Name	Clonbulloge Ash Repository
PRTR Identification Number	W0049
Licence Number	W0049-02

Classes of Activity

No.	class_name
-	Refer to PRTR class activities below

Address 1	Cloncreen Bog
Address 2	Clonbulloge
Address 3	
Address 4	
	Offaly
Country	Ireland
Coordinates of Location	-7.11013 53.274
River Basin District	IESE
NACE Code	3821
Main Economic Activity	Treatment and disposal of non-hazardous waste
AER Returns Contact Name	Enda McDonagh
AER Returns Contact Email Address	enda.mcdonagh@bnm.ie
AER Returns Contact Position	Head of Environment, Health & Safety
AER Returns Contact Telephone Number	0579345911
AER Returns Contact Mobile Phone Number	0862370816
AER Returns Contact Fax Number	0579345160
Production Volume	24369.0
Production Volume Units	tonnes
Number of Installations	1
Number of Operating Hours in Year	3796
Number of Employees	4
User Feedback/Comments	There are no loadings calculated on emissions to water as flow measurement is not a licence requirement.
Web Address	www.bnm.ie

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
5(d)	Landfills

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

4.1 RELEASES TO AIR Link to previous years emissions data | PRTR# : W0049 | Facility Name : Clonbulloge Ash Repository | Filename : W0049_2015.xls | Return Year : 2015 | 29/03/2016 15:23

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
					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 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		DM-01	DM-02	DM-03	DM-04			
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	Emission Point 2	Emission Point 3	Emission Point 4	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
		E		VDI 2199 Blatt 2/Part 2	0.044	0.014	0.008	0.011	0.154	0.0	0.077

* 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: Clonbulloge Ash Repository

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 t

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 | PRTR# : W0049 | Facility Name : Clonbulloge Ash Repository | Filename : W0049_2015.xls | Return Year : 2015 | 29/03/2016 15:25

Please enter all quantities on this sheet in Tonnes 3

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	20 03 01	No	0.66	mixed municipal waste	D1	C	Volume Calculation	Offsite in Ireland	AES Ltd Cappincur Tullamore Co Offaly,WCP-OY-08-601-01	Cappincur,Tullamore,Co Offaly,.,Ireland		
Within the Country	20 03 01	No	1.0	mixed municipal waste	D1	M	Weighed	Offsite in Ireland	AES Ltd Cappincur Tullamore Co Offaly,WCP-OY-08-601-01	Cappincur,Tullamore,Co Offaly,.,Ireland		

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