

Facility Information Summary

AER Reporting Year
 Licence Register Number
 Name of site
 Site Location
 NACE Code
 Class/Classes of Activity
 National Grid Reference (6E, 6 N)

2014

P0501-01

Bord na Mona Derrygreenagh

Derrygreenagh, Rochfortbridge, Co Westmeath

0892

1.4

249450, 238140

Activities on site can be divided into two components, firstly the milling, harrowing, ridging and harvesting of peat into stockpiles and secondly the transportation of that peat via an internal rail network to the Power Station and lorry outloading facilities. Production achieved was approximately 292,439 tonnes which was down on the 2013 figure. Infrastructurally, there was no bog development. From an environmental perspective silt pond capacity was increased by 1800m³. There was also 1.7 km of shelter belt planted adjacent to the M6 motorway at Derryhinch Bog and 210 metres at Ballybeg Bog. The quarterly grab sampling was 100% compliant, with the continuous composite sampling returning one non-compliance for suspended solids. There were no environmental complaints received during the reporting period. In relation to silt pond cleaning, 86% of ponds received two cleanings, inspections dictating cleaning schedules. Decommissioning and Rehabilitation works are described in an attachment.

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.

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. Mulholland

Signature

Group/Facility manager

(or nominated, suitably qualified and experienced deputy)

Date

24-3-15

AIR-summary template

Lic No:

#REF!

Year

#REF!

Answer all questions and complete all tables where relevant

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

No

Additional information

Fugitive emissions only

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 [Basic air monitoring checklist](#) note AG2 and using the basic air monitoring checklist?

[AGN2](#)

Yes

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

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

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

AIR-summary template				Lic No:	#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 thereof	Averaging Period	Compliance Criteria	Units of measurement	Annual Emission	Annual maximum	Monitoring Equipment downtime (hours)	Number of ELV exceedences in current reporting year	Comments
DM-01	Total Particulates	350	140 DAYS	Daily average < ELV	mg/m2/day	4228	46	0	0	Dust monitoring took place on 5 occasions for 28 days each time between April and September
DM-02	Total Particulates	350	140 DAYS	Daily average < ELV	mg/m2/day	15204	258	0	0	
DM-03	Total Particulates	350	140 DAYS	Daily average < ELV	mg/m2/day	16660	205	0	0	
DM-04	Total Particulates	350	140 DAYS	Daily average < ELV	mg/m2/day	11676	150	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						SELECT			
Table A4: Solvent Management Plan Summary Total VOC Emission limit value				Solvent regulations Please refer to linked solvent regulations to complete table 5 and 6					
Reporting year	Total solvent input on site (kg)	Total VOC emissions to Air from entire site (direct and fugitive)	Total VOC emissions as %of solvent input	Total Emission Limit Value (ELV) in licence or any revision thereof		Compliance			
						SELECT			
						SELECT			
Table A5: Solvent Mass Balance summary									
	(I) Inputs (kg)	(O) Outputs (kg)							
Solvent	(I) Inputs (kg)	Organic solvent emission in waste	Solvents lost in water (kg)	Collected waste solvent (kg)	Fugitive Organic Solvent (kg)	Solvent released in other ways e.g. by-	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!

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

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

Additional information	
Yes	
Yes	Monthly COD of yard run-off is attached.

Table W1 Storm water monitoring

Location reference	Location relative to site activities	PRTR Parameter	Licensed Parameter	Monitoring date	ELV or trigger level in licence or any revision thereof*	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence	Comments
	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)

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

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

require improvement in additional information box

[External /Internal](#)

[Lab Quality](#)

[checklist](#)

[Assessment of](#)

[results checklist](#)

No	
Yes	Surface water monitoring was carried out on a quarterly basis. The results of which are attached.

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

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

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

Additional Information	
Yes	Flow proportionate composite sampling

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

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

Yes	Total of 47 days over 365 days
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7 Do you have a proactive service contract for each piece of continuous monitoring equipment on site?

