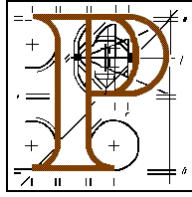


**APPENDIX 1.1**  
**Existing Waste Licence and Planning Permission**

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# An Bord Pleanála



PLANNING AND DEVELOPMENT ACTS, 2000 TO 2002

## Mayo County

**Planning Register Reference Number: P03/3343**

An Bord Pleanála Reference Number: PL 16.207212

**APPEAL** by Monica Muller of Rossport, Ballina, County Mayo and by others and by Shell E. and P. Ireland Limited care of Tom R. Phillips and Associates of 8-11 Lower Baggot Street, Dublin against the decision made on the 30<sup>th</sup> day of April, 2004 by Mayo County Council to grant subject to conditions a permission to the said Shell E. and P. Ireland Limited in accordance with plans and particulars lodged with the said Council.

**PROPOSED DEVELOPMENT:** Development at a site of 160 hectares, approximately, in the townland of Bellagelley South, Bellanaboy Bridge, County Mayo and a site of 117 hectares, approximately, in the townlands of Srahmore and Attavally, Bangor-Erris, County Mayo for the development of a gas terminal for the reception and separation of gas from the Corrib Gas Field, and for a peat deposition site, respectively.

The development will consist of the concurrent development of two sites located 11 kilometres apart, approximately, and identified as the site of the gas terminal for the reception and separation of gas from the Corrib Gas Field in the townland of Bellagelley South, Bellanaboy Bridge, County Mayo (the Bellagelley South site) and the site of peat deposition site in the townlands of Srahmore and Attavally, Bangor-Erris, County Mayo (the Srahmore site), respectively.

The development at the Bellagelley South site will consist of a gas terminal for the reception and separation of gas, including plant and equipment, provision of 4,935 square metres (gross floor area), approximately, of buildings, access roads, 40 number car parking spaces and ancillary developments, of which 13 hectares, approximately, will be developed in respect of the gas terminal's footprint. The proposed development of the Bellagelley South site will also consist of the excavation and removal of 450,000 cubic metres, approximately, of peat from the Bellagelley South site, off site, to the Srahmore site, civil works, inclusive of foundations and piling, the provision of a single storey control building with a gross floor area of 400 square metres, approximately, inclusive of a control room, offices, equipment rooms, kitchenette, locker room and toilets, the provision of a single storey administration building with a gross floor area of 1,015 square metres, approximately, inclusive of a gatehouse, offices, a conference room and an emergency response room, canteen,

kitchenette, laboratory, archive room, first aid room, store rooms, lockers, changing rooms and toilets; the provision of a maintenance building with a gross floor area of 800 square metres, inclusive of a warehouse, stores, mechanical workshop, welding and fabrication shop, instruments and electrical workshops, a plant room, toilets and a maintenance vehicle shed; a weighbridge; and a lattice antenna structure of 22 metres in height, approximately, for site-wide radio communications. The development of the Bellagelly South site will also consist of a diesel storage tank of 75 cubic metres capacity, approximately; a nitrogen generation unit; an air compressor package; a utility area (for plant); a power generation and switchroom building with a gross floor area of 525 square metres, approximately, for the production of electricity for the proposed gas terminal, to include three number generator sets each with a capacity of 1.3 MW; an emergency generator with a capacity of 650kW; one number emergency generator diesel day-tank and one number diesel distribution pump; a high pressure and low pressure flare tower of some 40 metres in height, approximately; a ground flare with a stack height of some 12 metres, approximately; a transformer building with a gross area of 410 square metres, approximately, to include a 400v switchroom; a heating medium heater with a stack height of 20 metres, approximately, three number flare knock out drums; two number low pressure gas compressors; a methanol recovery system comprising of one number methanol still of 33 metres in height, approximately, a heating medium storage tank with a capacity of 40 cubic metres, approximately, a sales gas compressor building with a gross floor area of 890 square metres, approximately, to include two number sales gas compressors, each with a 7.7 MW ISO rated gas turbine driver; a gas-to-gas heat exchanger; a corrugated plate interceptor; effluent feed/treated water sumps; a water treatment building with a gross floor area of 235 square metres, approximately, containing a multi-media filter, ultrafiltration and nanofiltration membrane units, ion exchange beds; an activated carbon filter and a sludge treatment facility; three number condensate storage tanks, of 10 metres each in height, approximately, and 10 metres each in diameter, approximately, two number product methanol tanks of 8.4 metres each in diameter, approximately, and 10 metres each in height, approximately; three number raw methanol storage tanks 13.5 metres each in diameter, approximately, and 10 metres high, approximately, a firewater pond with a capacity of 7,200 cubic metres, approximately; a used firewater pond with a capacity of 5,000 cubic metres, approximately; a firewater pump building with a gross floor area of 660 square metres, approximately, to include four number firewater pumps, each with capacity of 600 cubic metres per hour, approximately; and four number diesel engine drivers, each rated at 265kW (absorbed), approximately; a finger type Slug Catcher, an inlet pig receiver with a withdrawal footprint of 15 square metres, approximately, a sales gas metering unit with a footprint of 200 square metres, approximately; an odorant tank with a capacity of 10 cubic metres, approximately; a sales gas pig launcher with a loading/withdrawal footprint of 15 square metres, approximately; an Onshore Terminal Termination Unit (OTTU) measuring two metres long by one metre wide by 2.5 metres high, approximately; an electricity substation; a Road Tanker Loading/Unloading area; a waste storage area occupying an area of 990 square metres, approximately; the provision of a number of pipetracks and piperacks joining elements of plant together; the provision of two number settlement ponds and associated drainage arrangements; landscaping works; stock proof fencing around the perimeter of the proposed development; security fencing around the terminal and settlement ponds inside the stock proof fence; paved internal access roads; provision of vehicular access to the R314 via an improved forestry access road and the provision of entrance walls and gates; the reconfiguration of the existing entrance from the site to the R314 to include the widening of the entrance and the provision of

a deceleration lane; realignment of the R314 to the south of its current location, at the site entrance, over a length of 115 metres, approximately, to the west of the centreline of the existing site entrance and over a length of 80 metres, approximately, to the east of the centreline of the existing site entrance (over a total length of 195 metres, approximately); an emergency vehicular access road to the county road running between Pollatomish and the R314 via an improved forestry access road; a new maintenance access and maintenance road from the R314 to the two number settlement ponds; and all other site development works and landscaping above and below ground.

The development will simultaneously consist of the development of a peat deposition site of 117 hectares, approximately, at the Srahmore site. The development of the peat deposition site will consist of the construction of a hardstanding peat reception area of 5,112 square metres, approximately; the provision of a temporary administration building with a gross floor area of 108 square metres, approximately, inclusive of offices, canteen and toilets. The development of the peat deposition site will also consist of the provision of a new entrance and access road to the peat deposition site from the R313; the construction of internal circulation routes; the construction of a surface water swale along the southern and western boundaries of the site; the provision of five number surface water settlement ponds (two number ponds of 800 square metres each, three number ponds of 400 square metres each, approximately). Deposition of peat will take place within an area of 63 hectares, approximately. The peat deposition site will also entail the provision of a controlled overflow area of 12 hectares, approximately; an oil interceptor; a settlement tank of 28 cubic metres, approximately; the provision of a temporary weighbridge and a temporary wheelwash. The development of the peat deposition site will also consist of five number car parking spaces located adjacent to the administration building and 20 number parking spaces for haulage vehicles at the peat reception area.

## DECISION

**GRANT permission for the above proposed development in accordance with the said plans and particulars based on the reasons and considerations under and subject to the conditions set out below.**

## REASONS AND CONSIDERATIONS

Having regard to -

- (a) The planning history relating to the Terminal site,
- (b) The strategic importance of the proposed development both nationally and regionally,
- (c) National policy as expressed in the National Development Plan 2000-2006, the National Spatial Strategy 2002-2020, the National Climate Change Strategy for Ireland, 2000 and Government policy in relation to energy supply,
- (d) The limited duration of the earthworks and construction phase, including the transportation of peat,



- (e) The availability of vegetation and plantations to provide screening on the terminal site,
- (f) The nature, extent and low lying profile of the deposition site,
- (g) The legislative requirement to obtain licences from the Environmental Protection Agency in relation to the proposed activities on the two sites,
- (h) Consents granted under the Gas Act, 1976, as amended, and the Foreshore Act, 1933, as amended,
- (i) The development objectives and the conservation and amenity provisions of the current Mayo County Development Plan 2003-2009,
- (j) The reports of the Health and Safety Authority to the planning authority and to An Bord Pleanála,

it is considered that the proposed development, subject to compliance with the conditions set out below, would not be unduly injurious to the amenities of the area or property in the vicinity, would be acceptable in terms of traffic safety, would not be prejudicial to public health and safety and would be in accordance with the proper planning and sustainable development of the area.

## CONDITIONS

### General/Clarification

1. The development shall be carried out in accordance with the following plans and particulars -
  - (a) Original submission to the planning authority on the 17<sup>th</sup> day of December, 2003 and the 23<sup>rd</sup> day of December, 2003, including the Environmental Impact Statement and the mitigation measures contained therein,
  - (b) Amendments and elaboration of the original submission by way of Additional Information submitted to the planning authority on the 11<sup>th</sup> day of March, 2004,
  - (c) Amendments and elaboration to the above submissions by way of Additional Information submitted to the Board on the 31<sup>st</sup> day of August, 2004 and the 15<sup>th</sup> day of September, 2004,

except as may be amended by the following conditions.

