

SECTION 1

INTRODUCTION

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Environmental Protection Agency Waste Licensing	
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1.1 GENERAL

Bord na Móna Energy Ltd operate an Ash Repository Facility at Cloncreen, Clonbulloge, Co. Offaly. This facility currently accepts ash from Edenderry Power Ltds (EPL) peat fired power plant. EPL have made an application with Offaly County Council and the Environmental Protection Agency (EPA) for the co-fuelling of the power plant with biomass (wood material) and (treated) Meat and Bone Meal (MBM). The extent of the use of MBM will be as a mix fuel to a maximum volume of 10% of total fuel input based on calorific value (maximum 100,000 tonnes per annum).

Subsequently Bord na Móna Energy Ltd are applying to Offaly County Council for the acceptance of the ash from the EPL facility from the co-fuelling of peat with biomass (wood material) and/or (treated) Meat and Bone Meal (MBM).

Offaly County Council indicated that planning permission would be required for the acceptance of the ash from the co-fuelling of peat with biomass (wood material) and/or (treated) Meat and Bone Meal (MBM) and as such Bord na Móna Energy Ltd are applying for the same.

Bord na Móna Environmental Limited was commissioned by Bord na Móna Energy Ltd to undertake an Environmental Impact Assessment/Statement (EIA/EIS) for the proposed acceptance of ash from EPL power plant from the co-fuelling of peat with Biomass and/or MBM and subsequent submission of an EIS to the Planning Authority as part of the planning process. This EIA process involves the determination of potential impacts of the proposed development on the environment and where any are identified, to propose measures to avoid or mitigate them.

This EIS will be submitted as supporting information for the planning application for:

“Deposition of deposition of Peat Ash, Meat and Bone Meal Ash and Biomass Ash on the site of the existing Peat Ash Repository Facility at Cloncreen, Clonbulloge.”

In line with the planning application submission, a review of the existing waste licence (49-1) is being processed with the EPA.

1.2 EIS FORMAT

The findings of the EIA investigation are presented as follows (group format structure):

- Section 1 Introduction (including project overview, need of the development etc)
- Section 2 Description of the Site and Project Description
- Section 3 Environmental Impacts (including existing information and prediction of the likely impacts of the development) and Remedial Measures (steps necessary to minimise environmental impacts)
- Section 4 Environmental Monitoring

1.3 ENVIRONMENTAL IMPACT STATEMENT

This Environmental Impact Statement (EIS) was prepared in accordance with The Planning and Development Regulations, 2001 (S.I. No. 600 of 2001), and the EIS Regulations (The European Communities (Environmental Impact Assessment) Regulations, 1989 (S.I. 349 of 1989) and The European Communities (Environmental Impact Assessment) (Amendment) Regulations, 1999 (S.I. 93 of 1999).

In accordance with Part 10 of the Planning and Development Regulations, 2001 (S.I. No. 600 of 2001), an EIS must be submitted as part of a planning application for certain types/scale of developments. Part 10 of this legislation outlines the role of Environmental Impact Assessments (EIA) within the planning application process.

Schedule 5 of these Regulations lists the infra-structural developments for which an EIS is required. The 6th Schedule details information, which must be contained in an EIS. In accordance with paragraph 2(b), the impacts of a proposed development must be examined under the following headings:

Human Beings, Flora and Fauna,
Soil, Water, Air, Climatic Factors and the Landscape,
Material Assets including the architectural and archaeological heritage, and
Cultural Heritage,
Interactions between the above factors;

The primary objective of undertaking the EIA process is to “anticipate the effects on the environment caused by a development. Where effects are identified which are unacceptable, these can then be avoided or reduced” (*Guidelines on the Information to be Contained in Environmental Statements*, Environmental Protection Agency, March 2002).

In determining the potential impacts of the construction and operation of the proposed development the EIS focused on impacts that “are environmentally based”, “are likely to occur” and “have significant and adverse effects” (*EPA Guidelines on Information to be contained in an EIS*).

1.4 NEED FOR THE DEVELOPMENT

The need for the development derives from the management of ash from the EPL power plant.

As part of the EIS process, alternatives to the management of the ash needs to be addressed. A number of alternatives are available for the management of the ash waste include alternative sites for the deposition of the waste and use of the ash as a product. The main alternatives considered are:

- **Alternative Site Location**

The siting of a new ash repository facility within an alternative location was considered. The existing facility has been operating as an ash repository facility since 1998, in compliance of their waste licence (49-1) issued by the EPA. The site is located within the vicinity of the power station and as such there is limited transportation of the ash. The ash is transported from the power station via an existing rail link with no transportation by road. On-going monitoring at the

existing facility has indicated that there are no significant impacts on the surrounding environment as a result of existing activities on site.

The re-siting of a second ash repository within the region would not be deemed environmental feasible.

- **Alternative Use of Ash**

A number of alternative usages for the ash are available which includes the use of the ash for Concrete Constituent, as a Geotechnical Material and as use as a Sewage Sludge Ameliorant. At present these technologies are not feasible in terms of effectiveness and economic viability.

The most common method for the management of waste ash is through the landfilling of the material within the appropriately managed and licenced waste handling facility.

1.5 SCOPE OF EIS

The scoping process identifies issues and potential concerns related to the development that are likely to be important and that need to be examined in detail in the EIS.

The scope of this EIS covers environmental impacts associated with the proposed acceptance of ash from the proposed co-fuelling of the peat fired power station with biomass and MBM and therefore will only examine potential impacts related specifically to the construction and operation of the proposed development.