Yes	
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8 Did abatement system bypass occur during the reporting year? If yes please complete table W5 below

No

Table W4: Summary of average emissions -continuous monitoring

Emission reference no:	Emission released to	Parameter/ Substance	ELV or trigger values in licence or any revision thereof	Averaging Period	Compliance Criteria	Units of measurement	Annual Emission for current reporting year (kg)	% change +/- from previous reporting year	Monitoring Equipment downtime (hours)	Number of ELV exceedences in reporting year	Comments
SW15	Water	Suspended Solids	35	24 hour	All results < 1.5 times ELV, plus 8 from ten results must be < ELV	mg/L	13633	-35%	1128	1	54 mg/l on 02/08/2014. Due to 74mm of rainfall during preceeding 48 hours. Down time primarily due to battery changes and periods of no flow.
SW15	Water	Ammonia (as N)	2.78	Weekly	NA	mg/L	203.63	-46.88%			The % reduction can be attributed to 50% less down time on 2013.
SW15	Water	Total phosphorus	NA	Weekly	NA	mg/L	17.23	-42.27%			The % reduction can be attributed to 50% less down time on 2013.
SW15	Water	COD	100	Weekly	NA	mg/L	15020	-44.15%			The % reduction can be attributed to 50% less down time on 2013.
SW15	Water	volumetric flow	NA	24 hour	NA	m3/day	2472279	-33.25%	1128		Down time primarily due to battery changes and periods of no flow
SW15	Water	Total Dissolved Solids	NA	Weekly	NA	mg/L	760052	-34.42%			The % reduction can be attributed to 50% less down time on 2013.

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!
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Bund testing

dropdown menu click to see options

Additional information

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

1 Please provide integrity testing frequency period

2 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)

4 How many bunds are on site?

5 How many of these bunds have been tested within the required test schedule?

6 How many mobile bunds are on site?

7 Are the mobile bunds included in the bund test schedule?

8 How many of these mobile bunds have been tested within the required test schedule?

9 How many sumps on site are included in the integrity test schedule?

10 How many of these sumps are integrity tested within the test schedule?

Please list any sump integrity failures in table B1

11 Do all sumps and chambers have high level liquid alarms?

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

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

Yes	
Other (2 Yearly)	
Yes	
3	
1	Passed
6	
No	
0	
0	
0	
N/A	
N/A	
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

Has integrity testing been carried out in accordance with licence requirements and are all structures tested in line with BS8007/EPA Guidance?

15 Are channels/transfer systems to remote containment systems tested?

17 Are channels/transfer systems compliant in both integrity and available volume?

[bundings and storage guidelines](#)

SELECT	
SELECT	
SELECT	

Commentary

Pipeline/underground structure testing

Are you required by your licence to undertake integrity testing* on underground structures e.g. pipelines or sumps etc ? If yes please fill out table 2 below listing all

1 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**

2 Please provide integrity testing frequency period

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

No underground tanks or pipelines on site	
Yes	
SELECT	

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!
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		Comments	
1 Are you required to carry out groundwater monitoring as part of your licence requirements?	no		Please provide an interpretation of groundwater monitoring data in the interpretation box below or if you require additional space please include a groundwater/contaminated land monitoring results interpretaion as an additional section in this AER
2 Are you required to carry out soil monitoring as part of your licence requirements?	no		
3 Do you extract groundwater for use on site? If yes please specify use in comment section	yes	Drinking water well	
4 Do monitoring results show that groundwater generic assessment criteria such as GTVs or IGVs are exceeded or is there an upward trend in results for a substance? If yes, please complete the Groundwater Monitoring Guideline Template Report (link in cell G8) and submit separately through ALDER as a licensee return AND answer questions 5-12 below.	no		Please enter interpretation of data here
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	N/A		
7 Please specify the proposed time frame for the remediation strategy	N/A		
8 Is there a licence condition to carry out/update ELRA for the site?	N/A		
9 Has any type of risk assesment been carried out for the site?	N/A		
10 Has a Conceptual Site Model been developed for the site?	N/A		
11 Have potential receptors been identified on and off site?	N/A		
12 Is there evidence that contamination is migrating offsite?	N/A		

Table 1: Upgradient Groundwater monitoring results

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

.+ where average indicates arithmetic mean

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

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. 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)		Groundwater monitoring template Guidance on the Management of Contaminated Land and Groundwater at EPA Licensed Sites (EPA 2013).			
**Depending on location of the site and proximity to other sensitive receptors alternative Receptor based Water Quality standards should be used in addition to the GTV e.g. if the site is close to surface water compare to Surface Water Environmental Quality Standards (SWEQS), If the site is close to a drinking water supply compare results to the Drinking Water Standards (DWS)		Groundwater regulations Drinking water (private supply) standards Drinking water (public supply) standards Interim Guideline Values (IGV) Surface water EQS GTV's standards			