**Reason:** To clarify the development to which this permission relates, and in the interest of the proper planning and sustainable development of the area.

2. Before development commences, other than works directly associated with the reconfiguration of the main entrance to the Terminal site and the provision of an entrance to the Deposition site, the owners/developers (and their successors in title) shall enter into legally binding agreement(s) with the planning authority under section 47 of the Planning and Development Act, 2000. The agreement(s) shall provide for the following:
- (i) the satisfactory landscaping of the site, including the maintenance and/or replacement of existing trees and provision of new planting, in accordance with the Landscape Strategy (Drawings Numbers COR-RS-LA-001 – 003 (inclusive)) submitted to the planning authority on the 23<sup>rd</sup> day of December, 2003,
  - (ii) payment to the planning authority of all costs incurred by Mayo County Council in relation to the repair, maintenance and rehabilitation of the road network arising from the construction of the development, determined by the Road and Bridge survey to be carried out prior to and post construction in accordance with a further condition of this permission; the amount of such costs shall be as agreed between Mayo County Council and the developer or, in default of agreement, shall be determined by An Bord Pleanála,
  - (iii) restoration of the Terminal site to the satisfaction of the planning authority following the cessation of gas processing operations, including the demolition of process items of equipment and removal of facilities to grade level,
  - (iv) full implementation of the Traffic Management Plan, submitted to the planning authority on the 11<sup>th</sup> day of March, 2004, as amended and clarified by Additional Information submitted to the Board on the 15<sup>th</sup> day of September, 2004, and as may be amended by the conditions of this permission,
  - (v) payment of the planning authority's reasonable costs in engaging transportation personnel to monitor the Traffic Management Plan, and the provision of office accommodation and telecommunications facilities on site for such personnel, and
  - (vi) payment of the planning authority's reasonable costs in engaging environmental personnel to monitor implementation of the Environmental Management System, required by way of further condition, and the provision of office accommodation and telecommunications facilities on site for such personnel.

**Reason:** To ensure satisfactory control of the development in the interest of the proper planning and sustainable development of the area.

3. All agreements with the planning authority, required by way of the conditions in this permission, shall be in writing and copies of such agreements shall be made available for public inspection during normal office hours at the planning authority's offices, and at the developer's offices in Bangor Erris.

Monitoring results required under the conditions of this permission shall be submitted to the planning authority electronically and in hard copy form, and shall be made available for public inspection during normal office hours at the planning authority's offices, and at the developer's offices in Bangor Erris. The developer shall develop a computerised database for the recording and transfer of monitoring data; the design of the database shall be subject to agreement with the planning authority.

**Reason:** In the interest of clarity and transparency, and to facilitate ease of interpretation of all monitoring data collected and recorded.

### **Stability Matters**

4. The foundation design for the flare shall be such as to accommodate the weight of the flare and the wind loading. Details of this design shall be agreed with the planning authority prior to the construction of the flare.

**Reason:** In the interest of safety and the proper planning and sustainable development of the area.

5. The hazards listed on the Geotechnical Risk Register submitted to the Board on the 31<sup>st</sup> day of August, 2004 shall be the subject of ongoing monitoring throughout the development. A qualified engineer with appropriate experience shall carry out the monitoring. During the excavation and construction phase, the developer shall submit a report in relation to the Risk Register, on a two monthly basis, to the planning authority and the Project Monitoring Committee. The report shall describe the progress of monitoring the hazards listed on the Register and shall detail any specific difficulties encountered and contingencies employed. The reports shall be made available for public inspection within seven days of submission at both the developer's offices in Bangor Erris and the planning authority's offices. The nature and frequency of reporting during the operation phase shall be agreed with the planning authority prior to commissioning the terminal plant.

**Reason:** In the interest of safety and the proper planning and sustainable development of the area.

## Roads, Transportation and Traffic Management

6. Prior to the commencement of peat haulage operations from the Terminal site, the main entrance and adjoining carriageway of the R314 shall be realigned in accordance with Mayo County Council Drawing Number 3225/04/02 to the satisfaction of the planning authority. Until such time as these works are completed, and subject to the employment of two Traffic Controllers at the entrance, the importation of construction materials into this site shall be restricted to a maximum of four HCV's per hour.

**Reason:** In the interest of traffic safety.

7. The following traffic management measures shall apply -
  - (a) Haulage of all excavated peat from the Terminal site to the Deposition site shall be restricted to the designated Haul Route, and the return of all unladen haulage vehicles shall be along the designated return route. No haulage of peat shall commence until such time as the proposed improvements of the Haul Route and the return route are completed.
  - (b) The maximum number of Heavy Commercial Vehicle (HCV) movements along the haul route shall not exceed 800 per day, or 400 in each direction per day. The developer shall keep a record of all traffic movements into and out of the sites, and a copy of this shall be available for inspection by the planning authority and the Project Monitoring Committee on request.
  - (c) The proposed statutory one-way system at the southern end of the Haul Route, involving the L1204 and L12044, shall be in place prior to the commencement of haulage of peat.
  - (d) Two Traffic Directors shall be employed at the junction of the L12044 and L1204 at all times during the haulage of peat.
  - (e) All signage detailed in the Traffic Management Plan shall be erected prior to the commencement of the haulage of peat. Prior to this, or during the haulage period, the developer shall erect any other signage required by the planning authority to facilitate the safe haulage of construction materials.
  - (f) A school traffic warden shall be engaged to travel on each of the school buses using the Haul Route so as to facilitate the safe embarking/alighting and road crossing by children at all times during the haulage of peat.

**Reason:** In the interest of efficient traffic management and public safety.

8. The roadside boundary on the R314 shall be set back in accordance with Mayo County Council Drawing Number 3225/04/03, and the setback area shall be made level with the adjoining carriageway; these works shall be completed to the satisfaction of the planning authority at the same time as the creation of the proposed access to the settlement ponds.

**Reason:** In the interest of traffic safety.

9. (1) On completion of the main entrance to the terminal site, the haulage of all materials required for the construction of the development at the Bellanaboy site shall be via Local Roads L1204 and L12044 and the section of the Regional Road R314 from Bellanaboy Bridge to the main entrance.
- (a) Materials transported via Bangor shall use Regional Road R313, the Local Road L12044, the Local Road L1204 and the Regional Road R314 as the haul route to the site.
- (b) Materials transported from Belmullet shall use the Regional Road R313, the Local Road L12044, the Local Road L1204 and the Regional Road R314 as the haul route to the site.
- (2) Haulage of all materials required for the construction of development at the Srahmore site shall be via the Regional Road R313.

**Reason:** In the interest of efficient traffic management and public safety and to minimise damage to the public road system in the area.

10. The developer shall be responsible for the carrying out of a Road and Bridge survey before and after the construction period. The extent and precise content of the survey, which may be carried out by Mayo County Council at the developer's request and which shall generally relate to the road network directly and indirectly affected by the proposed development, shall be subject to agreement with the planning authority.

**Reason:** To facilitate the determination of damage attributable to the proposed development, and to ensure the proper maintenance and reinstatement of roads and bridges following construction.

11. Before peat haulage commences, the developer shall obtain the agreement of the planning authority, with regard to the following -
- (a) Regular survey of the road surface along the haul route and return route during the haulage and construction period. At minimum, a survey shall be carried out on a monthly basis during peat haulage and on a three monthly basis during the remainder of the construction period.
- (b) Target tolerances for the road surfaces and response times for repairs.
- (c) Liaison with the Project Monitoring Committee.

In the event of target tolerances being exceeded and in the absence of necessary maintenance of the road surface, the planning authority (following consultation with the Project Monitoring Committee) may require the cessation of all haulage activities or construction traffic directly related to the development.

**Reason:** To ensure the proper maintenance of road surfaces during the construction and haulage periods in the interest of traffic safety.

12. (1) All vehicles leaving the construction areas of the sites shall pass through a wheel wash.
- (2) The developer shall take all reasonable measures to ensure that no material shall leak or fall from vehicles transporting waste from the terminal site. Before haulage of waste commences, the developer shall obtain the agreement of the planning authority in relation to details of vehicles and methodologies to be used to ensure the prevention of such leakage.

**Reason:** In the interest of amenity, the proper planning and sustainable development of the area, and traffic safety.

13. The haul route and schedule of haulage for the construction phase of the development shall be clearly documented and published in a manner to be agreed with the planning authority. All HCV's and other commercial vehicles visiting the sites on a regular basis (twice a week or more), shall have a clear notice visible to the public identifying involvement with the development.

**Reason:** In the interest of traffic management.

14. An independent safety audit on the upgraded haul route shall be carried out and agreed with the planning authority prior to the commencement of haulage of peat. The audit shall have regard to the Risk Assessment Matrix in Appendix 1 of the Traffic Management Plan and make particular reference to the following -

- (a) Items A11, A12, A14, A15, A16, A18, A19, A20, A21, A24, A26, and A27 of the Risk Matrix.
- (b) The possible need for a lay-by on the southern approach to the bridge over the Glencullin River.
- (c) The adequacy of the proposed 40 mph non-statutory speed limit in the vicinity of, and on the lead-in to the junction between the L1204 and L12044.
- (d) The adequacy of the proposed 40 mph non-statutory speed limit in the vicinity of, and on the lead-in to the sharp bend at chainage 8000m.

- (e) The operational aspects of the proposed traffic lights along the haul route outside haulage hours.

**Reason:** In the interest of traffic safety.

### **Health and Safety**

15. Before the commissioning of the gas terminal, the developer shall submit to the planning authority a certified Safety Audit in relation to the installation of the combined upstream pipeline and terminal elements of the development within the planning application site, and the agreement of the planning authority shall be received.