The existing ash repository facility requires an Environmental Impact Statement under Part II of the First Schedule of the 1999 regulations (S.I. 93 of 1999):

Part II – Paragraph 11 (b): Installations for the disposal of waste with an annual intake greater than 25,000 tonnes not included in Part I of this schedule.

In determining the information required to comply with these specifications an environmental impact matrix was prepared. The matrix predicts the likely impacts of the existing development on the various categories listed above. Table 1.1/1

presents the matrix from which the scope of this study was established. Table 1.1/2 represents the interactions between the various environmental media's and identifies the sections of the EIS where the interactions are addressed.

This EIS has been prepared in accordance with the following legislation and documents:

- The Planning and Development Regulations, 2001 (S.I. No. 600 of 2001).
- The European Communities (Environmental Impact Assessment) Regulations, 1989 (S.I. 349 of 1989).
- The European Communities (Environmental Impact Assessment) (Amendment) Regulations, 1999 (S.I. 93 of 1999).
- "Advice notes on current practice in the preparation of environmental impact statements" (1995); and
- "Guidelines on the information to be contained in environmental impact statements" (2002).

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TABLE 1.1/1: MATRIX FOR THE POSSIBLE ENVIRONMENTAL IMPACTS ASSOCIATED WITH ASH REPOSITORY, CLONCREEN BOG, CLONBULLOGUE, CO. OFFALY

	Structure	Leachate	Air Emissions	Noise	Waste Generation
Human Beings	Amenity value, visual aspects Construction & Operation Disturbance	Surface Water & Groundwater Pollution	Dust Emissions	Noise generated from Construction & Operation Disturbance	Stock Piled Overburden Material, Visual and Dust Generation
Flora & Fauna	Habitat loss Construction & Operation Disturbance	Surface Water Pollution	Dust Emissions	Noise generated from Construction & Operation Disturbance	Habitat Loss
Geology	Excavation of Material	Subsurface Pollution	-	-	-
Hydrology	Surface Water Drainage Changes	Surface Water Pollution	-	-	Surface Water Pollution
Hydrogeology	Groundwater Pollution	Groundwater Pollution Possible Impacts on Local Groundwater Supplies	-	-	Groundwater Pollution
Air	-	-	Dust Emissions	-	-
Climate	-	-	-	-	-
Landscape	Visual Aspects	-	-	-	-
Material Assets	Property Value: Visual Aspect NIMBY Affect	Possible Impacts on Local Groundwater Supplies	Property Value: Dust Aspect	Property Value: Noise Aspects	Property Value: Landfill site
Cultural Heritage	Existing & Undiscovered Archaeological Features	-	-	-	-

**TABLE 1.1/2: SUMMARY OF THE ENVIRONMENTAL IMPACTS OF THE ASH REPOSITORY, CLONCREEN BOG,
CLONBULLOGUE, CO. OFFALY**

	Human Beings	Ecology	Geology	Water	Air	Climate	The Landscape	Material Assets	Cultural Heritage
Human Beings	3.1	none	none	3.4 & 3.5	3.1 & 3.6	none	3.1 & 3.8	3.1	none
Ecology	none	3.2	none	3.2, 3.4 & 3.5	3.2 & 3.6	none	none	none	none
Geology	none	None	3.3	none	none	none	none	none	3.8
Water	3.1, 3.4, & 3.5	3.2, 3.4 & 3.5	none	3.4 & 3.5	none	none	none	none	none
Air	3.1 & 3.6	3.2 & 3.6	none	none	3.6	none	none	none	none
Climate	None	None	none	none	none	3.9	none	none	none
Landscape	3.5 & 3.7	None	none	none	none	none	3.8	none	none
Material Assets	3.1	None	None	None	None	None	None	3.1	none
Cultural Heritage	None	none	3.8	none	none	none	none	none	3.8

Any interactions which will not be impacted upon or affected by the facility are not described in the EIS.

1.6 CONSULTATION

A range of government departments, agencies and bodies and non-governmental organisations were consulted during the preparation of the EIS in order to ensure that all environmental issues relevant to the proposed development were addressed. A list of the bodies consulted is included in Table 1.6.1 below.

Appendix 2 contains a sample of the consultation letters issued. Using this approach, specific concerns raised relating to any issue, environmental or otherwise, could subsequently be considered via design or procedural modifications or by the implementation of appropriate mitigation measures.

Table 1.6/1: List of Organisations that were Consulted as Part of this EIS

- Offaly County Council
- Environmental Protection Agency
- Irish Farmers Association
- The Minister for Transport
- The Minister for Agriculture & Food
- The Irish Aviation Authority
- Enterprise Ireland
- Department of the Environment
- The Minister for Arts, Sports, and Tourism
- Department of An Taisce, Health and Children
- The Heritage Council
- An Taisce
- Department of the Communications, Marine and Natural Resources
- Health Services Executive
- Bord Failte Eireann
- The Department of Enterprise, Trade, and Employment
- The National Roads Authority
- Regional Fisheries Board
- Department of Community, Rural and Gaeltacht Affairs

1.7 STATEMENT OF DIFFICULTIES ENCOUNTERED

It is a requirement of the EIA Regulations (European Communications (Environmental Impact Assessment) (Amendment) Regulations, 1999 (S.I. No. 93 of 1999) Second schedule, 2(d)) to provide an indication of any difficulties (technical deficiencies or lack of know-how) encountered by the developer in compiling the required information. No significant technical difficulties were encountered in preparation of this report.

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