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

		Commentary	
1	ELRA initial agreement status	Not a licence requirement	
2	ELRA review status	NA	
3	Amount of Financial Provision cover required as determined by the latest ELRA	NA	
4	Financial Provision for ELRA status	NA	
5	Financial Provision for ELRA - amount of cover	NA	
6	Financial Provision for ELRA - type	NA	
7	Financial provision for ELRA expiry date	NA	
8	Closure plan initial agreement status	NA	Internal budget provision
9	Closure plan review status	NA	Internal budget provision
10	Financial Provision for Closure status	NA	Internal budget provision
11	Financial Provision for Closure - amount of cover	NA	Internal budget provision
12	Financial Provision for Closure - type	NA	Internal budget provision
13	Financial provision for Closure expiry date	NA	

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	Internal unaccredited EMS.		
2	Does the EMS reference the most significant environmental aspects and associated impacts on-site	Yes			
3	Does the EMS maintain an Environmental Management Programme (EMP) as required in accordance with the licence requirements	Yes			
4	Do you maintain an environmental documentation/communication system to inform the public on environmental performance of the facility, as required by the licence	Yes			

Environmental Management Programme (EMP) report

Objective Category	Target	Status (% completed)	How target was progressed	Responsibility	Intermediate outcomes
Reduction of emissions to Air	Continue to train all employees in environmental matters. Training will be by means of a new four module training programme delivered by dedicated Bord na Mona training specialists. This new training programme includes environmental compliance-IPPC, Biodiversity, Archaeology and Energy management. Hydraulic harrows will be deployed at dust sensitive locations. Continue with the collection of headland peat.	90	In total 115 personnel received training during 2014. At Derryhinch 1.7 km of shelter belt planted with 210 metres planted at Ballybeg. Hydraulic harrows were depolyed at 4 locations. Headland peat was collected at all locations and returned with production figures.	Individual	Reduced emissions
Waste reduction/Raw material usage efficiency	Waste streamlining is a project we are particularly interested in continuing and hope to reduce wastes further in the future and be more efficient in dealing with all aspects of waste management	80	Installed a waste management system. Quarterly waste reports are returned for records/filing and waste streams are segregated on site to maximise recycling potential.	Section Head	Improved Environmental Management Practices

Environmental Management Programme/Continuous Improvement Programme template				Lic No:	#REF!	Year	#REF!
Waste reduction/Raw material usage efficiency	Continue with the recycling of polyethylene. The sourcing of more recycling contractors will be ongoing.	100	In total 117.06 tonnes were sent off site for recycling. Procurement also exploring the possibility of securing further recyclers.	Individual	Improved Environmental Management Practices		
Energy Management	As part of an Energy Awareness campaign all aspects of energy consumption will be communicated to personnel with the intention of reducing consumption through awareness	100	A launch event took place where the various energy aspects of the process was communicated, with a breakdown of individuals consumption across all areas of operation.	Section Head	Reduce overall energy output while maintaining productivity.		
Reduction of emissions to Water	Continue to train all employees in environmental matters. Training will be by means of a new four module training programme delivered by dedicated Bord na Mona training specialists. This new training programme includes environmental compliance-IPPC, Biodiversity, Archaeology and Energy management. Continue with the collection of headland peat.	90	In total 115 Personnel received training in 2014. Headland peat was collected at all locations and included as part of overall peat returns.	Individual	Improved Environmental Management Practices		

Noise monitoring summary report	Lic No:	#REF!	Year	#REF!
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1 Was noise monitoring a licence requirement for the AER period?
If yes please fill in table N1 noise summary below

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?

NA

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 <u>site</u> 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!
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- 1 When did the site carry out the most recent energy efficiency audit? Please list the recommendations in table 3 below
- Is the site a member of any accredited programmes for reducing energy usage/water conservation such as the SEAI programme linked to the right? If yes please list them in additional information
- 2 Where Fuel Oil is used in boilers on site is the sulphur content compliant with licence conditions? Please state percentage in additional information
- 3