The Safety Audit shall be prepared and certified by an independent qualified and competent person or body. Such body or person, and the precise form of the Safety Audit, which shall include Qualitative and Quantitative Risk Analysis of the specified combined components, shall be agreed with the planning authority.

The Safety Audit shall also be submitted to the Health and Safety Authority and the Department of Communications, Marine and Natural Resources at the same time as it is submitted to the planning authority.

**Reason:** It is necessary that the cumulative impacts of the upstream pipeline and terminal components within the application site are assessed and a Safety Audit is prepared and certified in the interest of public health and safety.

16. (1) Any amendment to the permitted scheme which relates to the control or impact of major accident hazards (as defined by Seveso II Directive), but which does not materially alter the permitted development, shall be subject to notification and agreement of the planning authority, following consultation with the Health and Safety Authority.
- (2) Prior to the commissioning of the terminal, the developer shall obtain the agreement of the planning authority for a plan for the control of traffic close to the terminal for use in the event of a major accident.

**Reason:** In the interest of health and safety.

17. No development works shall take place on the sites until water supplies are provided to the satisfaction of the planning authority.

**Reason:** In the interest of public health.

18. Prior to commencement of development, details of aeronautical requirements shall be agreed with the planning authority. Subsequently, the developer shall inform the planning authority of the co-ordinates of the as-constructed position of the flare stack and any other structures required by the planning authority.



**Reason:** In the interest of air traffic safety.

## **Environmental Protection**

### *Management System*

19. Before development commences, the developer shall obtain the agreement of the planning authority for an Environmental Management System (EMS), specific to the earthworks and construction phase of the development on the two sites. The EMS shall include as a minimum the following -
- (a) Management and Reporting Structure.
  - (b) Schedule of Environmental Objectives and Targets, including objectives for the minimization of suspended solids movement to surface water systems, and effective management of all silt and settlement pond flow discharges during periods of high precipitation.
  - (c) An Environmental Management Programme.
  - (d) Corrective Action Procedures.
  - (e) Awareness and Training Programme.
  - (f) Communications Programme.

The developer shall implement the agreed EMS for the duration of the earthworks and construction phase of the development. On written request by the planning authority, the developer shall submit a report on any specific environmental matter or an environmental audit.

The EMS shall be the subject of an annual review by the planning authority, following consultation with the Project Monitoring Committee.

The developer shall modify the EMS in accordance with any reasonable requirement of the planning authority, at any stage.

**Reason:** In the interest of environmental protection and the proper planning and sustainable development of the area.

### *Water Resources*

20. The initial excavation phase on the terminal footprint, prior to the construction and operation of the settlement ponds, shall conform to the following -
- (a) The area to be excavated shall not exceed one hectare.
  - (b) All drainage waters from this excavated area shall be monitored for suspended solids and orthophosphate, and any other parameter at specified frequency required by the planning authority (following consultation with the Project Monitoring Committee), before discharge

from the site. The initial monitoring frequency of suspended solids shall be each afternoon during working days, and three times weekly for orthophosphate (all on working days). Precise details of the monitoring programme, including Trigger Levels shall be agreed with the planning authority (following consultation with the Project Monitoring Committee) prior to the commencement of the excavation of peat. Where practical, at least two of the sampling occasions per month for suspended solids and orthophosphate shall follow a heavy rainfall event.

- (c) Monitoring results shall be submitted on a weekly basis to the planning authority or as otherwise specified by the planning authority, and shall be placed on public display within seven days of receipt.
- (d) In the event of Trigger Levels being reached or exceeded for any of the specified monitoring parameters, the developer shall notify the planning authority without delay, and shall carry out any remedial measures specified by the planning authority including, if necessary, cessation of works.
- (e) Proposals for the regular maintenance of silt ponds facilitating this phase of development shall be agreed with the planning authority prior to commencement of excavation.

**Reason:** To prevent water pollution.

21. Other than the initial excavation phase referred to in condition number 21 above, all surface water discharges from the disturbed area of the sites shall be channelled through the settlement ponds.

Prior to commencement of development, the developer shall agree with the planning authority precise details of a monitoring programme for the settlement ponds and their discharge, and a maintenance programme for the ponds.

Parameters to be monitored shall include -

- (a) temperature,
- (b) turbidity,
- (c) dissolved oxygen,
- (d) electrical conductivity,
- (e) orthophosphate,
- (f) total phosphorus,
- (g) nitrate,
- (h) ammonia (as N),
- (i) suspended solids

and any other parameter required by the planning authority. The frequency and methods of monitoring shall be agreed in advance of the operation of the settlement ponds with the planning authority. Any alterations to the agreed monitoring regime or maintenance programme shall be subject to agreement

with the planning authority, following consultation with the Project Monitoring Committee.

Results shall be submitted to the planning authority on a fortnightly basis or at other such interval specified by the planning authority (following consultation with the Project Monitoring Committee). All results shall be made available for public inspection within seven days of receipt.

**Reason:** To prevent water pollution.

22. All tank and drum storage areas on the sites shall, as a minimum, be bunded to a volume not less than the greater of the following -
- (a) 110% of the capacity of the largest tank or drum within the bunded area, or
  - (b) 25% of the total volume of substance which could be stored within the bunded area.

All fuel storage areas and cleaning areas, particularly for concrete trucks, shall be rendered impervious to the stored or cleaned materials and shall be constructed to ensure no discharges from the areas.

**Reason:** To prevent surface and ground water pollution.

23. The developer shall maintain on the sites for the duration of the construction period, oil abatement kits comprising of booms and absorbent materials. The precise nature and extent of the kits shall be agreed in writing with the planning authority prior to commencement of development.

**Reason:** To prevent water pollution.

24. The location of the percolation area for the wastewater treatment system shall be as shown on Drawing Number COR-AR-SD-RF1-005, submitted to the planning authority on the 11<sup>th</sup> day of March, 2004.

**Reason:** To prevent water pollution in the interest of public health.

#### *Noise and Dust*

25. During construction and haulage, noise levels shall be kept to a minimum. Any activity that will result in a significant increase in the ambient noise levels, for example, piling or rock breaking, shall be notified to the Project Monitoring Committee in advance. Advance notice of the schedule of such activity shall be made available to the general public by way of public advertisement.

**Reason:** In the interest of public health and residential amenity.

26. Dust levels shall not exceed 350 mg/m<sup>2</sup> (TA Luft Air Quality Standard) per day averaged over thirty days when measured at the Bellanaboy site boundaries. Any activity, which could reasonably be expected to exceed that dust level, and proposed mitigation measures, shall be notified to the planning authority and the Project Monitoring Committee in advance, and shall be made available to the general public by way of public advertisement.

**Reason:** In the interest of public health and residential amenity.

#### *Waste Disposal*

27. (1) No waste material, other than material being transferred to a licenced waste facility, generated on the sites during the construction phase shall be removed off the sites without the prior agreement of the planning authority.
- (2) Prior to commencement of development, the developer shall submit, and obtain the agreement of the planning authority to a plan containing details for the management of waste (and, in particular, recyclable materials) within the development, including the provision of facilities for the storage, separation and collection of waste and, in particular, recyclable materials, and for the ongoing operation of these facilities.

**Reason:** To provide for the appropriate management of waste and, in particular, recyclable materials, in the interest of protecting the environment.

28. Sanitary facilities shall be installed on the sites for the duration of the peat haulage and construction periods. All wastes generated from such facilities shall be disposed of off the sites. The facilities and method of disposal shall be to the requirements of the planning authority.

**Reason:** In the interest of public health.

#### *Natural Heritage*

29. Prior to commencement of development, the developer shall carry out a baseline study of salmonid habitats in the area of the sites for the proposed development. The scope, nature and degree of monitoring of the baseline study shall be agreed with the planning authority, who shall consult with the North Western Regional Fisheries Board, together with a schedule of follow-up surveys during the construction and immediate post-completion phases of the development.

**Reason:** In order to provide comprehensive baseline data to facilitate necessary monitoring and protection of salmonid habitats in the area.

30. Within 12 months of the date of this order, the developer shall submit a report, including a survey (carried out at the appropriate time of year) into the presence or otherwise in the area of the sites of breeding hen harriers together with mitigation measures proposed to minimise disturbance during the breeding season, if breeding is recorded.

**Reason:** In order to establish if hen harriers are breeding in the area affected by the development and to determine the nature and extent of any mitigation measures required.

## **Monitoring**

### *General*

31. Prior to commencement of development, the developer shall obtain the agreement of the planning authority for a monitoring plan to ensure that all mitigation measures proposed in the Environmental Impact Statement and Additional Information submitted to the planning authority and the Board relating to the protection of habitats, flora and fauna are carried out. Monitoring shall be carried out by a suitably qualified ecologist who shall liaise with the Project Monitoring Committee.

**Reason:** In the interest of protecting the environment.

32. The developer shall appoint a suitably qualified and experienced Environmental Officer for the period of the earthworks and construction phase. As part of his/her duties the Environmental Officer shall liaise with the Project Monitoring Committee in relation to implementation of the required environmental monitoring, and shall be responsible for reporting to that committee and the planning authority -

- (a) any malfunction of any environmental system,
- (b) any occurrence with the potential for environmental pollution,
- (c) any emergency

which could reasonably be expected to give rise to pollution of waters. The Environmental Officer shall maintain a record of any such occurrences and action taken; this record shall be available for public inspection at the developer's offices at Bangor Erris during normal office hours.