Additional information

Nov-12	Report on file
Yes	
NA	Not a Licence requirement

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)	8169	7343	-13.56%	+10.1%
Total Energy Generated (MWHrs)				
Total Renewable Energy Generated (MWHrs)				
Electricity Consumption (MWHrs)	309	360	-13.56%	+16.5%
Fossil Fuels Consumption:				
Heavy Fuel Oil (m3)				
Light Fuel Oil (m3)	773.563	687.266	-13.56%	-11.12%
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		Production and site emissions compared to previous year			Water Emissions	Water Consumption	
	Water extracted Previous year m3/yr.	Water extracted Current year m3/yr.	Production +/- % compared to previous reporting year**	Energy Consumption +/- % vs overall site production*	Volume Discharged back to environment(m ³ /yr):	Volume used i.e not discharged to environment e.g. released as steam m3/yr	
Water use							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)	44.64	0	0	44.64	0
Non-Hazardous (Tonnes)	396.91	60.37	0	135.33	201.21

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

[illegible]

WASTE SUMMARY

Lic No:

#REF!

Year

#REF!

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

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

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

Table 5 Capping-Landfill only

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

*please note this includes daily cover area

Table 6 Leachate-Landfill only

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

SELECT

SELECT

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

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

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

Table 7 Landfill Gas-Landfill only

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

Comments on liner type

Derrygreenagh

Decommissioning and Rehabilitation

AER Overview 2014.

Within the Derrygreenagh licensed area (P0501-01) there were no entire bog units available for rehabilitation in 2014. Ongoing monitoring of cutaway within the Derrygreenagh licensing area included the re-survey of Derryarkin and Cavemount bogs.

Draft rehabilitation plans for the Derrygreenagh bogs licensed area, including more detailed draft plans for each component bog unit were submitted to the EPA in 2013. The BNM Ecology Team (who plan and manage rehabilitation) met with the EPA inspectorate in 2013 to outline the general content of the rehab plans and a review process was agreed. This will involve a biannual review and update of plans as well as more detail and finalisation of plans for sites that have been taken out of production. The plans are currently under review (March-April 2015).

The annual Biodiversity Action Plan review day was held in February 2015 and this included an update on progress of this plan, bog restoration and cutaway rehabilitation for a wide range on statutory and non-statutory consultees including members of the EPA, NPWS, BWI, Bord na Mona, Coillte, Inland Fisheries Ireland, An Taisce, IPCC, Irish Red Grouse Association, Irish Wildlife Trust, NARGC, local game councils, Midland Regional Planning Authority as well as a range of local community groups and Heritage Officers from counties Laois, Offaly, Kildare, Roscommon, Longford, Meath, Galway, Westmeath and Dublin.

A copy of our Biodiversity Action Plan is available to view and download at <http://www.bordnamona.ie/our-company/biodiversity/>

Bord na Mona Derrygreenagh	
IPPC Licence P0501-01	

Siltpond Monitoring Frequency & Results
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X	Y	Bog	SW	Monitoring	Sampled	pH	SS	TS	Ammonia	TP	COD	Colour
259415.30	256855.75	Bracklin	SW-29	Q1 14	19/03/2014	7.3	5	312	1.9	0.07	67	220
259519.45	257618.44	Bracklin	SW-30	Q1 14	19/03/2014	7.4	5	288	0.61	0.06	62	203
265632.83	254865.04	Carranstown	SW-33	Q1 14	19/03/2014	7.4	11	338	0.73	0.06	69	228
265886.95	254984.18	Carranstown	SW-34	Q1 14	19/03/2014	7.2	13	410	1.6	0.14	133	453
265140.06	254114.54	Ballivor	SW-35	Q1 14	19/03/2014	7.3	5	518	0.3	0.05	123	284
To Be Confirmed	To Be Confirmed	Ballivor	SW-36	Q2 14	13/06/2014	7.7	39	342	0.02	0.11	120	169
266022.62	259613.57	Lisclogher	SW-25	Q2 14	13/06/2014	7.4	17	400	2.8	0.07	76	246
To Be Confirmed	To Be Confirmed	Lisclogher	SW-28	Q2 14	13/06/2014	7.6	8	404	0.25	0.08	68	308
To Be Confirmed	To Be Confirmed	Ballivor	SW-37	Q2 14	13/06/2014	7.5	5	434	1.5	0.07	63	183
265878.97	253506.58	Ballivor	SW-38	Q2 14	13/06/2014	7.6	5	248	0.02	0.07	63	182
265888.99	253456.63	Ballivor	SW-39	Q3 14	27/07/2014	7.1	5	200	0.05	0.05	69	114
266366.86	251598.58	Ballivor	SW-40	Q3 14	27/07/2014	7.3	5	462	0.94	0.05	67	155
266386.45	251579.18	Ballivor	SW-41	Q3 14	27/07/2014	7.2	21	448	0.02	0.21	82	103
To Be Confirmed	To Be Confirmed	Rossan	SW-42	Q3 14	27/07/2014	6.6	6	144	3.1	0.05	109	287
259965.18	243847.63	Rossan	SW-43	Q3 14	27/07/2014	6.7	6	142	2.6	0.05	106	301
To Be Confirmed	To Be Confirmed	Rossan	SW-44	Q4 14	15/10/2014	7.2	5	260	0.29	0.08	136	370
258846.25	243853.76	Rossan	SW-45	Q4 14	15/10/2014	7.4	5	190	2.2	0.05	64	106
260629.22	242141.39	Rossan	SW-46	Q4 14	15/10/2014	7.4	5	235	1	0.05	83	236
260145.55	242266.71	Rossan	SW-47	Q4 14	15/10/2014	6.8	5	208	2.6	0.05	107	331
To Be Confirmed	To Be Confirmed	Rossan	SW-48	Q4 14	15/10/2014	7.4	5	196	2.2	0.06	68	187