**Reason:** In the interest of proper environmental control during the earthworks and construction phase.

33. Before development commences on the sites, the developer shall obtain the agreement of the planning authority for a monitoring plan in relation to surface water, ground water, dust and continuous noise. Such monitoring shall be carried out by the developer throughout the earthworks and construction phase (to the date of commissioning on the terminal site and the date of commencement of deposition on the repository site). The monitoring plan shall, as a minimum, include -

- (a) A list of all monitoring locations,
- (b) Description and specification of equipment to be used,
- (c) The identity and qualifications of persons responsible for monitoring,
- (d) Parameters to be used,
- (e) Monitoring intervals,
- (f) Averaging times,
- (g) Proposal for the presentation of data,
- (h) Codes of practice to be used, and
- (i) Details of right of access to Mayo County Council appointed staff to carry out environmental monitoring checks as required, or as requested by the Project Monitoring Committee.

Costs incurred by the planning authority in carrying out any necessary monitoring, monitoring checks, inspections and environmental audits, shall be reimbursed by the developer.

**Reason:** In the interest of clarity, and the protection of the environment during the earthworks and construction phase.

34. Prior to commencement of development, a Project Monitoring Committee (PMC) shall be established to monitor geotechnical risks set out in the revised Geotechnical Risk Register (submitted to the Board on 31<sup>st</sup> day of August, 2004), surface water run-off, drainage control, traffic management and road maintenance, implementation of the landscape plan and other environmental issues. The PMC shall comprise two representatives of the developer, two representatives of Mayo County Council, and an invitation shall be extended to the North West Regional Fisheries Board, the Department of the Environment, Heritage and Local Government, and the Environmental Protection Agency to provide one representative each for the committee. In addition, two representatives of the local community, selected in accordance with procedures to be agreed with the planning authority, shall be invited to serve on this committee. The PMC shall have the right to co-opt other members as required. The Mayo County Manager or his/her nominee shall chair the PMC.

Details of the mode of operation for the committee, including frequency of meetings, reporting and liaising arrangements with other persons and bodies, shall be agreed with the planning authority before development commences.

**Reason:** To ensure effective monitoring during construction in the interest of the proper planning and sustainable development of the area.

#### *Archaeology*

35. The developer shall facilitate the planning authority in the archaeological appraisal of the site and in preserving and recording or otherwise protecting archaeological materials or features which may exist within the site. In this regard the developer shall –
- (a) notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including any further

hydrological and geotechnical investigations) relating to the proposed development,

- (b) employ a suitably qualified archaeologist with relevant experience in Peatland archaeology prior to commencement of development. The archaeologist, who shall work under licence, shall assess the site and monitor all site development works,
- (c) provide satisfactory arrangements for the recording and removal of any archaeological material which may be considered appropriate to remove. The archaeologist shall be responsible for reporting any finds, without delay, to the planning authority. In such event, works shall cease in the effected area and shall not recommence until such time as mitigation measures (if any) agreed with the planning authority have been carried out, and
- (d) submit a report to the planning authority detailing the results of the monitoring.

**Reason:** In order to conserve the archaeological heritage of the site and to secure the preservation of any remains which may exist within the site.

### **Complaints Register**

36. A complaints register shall be maintained by the developers at their offices in Bangor Erris; this shall relate to all written complaints made regarding any aspect of the earthworks and construction phase of the development. The register, which shall be available for public inspection on request during normal office hours, shall include
- the name of the complainant
  - the nature of the complaint
  - the date and time of the complaint
  - actions taken as a result of the complaint

**Reason:** In the interest of the proper monitoring of the development.

### **Financial**

37. Prior to commencement of development, the developer shall lodge with Mayo County Council a cash deposit, a bond of an insurance company, or other security to secure the satisfactory reinstatement of the site, upon the cessation of activity at the terminal, coupled with an agreement empowering Mayo County Council to apply such security or part thereof to the satisfactory reinstatement of the site. The form and amount of the security shall be as agreed between Mayo County Council and the developer or, in default of agreement, shall be determined by An Bord Pleanála.

**Reason:** To ensure the satisfactory reinstatement of the site.



38. The developer shall pay the sum of €4,325,125 (four million three hundred and twenty-five thousand one hundred and twenty-five euro) (updated at the time of payment in accordance with the Wholesale Price Index – Building and Construction (Capital Goods), published by the Central Statistics Office), to the planning authority as a special contribution under section 48(2)(c) of the Planning and Development Act 2000 in respect of road improvement works, namely:

- Widening and strengthening of the Local Roads L1204 and L12044 along their entire length
- Strengthening of Regional Road R313 Bangor-Muinhin and Glencastle
- The provision of a right turning lane at the junction of Regional Road R313 and Local Road L12044 in accordance with Mayo County Council Drawing Number 3225/04/04.

This contribution shall be paid prior to the commencement of the development or in such phased payments as may be agreed between the planning authority and the developer. Payment is subject to the provisions of section 48(12) of the Planning and Development Act 2000.

**Reason:** It is considered reasonable that the developer should contribute towards the specific exceptional costs which will be incurred by the planning authority which are not covered in the Development Contribution Scheme and which will benefit the proposed development.

39. The developer shall pay the sum of €1,394,361 (one million three hundred and ninety-four thousand three hundred and sixty-one euro) (updated at the time of payment in accordance with the Wholesale Price Index – Building and Construction (Capital Goods), published by the Central Statistics Office), to the planning authority as a special contribution under section 48(2)(c) of the Planning and Development Act 2000 in respect of the cost of upgrading the proposed extension of the Erris Regional Water Supply which will facilitate the development. This contribution shall be paid prior to the commencement of the development or in such phased payments as may be agreed between the planning authority and the developer. Payment is subject to the provisions of section 48(12) of the Planning and Development Act 2000.

**Reason:** It is considered reasonable that the developer should contribute towards the specific exceptional costs which will be incurred by the planning authority which are not covered in the Development Contribution Scheme and which will benefit the proposed development.

40. The developer shall pay the sum of €30,000 (thirty thousand euro) (updated at the time of payment in accordance with the Wholesale Price Index – Building and Construction (Capital Goods), published by the Central Statistics Office), to the planning authority as a special contribution under section 48(2)(c) of the Planning and Development Act 2000 in respect of the cost of specialist infrastructure required by Mayo County Fire Service which will facilitate the development. This contribution shall be paid prior to the commencement of the development or in such phased payments as may be agreed between the planning authority and the developer. Payment is subject to the provisions of section 48(12) of the Planning and Development Act 2000.

**Reason:** It is considered reasonable that the developer should contribute towards the specific exceptional costs which will be incurred by the planning authority which are not covered in the Development Contribution Scheme and which will benefit the proposed development.

41. The developer shall provide artwork to a maximum value of €64,000 (sixty-four thousand euro) in a location and form to be agreed with Mayo County Council.

**Reason:** In the interest of visual amenity.

42. The developer shall pay to the planning authority a contribution of €1 (one euro) per m<sup>3</sup> of waste peat transported to the deposition site towards the cost of the provision of environmental improvements, recreational or community amenities in the locality. The identification of such projects shall be decided by the planning authority having consulted with the local community.

**Reason:** It is considered reasonable that the developer should contribute towards the cost of environmental, recreational or community amenities which will help mitigate the impact of the transport of waste peat on the local community.

---

**Member of An Bord Pleanála  
duly authorised to authenticate  
the seal of the Board.**

**Dated this                      day of                      2004.**

Headquarters  
P.O. Box 3000  
Johnstown Castle Estate  
County Wexford  
Ireland

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## WASTE LICENCE

<b>Waste Licence Register</b>	W199-1
<b>Number:</b>	
<b>Licensee:</b>	Bord na Móna Energy Limited
<b>Location of Facility:</b>	Srahmore, Attavally, Bangor-Erris, Co Mayo

## *INTRODUCTION*

This introduction is not part of the licence and does not purport to be a legal interpretation of the licence.

“Bord na Móna Energy Ltd (BnM) are applying for a waste licence for a peat disposal area at Srahmore, near Bangor, Co Mayo. The application related to the placement of c.450,000m<sup>3</sup> of peat waste excavated from the development of the Shell Corrib Gas Field Terminal at the nearby Bellanaboy Bridge site. The peat which is from a 3000 to 5000 year old Atlantic Blanket Bog will be transported by road in trucks to the BnM deposit area. It is anticipated that the peat transport and deposit will take place over a 6 month period, spread out over two seasons. The Srahmore facilities will comprise, *inter alia*, a peat reception area, fuel services, truck parking, internal haul roads, sedimentation ponds, wheelwash, weighbridge, office and support buildings. Peat delivered to the site will be deposited by the haulage trucks in a reception area and then transferred by loader to special low ground-bearing-pressure tractor & trailer (Haku) for transport to the deposit area. Peat will be placed in a layer up to 1.8m thick in a shallow 63ha bowl structure in the Srahmore bog and allowed to revegetate. All drainage from the site will be collected and treated prior to discharge to local river systems. The rehabilitation plan for the site is in keeping with the overall BnM rehabilitation plan for the Mayo cut-over bogs.”

The licence sets out in detail the conditions under which Bord na Móna Energy Ltd will operate and manage this facility.

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## *GLOSSARY OF TERMS*

All terms in this licence should be interpreted in accordance with the definitions in the Waste Management Acts 1996 to 2003, (the Acts), unless otherwise defined in this section.