Yard Discharge Results 2014		
Licence: P0501-01		
Works: Derrygreenagh		
Month	D/Greenagh SWE 2 COD	Rossan SWE 1 COD
Jan	44	16
Feb	38	41
Mar	32	26
Apr	30	18
May	30	25
June	12	13
July	23	40
Aug	36	95
Sep	29	66
Oct	38	30
Nov	38	23
Dec	33	110

Note: 0 denotes no flow at emission point on day of sampling



| PRTR# : P0501 | Facility Name : Bord na Móna Energy Limited (Derrygreenagh) |
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[Guidance to completing the PRTR workbook](#)

AER Returns Workbook

Version 1.1.18

REFERENCE YEAR	2014
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1. FACILITY IDENTIFICATION

Parent Company Name	Bord na Mona Energy Limited
Facility Name	Bord na Móna Energy Limited (Derrygreenagh)
PRTR Identification Number	P0501
Licence Number	P0501-01

Classes of Activity

No.	class_name
-	Refer to PRTR class activities below

Address 1	Derrygreenagh Group
Address 2	c/o Derrygreenagh Works
Address 3	Rochfortbridge
Address 4	Mullingar
	Westmeath
Country	Ireland
Coordinates of Location	-7.25676 53.3910
River Basin District	IEEA
NACE Code	0892
Main Economic Activity	Extraction of peat
AER Returns Contact Name	Enda Mc Donagh
AER Returns Contact Email Address	enda.mcdonagh@bnm.ie
AER Returns Contact Position	Head of Environment
AER Returns Contact Telephone Number	0579345911
AER Returns Contact Mobile Phone Number	0862370816
AER Returns Contact Fax Number	0579345160
Production Volume	292439.0
Production Volume Units	Tonnes
Number of Installations	6
Number of Operating Hours in Year	2216
Number of Employees	60
User Feedback/Comments	In accordance with licence condition 6.2 of Technical Amendment A, quarterly sampling is now rotated every quarter and therefore suspended solids results are not factored into loading.
Web Address	www.bnm.ie

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
50.1	General

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

4.2 RELEASES TO WATERS [Link to previous years emissions data](#)

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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 concerns Releases from

RELEASES TO WATERS		Please enter all quantities in this section in KGs					
POLLUTANT		Method Used			QUANTITY		
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 PRTR POLLUTANTS

RELEASES TO WATERS		Please enter all quantities in this section in KGs					
POLLUTANT		Method Used			QUANTITY		
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 C : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

RELEASES TO WATERS		Please enter all quantities in this section in KGs							
POLLUTANT		Method Used			QUANTITY				
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	Emission Point 2	Emission Point 3	T (Total) KG/Year	A (Accidental) KG/Year
240	Suspended Solids	E	OTH	ALPHA,1998,20th Edition, Method 2540D	13633.0	0.0	0.0	13633.0	0.0

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

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			
No. Annex II	Name	M/C/E	Method Used		Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
			Method Code	Designation or Description				
					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			
Pollutant No.	Name	M/C/E	Method Used		Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
			Method Code	Designation or Description				
					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](#)

| PRTR# : P0501 | Facility Name : Bord na Móna Energy Limited (Derrygreenagh) | Filename : P0501_2014.xls | Return Year : 2014 |

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SECTION A : PRTR POLLUTANTS

RELEASES TO LAND			Please enter all quantities in this section in KGs		
POLLUTANT		METHOD		QUANTITY	
No. Annex II	Name	M/C/E	Method Used	Emission Point 1	T (Total) KG/Year
			Designation or Description		A (Accidental) KG/Year
				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	
Pollutant No.	Name	M/C/E	Method Used	Emission Point 1	T (Total) KG/Year
			Designation or Description		A (Accidental) KG/Year
				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# : P0501 | Facility Name : Bord na Móna Energy Limited (Derrygreenagh) | Filename : P0501_2014.xls | Return Year : 2014 |

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Please enter all quantities on this sheet in Tonnes

0

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility Haz Waste : Name and Licence/Permit No of Recover/Disposer	Non 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	01 01 02	No	201.21	wastes from mineral non-metalliferous excavation	D1	E	Volume Calculation	Onsite of generation	Bord na Mona Energy Ltd,P0501-01	Derrygreenagh,Rochfortbridge,Mullingar,Co Westmeath,Ireland		
Within the Country	02 01 04	No	117.06	waste plastics (except packaging)	R5	M	Weighed	Offsite in Ireland	Leinster Environmental Ltd,WP 2008/06	Haggardstown,Dundalk,Co Louth,,Ireland		
To Other Countries	11 01 13	Yes	0.38	degreasing wastes containing dangerous substances	R11	C	Volume Calculation	Abroad	Safety Kleen Ltd,99-1	Tallaght,,,,,Ireland	Solvent Recovery Management,PP33345F,Wh eeland Rd,Knottingly,West Yorks,WF11 8DZ,United Kingdom	Wheeland Rd,Knottingly,West Yorks,WF11 8DZ,United Kingdom
Within the Country	13 02 05	Yes	38.97	mineral-based non-chlorinated engine, gear and lubricating oils	R1	C	Volume Calculation	Offsite in Ireland	Enva Ireland Ltd,184-1	Clonminam Ind Estate,Portlaoise,Co Laois,,Ireland	Enva Ltd,184-1,Clonminam Industrial Estate,Portlaoise,Laois,,Ireland	Clonminam Industrial Estate,Portlaoise,Laois,,Ireland
Within the Country	15 01 03	No	3.65	wooden packaging absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances	R1	M	Weighed	Offsite in Ireland	AES Ltd,WP-OY-08-061-01	Cappincur,Tullamore,Co Offaly,,Ireland		
To Other Countries	15 02 02	Yes	0.72		R1	C	Volume Calculation	Abroad	Enva Ireland Ltd,184-1	Clonminam Ind Estate,Portlaoise,Co Laois,,Ireland	Lindenschmidt,Reg no E97095037,IINDENSCHMIDT,Kreuztal,,Germany	IINDENSCHMIDT,Kreuztal,,Germany
To Other Countries	16 01 07	Yes	4.08	oil filters	R4	C	Volume Calculation	Abroad	Enva Ireland Ltd,184-1	Clonminam Ind Estate,Portlaoise,Co Laois,,Ireland	R.D. Recycling,Reg no 51727/1/KD,Houthalen,,,,,Belgium	Houthalen,,,,,Belgium
Within the Country	17 04 07	No	14.62	mixed metals	R4	M	Weighed	Offsite in Ireland	AES Ltd,WP-OY-08-061-01	Cappincur,Tullamore,Co Offaly,,Ireland		
Within the Country	20 03 01	No	54.59	mixed municipal waste	D1	M	Weighed	Offsite in Ireland	AES Ltd,WP-OY-08-061-01	Cappincur,Tullamore,Co Offaly,,Ireland		
Within the Country	20 03 01	No	5.78	mixed municipal waste	D1	M	Volume Calculation	Offsite in Ireland	AES Ltd,WP-OY-08-061-01	Cappincur,Tullamore,Co Offaly,,Ireland		
To Other Countries	08 01 11	Yes	0.49	waste paint and varnish containing organic solvents or other dangerous substances	R1	M	Weighed	Abroad	Enva Ireland Ltd,184-1	Clonminam Ind Estate,Portlaoise,Co Laois,,Ireland	Recyfuel Ltd,BE0459.735.458,Enghis,,Belgium	Enghis,,,,,Belgium

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