<b>Adequate lighting</b>	20 lux measured at ground level.
<b>AER</b>	Annual Environmental Report.
<b>Agreement</b>	Agreement in writing.
<b>Annually</b>	At approximately twelve monthly intervals.
<b>Attachment</b>	Any reference to Attachments in this licence refers to attachments submitted as part of this licence application.
<b>Application</b>	The application by the licensee for this licence.
<b>Appropriate facility</b>	A waste management facility, duly authorised under relevant law and technically suitable.
<b>BAT</b>	Best Available Techniques.
<b>Bi-annually</b>	All or part of a period of six consecutive months.
<b>Biennially</b>	Once every two years.
<b>BOD</b>	5 day Biochemical Oxygen Demand.
<b>CEN</b>	Comité Européen De Normalisation – European Committee for Standardisation.
<b>COD</b>	Chemical Oxygen Demand.
<b>Construction and Demolition Waste</b>	All wastes which arise from construction, renovation and demolition activities.
<b>Containment boom</b>	A boom which can contain spillages and prevent them from entering drains or watercourses or from further contaminating watercourses.
<b>Daily</b>	During all days of plant operation, and in the case of emissions, when emissions are taking place; with at least one measurement on any one day.
<b>Day</b>	Any 24 hour period.
<b>Daytime</b>	0800 hrs to 2100 hrs.
<b>dB(A)</b>	Decibels (A weighted).
<b>DO</b>	Dissolved Oxygen.
<b>Documentation</b>	Any report, record, result, data, drawing, proposal, interpretation or other document in written or electronic form which is required by this licence.
<b>Drawing</b>	Any reference to a drawing or drawing number means a drawing or drawing number contained in the application, unless otherwise specified in this licence.
<b>EMP</b>	Environmental Management Programme.
<b>Emission Limits</b>	Those limits, including concentration limits and deposition levels established in <i>Schedule B</i> of this licence.
<b>EPA</b>	Environmental Protection Agency.
<b>European Waste Catalogue (EWC)</b>	A harmonised, non-exhaustive list of wastes drawn up by the European Commission and published as Commission Decision 2000/532/EC and any

	subsequent amendment published in the Official Journal of the European Community.
<b>Fortnightly</b>	At least 20 measurements in a calendar year with at least one measurement in any one week.
<b>Hours of Operation</b>	The hours during which the facility is authorised to be operational.
<b>Hours of Waste Acceptance</b>	The hours during which the facility is authorised to accept waste.
<b>ICP</b>	Inductively Coupled Plasma Spectroscopy.
<b>Incident</b>	The following shall constitute an incident for the purposes of this licence: <ul style="list-style-type: none"> <li>a) an emergency;</li> <li>b) any emission which does not comply with the requirements of this licence;</li> <li>c) any exceedence of the daily duty capacity of the waste handling equipment;</li> <li>d) any trigger level specified in this licence which is attained or exceeded; and,</li> <li>e) any indication that environmental pollution has, or may have, taken place.</li> </ul>
<b>Inert waste</b>	Waste that does not undergo any significant physical, chemical or biological transformations. Inert waste will not dissolve, burn or otherwise physically or chemically react, biodegrade or adversely affect other matter with which it comes into contact in a way likely to give rise to environmental pollution or harm human health. The total leachability and pollutant content of the waste and the ecotoxicity of the leachate must be insignificant, and in particular not endanger the quality of surface water and/or groundwater.
<b>Initial development works</b>	Means such works, actions or constructions as may be specified, which for the purposes of environmental protection and safe construction and operation of the facility, have to be carried out in the initial stages of site development, and in any case prior to the commencement of acceptance waste for disposal.
<b>Landfill Directive</b>	Council Directive 1999/31/EC.
<b>Leq</b>	Equivalent continuous sound level.
<b>Liquid Waste</b>	Any waste in liquid form and containing less than 2% dry matter. Any waste tankered to the facility.
<b>List I</b>	As listed in the EC Directives 76/464/EEC and 80/68/EEC and amendments.
<b>List II</b>	As listed in the EC Directives 76/464/EEC and 80/68/EEC and amendments.
<b>Local Authority</b>	Mayo County Council.
<b>Maintain</b>	Keep in a fit state, including such regular inspection, servicing, calibration and repair as may be necessary to adequately perform its function.
<b>Mass Flow Limit</b>	An Emission Limit Value which is expressed as the maximum mass of a substance which can be emitted per unit time.
<b>Mass Flow Threshold</b>	A mass flow rate, above which, a concentration limit applies.
<b>Mobile Plant</b>	Self-propelled machinery used for the emplacement of wastes or for the construction of specified engineering works.



<b>Monthly</b>	A minimum of 12 times per year, at approximately monthly intervals.
<b>Night-time</b>	2100 hrs to 0800 hrs.
<b>Noise Sensitive Location (NSL)</b>	Any dwelling house, hotel or hostel, health building, educational establishment, place of worship or entertainment, or any other facility or area of high amenity which for its proper enjoyment requires the absence of noise at nuisance levels.
<b>Oil Separator</b>	Device installed according to the draft European Standard prEN 858 (Installations for the separation of light liquids, e.g. oil and petrol).
<b>PDA</b>	Peat Deposit Area.
<b>Quarterly</b>	All or part of a period of three consecutive months beginning on the first day of January, April, July or October.
<b>Regional Fisheries Board</b>	North West Regional Fisheries Board.
<b>Sample(s)</b>	Unless the context of this licence indicates to the contrary, samples shall include measurements by electronic instruments.
<b>SOP</b>	Standard Operating Procedure.
<b>Standard Methods</b>	As detailed in "Standard Methods for the Examination of Water and Wastewater", (prepared and published jointly by A.P.H.A., A.W.W.A & W.E.F) 20th Ed. 1998, American Public Health Association, 1015 Fifteenth Street, N.W., Washington DC 20005, USA; or, an alternative method as may be agreed in writing by the Agency.
<b>The Agency</b>	Environmental Protection Agency.
<b>TOC</b>	Total Organic Carbon.
<b>Trigger Level</b>	A parameter value, the achievement or exceedance of which requires certain actions to be taken by the licensee.
<b>Weekly</b>	During all weeks of plant operation, and in the case of emissions, when emissions are taking place; with at least one measurement in any one week.
<b>Working Face</b>	The area of the site in which waste is being deposited.
<b>WWTP</b>	Waste Water Treatment Plant.

## *DECISION & REASONS FOR THE DECISION*

### *Reasons for the Decision*

The Agency is satisfied, on the basis of the information available, that subject to compliance with the conditions of this licence, any emissions from the activity will comply with and will not contravene any of the requirements of Section 40(4) of the Waste Management Acts 1996 to 2003. In reaching this decision the Environmental Protection Agency has considered the application and supporting documentation received from the applicant, all submissions and objections received and the reports of its inspectors.

## *PART I SCHEDULE OF ACTIVITIES LICENSED*

In pursuance of the powers conferred on it by the Waste Management Acts 1996 to 2003, the Environmental Protection Agency (the Agency), under Section 40(1) of the said Acts hereby grants this Waste Licence to Bord na Móna Energy Ltd to carry on the waste activity listed below at Srahmore, Attavally, Bangor-Erris, Co Mayo subject to conditions, with the reasons therefore and the associated schedules attached thereto set out in the licence.

### **Licensed Waste Disposal Activities, in accordance with the Third Schedule of the Waste Management Acts 1996 to 2003**

<b>Class 1.</b>	<b>Deposit on, in or under land (including landfill).</b> <i>This activity is limited to the deposit of peat and associated natural material.</i>
<b>Class 4.</b>	<b>Surface impoundment, including placement of liquid or sludge discards into pits, ponds or lagoons.</b> <i>This activity is limited to the operation of the silt settlement lagoons.</i>
<b>Class 13.</b>	<b>Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.</b> <i>This activity is limited to the storage of peat and associated natural material prior to deposit on site.</i>

## *PART II CONDITIONS*

### **CONDITION 1. Scope**

- 1.1 The installation/facility shall be controlled, operated, and maintained and emissions shall take place as set out in this licence. All programmes required to be carried out under the terms of this licence, become part of this licence.
- 1.2 For the purposes of this licence, the installation/facility is the area of land outlined in red on Drawing Ref. Figure 2 – Site Plan, in Attachment A to the Waste Licence Application. Any reference in this licence to “installation/facility” shall mean the area thus outlined in red.
- 1.3 No alteration to, or reconstruction in respect of, the activity or any part thereof which would, or is likely to, result in
- (a) a material change or increase in:
    - The nature or quantity of any emission,
    - The abatement/treatment or recovery systems,
    - The range of processes to be carried out,
    - The fuels, raw materials, intermediates, products or wastes generated, or
  - (b) any changes in:
    - Site management infrastructure or control with adverse environmental significance,
- shall be carried out or commenced without prior notice to, and without the prior written agreement of, the Agency.
- 1.4 This licence is for the purposes of waste licensing under the Waste Management Acts 1996 to 2003 only and nothing in this licence shall be construed as negating the licensee’s statutory obligations or requirements under any other enactments or regulations.
- 1.5 Activities at this facility shall be limited as set out in *Schedule A: Limitations* of this licence. No hazardous wastes shall be disposed of at the facility.
- 1.6 Waste Acceptance Hours and Hours of Operation
- 1.6.1 Waste may be accepted at the facility peat reception area only between the hours of 0700hrs and 1900hrs Monday to Friday inclusive and 0700hrs to 1600hrs on Saturdays.
  - 1.6.2 Waste handling operations at the facility may take place only during the hours of 0700hrs and 2100hrs Monday to Friday inclusive and 0700hrs to 1800hrs on Saturdays.
  - 1.6.3 Waste shall not be accepted at the facility on Bank Holidays.

### **CONDITION 2. Management of the Installation/Facility**

- 2.1 Installation Management
- 2.1.1 The licensee shall employ a suitably qualified and experienced installation manager who shall be designated as the person in charge. The installation manager or a nominated, suitably qualified and experienced, deputy shall be present on the facility at all times during its operation or as otherwise required by the Agency.
  - 2.1.2 The licensee shall ensure that personnel performing specifically assigned tasks shall be qualified on the basis of appropriate education, training and

experience, as required and shall be aware of the requirements of this licence.

## 2.2 Environmental Management System (EMS)

2.2.1 The licensee shall establish and maintain an Environmental Management System (EMS). The EMS shall be updated on an annual basis and submitted to the Agency as part of the Annual Environmental Report (AER).

2.2.2 The EMS shall include as a minimum the following elements:

2.2.2.1 Management and Reporting Structure.

2.2.2.2 Schedule of Environmental Objectives and Targets.

The licensee shall prepare a schedule of Environmental Objectives and Targets. The schedule shall include time frames for the achievement of set targets. The schedule shall address a two year period as a minimum. The schedule shall be reviewed annually and amendments thereto notified to the Agency for agreement as part of the Annual Environmental Report (AER).

The schedule shall as a minimum include the following objectives:

- (i) Minimisation of suspended solids movement to surface water systems via peat-land surface water drainage channels during development and operation of facility.
- (ii) Reduction of fugitive dust emissions during loading and transfer operation on the bog and during unloading operations at the peat reception area.
- (iii) Provision of measures to protect dust sensitive areas.
- (iv) Reuse of silt pond waste.
- (v) Effective spill/leak management of mobile fuelling units.
- (vi) The management of dangerous and/or listed substances (List I and List II).
- (vii) Effective management of all silt pond flow discharges during periods of high precipitation and flooding.
- (viii) Reuse of stone used in internal haul-road construction.

2.2.2.3 Environmental Management Programme (EMP)

The licensee shall, prior to the commencement of site development, submit to the Agency for agreement an EMP, including a time schedule, for achieving the Environmental Objectives and Targets prepared under Condition 2.2.2.2. Once agreed the EMP shall be established and maintained by the licensee. It shall include:

- (i) designation of responsibility for targets;
- (ii) the means by which they may be achieved;
- (iii) the time within which they may be achieved.

The EMP shall be reviewed annually and amendments thereto notified to the Agency for agreement as part of the Annual Environmental Report (AER) (Condition 11.9).

A report on the programme, including the success in meeting agreed targets, shall be prepared and submitted to the Agency as part of the AER. Such reports shall be retained on-site for a period

of not less than seven years and shall be available for inspection by authorised persons of the Agency.

2.2.2.4 Documentation

- (i) The licensee shall establish and maintain an environmental management documentation system which shall be to the satisfaction of the Agency.
- (ii) The licensee shall issue a copy of this licence to all relevant personnel whose duties relate to any condition of this licence.

2.2.2.5 Corrective Action

The licensee shall establish procedures to ensure that corrective action is taken should the specified requirements of this licence not be fulfilled. The responsibility and authority for initiating further investigation and corrective action in the event of a reported non-conformity with this licence shall be defined.

2.2.2.6 Awareness and Training

The licensee shall establish and maintain procedures for identifying training needs, and for providing appropriate training, for all personnel whose work can have a significant effect upon the environment. Appropriate records of training shall be maintained.

2.2.2.7 Communications Programme

The licensee shall establish and maintain a Communications Programme to ensure that members of the public can obtain information at the facility, at all reasonable times, concerning the environmental performance of the facility.

### CONDITION 3. Infrastructure and Operation

- 3.1 The licensee shall establish all infrastructure referred to in this licence prior to the acceptance of waste to the PDA or as required by the conditions of this licence.
- 3.2 Three months prior to the commencement of site development, the licensee shall submit to the Agency for its agreement a construction schedule, sequence and timescale (Construction Plan) incorporating the requirements of this licence. This Plan shall have regard to the following development phases: (i) Initial Development Works (ii) Main infrastructure development works (pre acceptance of waste for disposal), and (iii) future/planned works (e.g. future deposit bay development/phasing/closure).
- 3.3 The initial developments works at the site shall include construction of surface water silt ponds and associated surface water management infrastructure.
- 3.4 Following the completion of all surface water drainage/control/treatment works, the licensee shall complete a construction quality assurance validation. The validation report shall be made available to the Agency on request. The report shall include the following information:-
  - a) A description of the works;
  - b) As-built drawings of the works;
  - c) Records and results of all tests carried out (including failures);
  - d) Records of any problems and the remedial works carried out to resolve those problems; and
  - e) Any other information requested in writing by the Agency.

- 3.5 Facility Notice Board
- 3.5.1 The licensee shall provide and maintain a Facility Notice Board on the facility so that it is legible to persons outside the main entrance to the facility. The minimum dimensions of the board shall be 1200 mm by 750 mm.
- 3.5.2 The board shall clearly show:-
- a) the name and telephone number of the facility;
  - b) the normal hours of opening;
  - c) the name of the licence holder;
  - d) an emergency out of hours contact telephone number;
  - e) the licence reference number; and
  - f) where environmental information relating to the facility can be obtained.
- 3.6 Facility Office:- The licensee shall provide and maintain an office at the facility. The office shall be constructed and maintained in a manner suitable for the processing and storing of documentation.
- 3.7 Weighbridge and Wheel Cleaner
- 3.7.1 The licensee shall provide and maintain a weighbridge and a wheel cleaner at the facility.
- 3.7.2 The wheel cleaner shall be used by all vehicles leaving the facility as required to ensure that no process water or waste is carried off-site. All water from the wheel cleaning area shall be directed to the waste-water interceptor.
- 3.8 The licensee shall install on all emission points such sampling points or equipment, including any data-logging or other electronic communication equipment, as may be required by the Agency. All such equipment shall be consistent with the safe operation of all sampling and monitoring systems.
- 3.9 Replacement of Infrastructure:- Monitoring infrastructure which is damaged or proves to be unsuitable for its purpose shall be replaced within one month of it being damaged or recognised as being unsuitable.
- 3.10 The licensee shall provide safe and permanent access to all on-site sampling and monitoring points and to off-site points as required by the Agency.
- 3.11 All silt ponds serving the operational areas of the facility shall achieve the following performance criteria:
- Maximum flow velocity <math>10 \text{ cms}^{-1}</math>
  - Silt design capacity of lagoons, minimum 75 m<sup>3</sup> per nett ha of bog serviced.
- 3.12 Flow regulators shall be fitted to the inlets to all silt ponds to ensure the design flow capacity of the pond is not exceeded in flood events. Excess water to be discharged to the Area 7 controlled overflow zone, or as otherwise may be agreed.
- 3.13 Tank and Drum Storage Areas
- 3.13.1 All tank and drum storage areas shall be rendered impervious to the materials stored therein.
- 3.13.2 All tank and drum storage areas shall, as a minimum, be bunded, either locally or remotely, to a volume not less than the greater of the following:-
- (i) 110% of the capacity of the largest tank or drum within the bunded area; or
  - (ii) 25% of the total volume of substance which could be stored within the bunded area
- 3.13.3 All drainage from bunded areas shall be diverted for collection and safe disposal.

- 3.13.4 All inlets, outlets, vent pipes, valves and gauges must be within the bunded area.
- 3.13.5 The integrity and water tightness of all the bunding structures and their resistance to penetration by water or other materials stored therein shall be tested and demonstrated by the licensee to the satisfaction of the Agency and shall be reported to the Agency prior to their coming into service.
- 3.14 The licensee shall have in storage an adequate supply of containment booms and/or suitable absorbent material to contain and absorb any spillage at the facility. Once used the absorbent material shall be disposed of at an appropriate facility.
- 3.15 Silt Traps and Oil Separators: - The licensee shall install and maintain silt traps and oil separator at the facility to ensure that all surface water discharges from the facility pass through a silt trap and oil separator prior to discharge. The separator shall be a Class I full retention separator and the silt traps and separator shall be in accordance with European Standard prEN 858 (installations for the separation of light liquids).
- 3.16 All pump sumps or other treatment plant chambers from which spillage of environmentally significant materials might occur in such quantities as are likely to breach local or remote containment or separator, shall be fitted with high liquid level alarms (or oil detectors as appropriate), and installed as part of the initial site development works.
- 3.17 The storage area for mobile fuelling bogies shall be appropriately bunded and secured at night-time. All mobile fuelling units to be returned to this secure area each night-time or when not in use. A spill kit should be available at this location. All refuelling operations to be the sole responsibility of specifically designated and trained person(s).
- 3.18 The set-down area for the road haulage fleet fuelling trailer/truck is to be fully bunded. Crash barriers/bollards are to be appropriately located around this unit. All refuelling operations to be the sole responsibility of specifically designated and trained person(s). Re-fuelling operations are to take place within a bunded/run-off control area.
- 3.19 All fuelling guns for refuelling units to be fitted with overflow shut-off mechanisms, and 'auto-fill' clips on fuel gun triggers are to be disabled. All fuelling units must remain locked when not in use.
- 3.20 The licensee shall maintain a log of bi-annual inspections of all tractor transported fuelling units/bowsers. These inspections as a minimum should record any damage or leaks or flaws in bowsers that could result in accidental spillage.
- 3.21 The provision of a catchment system to collect any leaks from flanges and valves of all over ground pipes used to transport material other than water shall be examined. This shall be incorporated into a schedule of objectives and targets for the reduction in fugitive emissions set out in Condition 2.2 of this licence.
- 3.22 The licensee shall, as part of the initial development works, install in a prominent location on the site a wind sock, or other wind direction indicator, which shall be visible from the public roadway outside the site.
- 3.23 The peat reception area shall act as a Waste Inspection Area. A Waste Quarantine Area shall be provided and maintained at the facility.
- 3.24 Other than re-fuelling, greasing, oil top-up and emergency repair, all vehicle/fleet maintenance is to be undertaken off-site.



## **CONDITION 4. Interpretation**

- 4.1 Emission limit values for emissions to waters in this licence shall be interpreted in the following way:-
  - 4.1.1 Eight out of ten consecutive results, calculated as daily mean concentration or mass emission values on the basis of flow proportional composite sampling, shall not exceed the emission limit value. No individual result similarly calculated shall exceed 1.2 times the emission limit value.
  - 4.1.2 No grab sample value shall exceed 1.2 times the emission limit value.
- 4.2 Noise
  - 4.2.1 Noise from the activity shall not give rise to sound pressure levels (Leq, 15min) measured at noise sensitive locations which exceed the limit value(s).

## **CONDITION 5. Emissions**

- 5.1 No specified emission from the facility shall exceed the emission limit values set out in *Schedule B: Emission Limits* of this licence. There shall be no other emissions of environmental significance.
- 5.2 The licensee shall ensure that the activities shall be carried out in a manner such that emissions do not result in significant impairment of, and/or significant interference with amenities or the environment beyond the facility/installation boundary.
- 5.3 No substance shall be discharged in a manner, or at a concentration which, following initial dilution, causes tainting of fish or shellfish.
- 5.4 There shall be no persistent tonal or impulsive component to noise measured at noise sensitive locations.
- 5.5 The licensee shall ensure that mud, dust, and odours do not give rise to nuisance at the facility or in the immediate area of the facility. Any method used by the licensee to control any such nuisance shall not cause environmental pollution.
- 5.6 The road network in the vicinity of the facility shall be kept free from any debris caused by vehicles entering or leaving the facility. Any such debris or deposited materials shall be removed without delay.

## **CONDITION 6. Materials Handling**

- 6.1 Deposit of waste shall only take place in accordance with the conditions of this licence and in accordance with the appropriate National and European legislation, standards and protocols.
- 6.2 Waste sent off-site for recovery or disposal shall be conveyed only by an authorised (where required) waste contractor. The waste shall be transported only from the site of the activity to the site of recovery/disposal in a manner which will not adversely affect the environment and in accordance with the appropriate National and European legislation and protocols.
- 6.3 Waste shall be accepted at the facility, only from customers who are holders of a waste permit, where required, under the Waste Management (Collection Permit) Regulations 2001 or from other licensed/permitted facilities.

- 6.4 The licensee shall ensure that waste prior to transfer to another person shall be classified packaged and labelled in accordance with National, European and any other standards which are in force in relation to such labelling.
- 6.5 Waste shall be stored in designated areas, protected as may be appropriate, against spillage and leachate run-off. The waste is to be clearly labelled and appropriately segregated.
- 6.6 No waste classified as green list waste in accordance with the EU Transfrontier Shipment of Waste Regulations (Council Regulation EEC No.259/1993, as amended) shall be consigned for recovery without the prior agreement of the Agency.
- 6.7 Unless approved in writing by the Agency the licensee is prohibited from mixing a hazardous waste of one category with a hazardous waste of another category or with any other non-hazardous waste.
- 6.8 All wastes shall be checked at the working face. Any wastes not suitable for acceptance shall be removed for recovery or disposal at an appropriate alternative facility. Such waste shall be stored in the Waste Quarantine Area only. No waste shall be stored in the Waste Quarantine Area for more than three months.

## **CONDITION 7. Resource Use and Energy Efficiency**

- 7.1 Prior to the acceptance of waste for deposit at the facility the licensee shall establish and operate a program to measure resources and energy use. This program shall also identify actions or measures that will be operated to maximise efficiency of use of resources and energy at this facility. A copy of this program shall be available on-site for inspection by authorised persons of the Agency and a summary report of consumption figures as well as efficiency measures/actions/innovations shall be submitted as part of the Annual Environmental Report.

## **CONDITION 8. Control and Monitoring**

- 8.1 The licensee shall carry out such sampling, analyses, measurements, examinations, maintenance and calibrations as set out in *Schedule C: Control & Monitoring* of this licence.
- 8.2 All treatment/abatement, control and monitoring equipment shall be calibrated and maintained when in use, in accordance with the information submitted in the application or as otherwise approved by the Agency under the Environmental Management Programme.
- 8.3 All automatic monitors and samplers shall be functioning at all times (except during maintenance and calibration) when the activity is being carried on unless alternative sampling or monitoring has been agreed in writing by the Agency for a limited period. In the event of the malfunction of any continuous monitor, the licensee shall contact the Agency as soon as practicable, and alternative sampling and monitoring facilities shall be put in place. Prior written agreement for the use of alternative equipment, other than in emergency situations, shall be obtained from the Agency.
- 8.4 Monitoring and analysis equipment shall be operated and maintained as necessary so that monitoring accurately reflects the emission or discharge.
- 8.5 The frequency, methods and scope of monitoring, sampling and analyses, as set out in this licence, may be amended with the written agreement of the Agency following evaluation of test results.

- 8.6 The licensee shall prepare a programme, to the satisfaction of the Agency, for the identification and reduction of fugitive emissions. This programme shall be included in the Environmental Management Programme.
- 8.7 Following completion of filling in each bay and bi-annually thereafter until the site has been successfully rehabilitated (refer Condition 9), the licensee shall carry out a stability assessment of the placed material. This assessment is to be supported by field measurement as necessary. The results of this assessment are to be reported as part of the AER.
- 8.8 Air
- 8.8.1 Prior to the acceptance of peat for deposit in the PDA the licensee shall submit to the Agency for agreement a proposal for dust monitoring at three dust sensitive locations.
- 8.8.2 In relation to Dust Control the licensee shall, prior to the acceptance of peat to the facility reception area, develop and implement procedures to ensure that:
- (i) in dry weather, site pavement/roads used by vehicles shall be sprayed with water as and when required to minimise airborne dust nuisance,
  - (ii) loose peat handling is prevented in strong wind conditions,
  - (iii) where possible machinery use grassed/surfaced trackways,
  - (iv) headlands/turning areas/trackways are kept clean and free of loose peat,
  - (v) moving machinery maintains slow speeds when travelling along dusty headlands/exposed peat.
- 8.9 Water
- 8.9.1 The drainage system, bunds, silt traps, and oil separators shall be inspected weekly, desludged as necessary and properly maintained at all times. All sludge and drainage from these operations shall be collected for safe disposal. A written record shall be kept of the inspections, desludging, cleaning, disposal of associated waste products, maintenance and performance of the interceptors, bunds and drains.
- 8.9.2 The integrity and water tightness of any underground pipes and tanks and their resistance to penetration by water or other materials carried or stored therein shall be tested and demonstrated by the licensee and shall be reported to the Agency following their installation and prior to their use. This testing shall be carried out by the licensee at least once every three years thereafter and reported to the Agency on each occasion. A written record of all integrity tests and any maintenance or remedial work arising from them shall be maintained by the licensee.
- 8.9.3 A visual examination of the surface water discharges shall be carried out daily. A log of such inspections shall be maintained.
- 8.9.4 The washing-down of plant and equipment shall take place in designated areas with suitable systems for the collection, containment and treatment of the resulting wastes and washings.
- 8.9.5 In respect of silt control the licensee shall, prior to the commencement of the construction plan for the facility prepare and implement procedures to ensure that:
- (i) drainage manholes are protected and maintained free of excessive peat,
  - (ii) headlands are kept clean and free of excessive loose peat,
  - (iii) all new manholes and outfalls are set well back from turning grounds, drivers of bog plant do not turn short (over drains) at headlands,
  - (iv) silt run-off, while piping or ditching, is minimised,

- (v) outfalls are controlled to minimise silt discharge during cleaning operations,
- (vi) drains are ditched in dry weather,
- (vii) while ditching, outfalls are blocked and ditch towards outfall,
- (viii) machine operations involved in moving the peat from the high fields to the deposit area do so in a manner that prevents excessive loss of material to intervening drains.

A copy of these procedures shall be maintained on site for inspection by Agency personnel.

#### 8.9.6 Silt Ponds

- (i) Prior to the commencement of the Construction Plan, the licensee shall prepare an operational procedure for de-silting of the silt ponds. The procedure shall as a minimum provide for visual inspection of all ponds on a weekly basis. The de-silting roster shall be based on recommendations of such visual inspection. A log of visual inspection and de-silting shall be maintained and a summary report on the de-silting programme shall be included in the AER.
- (ii) Silt ponds serving operational bogs shall be cleaned as a minimum three times a year, at least once before winter and once in spring, and more frequently as inspections may dictate.

#### 8.10 Groundwater

- 8.10.1 Prior to the acceptance of waste for deposit at the facility the licensee install a groundwater monitoring network around the site. The location and design of these monitoring points to be in accordance with Agency guidelines. At least one borehole to be located up-hydraulic gradient of the facility. One of the boreholes should be down gradient of the peat reception area and associated facilities; and two boreholes to be located down-hydraulic gradient of Area 6. These locations to be monitored as specified in *Schedule C: Control & Monitoring* of this licence and results reported as part of the AER.

#### 8.11 Noise

- 8.11.1 The licensee shall carry out a noise survey of the site operations during weeks 2, 6 and 12 after the commencement of waste acceptance. The survey programme shall be undertaken in accordance with the methodology specified in the 'Environmental Noise Survey Guidance Document' as published by the Agency. The survey program must include measurement during the morning start-up period (0700hrs to 0900hrs) and the evening period (1800hrs to 2100hrs). A record of the survey results shall be available for inspection by any authorised persons of the Agency, at all reasonable times and a summary report of this record shall be included as part of the AER.
- 8.11.2 Excessive revving of truck motors during morning start-up shall be prevented. Vehicle engines are not to be left running when not in use.

## CONDITION 9. Bog & PDA Rehabilitation & Aftercare

- 9.1 Following termination, or planned cessation for a period greater than six months, of use or involvement of all or part of the site in the licensed activity, the licensee shall, to the satisfaction of the Agency, decommission, render safe or remove for disposal/recovery, any soil, subsoils, buildings, plant or equipment, or any waste, materials or substances or other matter contained therein or thereon, that may result in environmental pollution.

- 9.2 Following completion of filling of the PDA the licensee shall implement the agreed bog rehabilitation plan (refer Condition 9.3).
- 9.3 Bog Rehabilitation Plan:
- 9.3.1 The licensee shall prepare, to the satisfaction of the Agency, a fully detailed and costed plan for permanent rehabilitation of the all the boglands within the licensed area. This plan shall be submitted to the Agency for agreement prior to the commencement of deposit of waste in the PDA.
- 9.3.2 The plan shall be reviewed every two years and proposed amendments thereto notified to the Agency for agreement as part of the AER. No amendments may be implemented without the written agreement of the Agency.
- 9.4 The Rehabilitation Plan shall include as a minimum, the following:
- 9.4.1 A scope statement for the plan; to include outcome of consultations with relevant Agencies, Authorities and affected parties (to be identified by the licensee).
- 9.4.2 The criteria which define the successful rehabilitation of the activity or part thereof, which ensures minimum impact to the environment.
- 9.4.3 A programme to achieve the stated criteria.
- 9.4.4 Where relevant, a test programme to demonstrate the successful implementation of the rehabilitation plan.
- 9.4.5 A programme for aftercare and maintenance.
- 9.5 A final validation report to include a certificate of completion for the Rehabilitation Plan, for all or part of the site as necessary, shall be submitted to the Agency within six months of execution of the plan. The licensee shall carry out such tests, investigations or submit certification, as requested by the Agency, to confirm that there is no continuing risk to the environment.

## CONDITION 10. Accident, Prevention and Emergency Response

- 10.1 The licensee shall, not later than two months prior to the implementation of the Construction Plan ensure that a documented Accident Prevention Policy is in place, which will address the hazards on-site, particularly in relation to the prevention of accidents with a possible impact on the environment.
- 10.2 The licensee shall, not later than two months prior to the implementation of the Construction Plan, ensure that a documented Emergency Response Procedure is in place, which shall address any emergency situation which may originate on-site. This Procedure shall include provision for minimising the effects of any emergency on the environment.
- 10.3 The policy and procedure referred to in Conditions 10.1 and 10.2 shall be reviewed annually and up-dated as necessary. They shall be made available on-site for inspection by the Agency at all reasonable times.
- 10.4 In the event of an incident the licensee shall immediately:-
- (i) identify the date, time and place of the incident;
  - (ii) carry out an immediate investigation to identify the nature, source and cause of the incident and any emission arising therefrom;
  - (iii) isolate the source of any such emission;
  - (iv) evaluate the environmental pollution, if any, caused by the incident;

- (v) identify and execute measures to minimise the emissions/malfunction and the effects thereof; and
- (vi) provide a proposal to the Agency for its agreement within one month of the incident occurring to:-
  - identify and put in place measures to avoid reoccurrence of the incident; and
  - identify and put in place any other appropriate remedial action.

## **CONDITION 11. Notifications, Records and Reports**

- 11.1 The licensee shall make a record of any incident. This record shall include details of the nature, extent, and impact of, and circumstances giving rise to, the incident. The record shall include all corrective actions taken to; manage the incident, minimise wastes generated and the effect on the environment, and avoid recurrence. The licensee shall as soon as practicable following incident notification, submit to the Agency the incident record.
- 11.2 A summary report of reported incidents shall be submitted to the Agency as part of the AER. The information contained in this report shall be prepared in accordance with any relevant guidelines issued by the Agency.
- 11.3 In the event of any incident which may require an emergency response by the Local Authority, the licensee shall notify the Local Authority as soon as practicable, after such an incident.
- 11.4 In the case of any incident which relates to discharges to water, the licensee shall notify the Local Authority and the North Western Regional Fisheries Board as soon as practicable after such an incident.
- 11.5 In the case of any incident which has the potential to impact the conservation objectives of NHA and/or SAC areas having taken place, the licensee shall notify the relevant local office of the the Heritage Section of the Department of Environment, Heritage & Local Government as soon as practicable after such an incident.
- 11.6 In the event that any analyses or observations made on the quality or appearance of surface water runoff should indicate that contamination has taken place, the licensee shall
  - (i) carry out an immediate investigation to identify and isolate the source of the contamination,
  - (ii) put in place measures to prevent further contamination and to minimise the effects of any contamination on the environment,
  - (iii) and notify the Agency as soon as is practicable.
- 11.7 The licensee shall record all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence.
- 11.8 The licensee shall record all complaints of an environmental nature related to the operation of the activity. Each such record shall give details of the date and time of the complaint, the name of the complainant and give details of the nature of the complaint. A record shall also be kept of the response made in the case of each complaint. A summary of the number and nature of complaints received shall be included in the AER.
- 11.9 The licensee shall as a minimum keep the following documents at the site:-
  - (i) the licence(s) relating to the facility;
  - (ii) the current EMS for the facility;
  - (iii) the previous year's AER for the facility;

- (iv) all operational procedures required by this licence, and
  - (v) relevant correspondence with the Agency.
- 11.10 For each full calendar year from the date of grant of this licence, the licensee shall submit to the Agency, by the 31<sup>st</sup> March of the following year, an AER which shall be to the satisfaction of the Agency. This report shall include as a minimum the information specified in *Schedule D: Reports & AER Content* of this licence and shall be prepared in accordance with any relevant guidelines issued by the Agency. In addition, the first AER report shall, separately from the calendar year report, include a report covering the period from the date of grant of the licence to the 31<sup>st</sup> December of the same year.
- 11.11 A full record, which shall be open to inspection by authorised persons of the Agency at all times, shall be kept by the licensee on matters relating to the waste management operations and practices at this site. This record shall as a minimum contain details of the following:
- 11.11.1 The tonnages and EWC Code for the waste materials imported to or sent off-site for disposal/recovery.
  - 11.11.2 The names of the agent and carrier of the waste, and their permit details (to include issuing authority and vehicle registration number).
  - 11.11.3 Details of the ultimate disposal/recovery destination facility for the waste and its appropriateness to accept the consigned waste stream, to include its permit details and issuing authority.
  - 11.11.4 Written confirmation of the acceptance and disposal/recovery of any hazardous waste consignments sent off-site.
  - 11.11.5 Details of all wastes consigned abroad for Recovery and classified as 'Green' in accordance with the EU Transfrontier Shipment of Waste Regulations (Council Regulation EEC No. 259/1993, as amended). The rationale for the classification must form part of the record.
  - 11.11.6 Details of any rejected consignments.
  - 11.11.7 Details of any approved waste mixing as per Condition 6.6.

A copy of this Waste Management record shall be submitted to the Agency as part of the AER for the site.

## CONDITION 12. Financial Charges and Provisions

- 12.1 Agency Charges
- 12.1.1 The licensee shall pay to the Agency an annual contribution of €13,623, or such sum as the Agency from time to time determines, having regard to variations in the extent of reporting, auditing, inspection, sampling and analysis or other functions carried out by the Agency, towards the cost of monitoring the activity as the Agency considers necessary for the performance of its functions under the Waste Management Acts 1996 to 2003. The first payment shall be a pro-rata amount for the period from the date of this licence to the 31<sup>st</sup> day of December, and shall be paid to the Agency within one month from the date of the licence. In subsequent years the licensee shall pay to the Agency such revised annual contribution as the Agency shall from time to time consider necessary to enable performance by the Agency of its relevant functions under the Waste Management Acts 1996 to 2003, and all such payments shall be made within one month of the date upon which demanded by the Agency.
  - 12.1.2 In the event that the frequency or extent of monitoring or other functions carried out by the Agency needs to be increased the licensee shall contribute

such sums as determined by the Agency to defraying its costs in regard to items not covered by the said annual contribution.

12.2 Cost of landfill of waste

12.2.1 The licensee shall provide a statement in writing to the Agency on an annual basis as part of the AER in respect of the determination of charges for the disposal of waste. The Statement shall be in accordance with the requirements of S.I. No. 337 of 2002 European Communities (Amendment of Waste Management (Licensing) Regulations, 2000) Regulation, 2002.

12.3 Environmental Liabilities

12.3.1 The licensee shall arrange for the completion, by an independent and appropriately qualified consultant, of a comprehensive and fully costed Environmental Liabilities Risk Assessment for the operation, which will address liabilities from authorised activities. A report on this assessment to be submitted to the Agency for agreement prior to the acceptance of peat to the PDA.

12.3.2 Within three months of agreement by the Agency under Condition 12.3.1, the licensee shall make financial provision in a form acceptable to the Agency to cover any liabilities incurred by the licensee. The amount of indemnity must always be capable of covering the liabilities identified in Condition 12.3.1.

12.3.3 The amount of indemnity, held under Condition 12.3.2 shall be reviewed and revised as necessary, but at least annually.

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## SCHEDULE A Limitations

### A.1 Waste Acceptance

Table A.1 Waste Categories and Quantities

WASTE TYPE	MAXIMUM (m <sup>3</sup> ) <sup>NOTE 1</sup>
Peat and associated natural materials	450,000
<b>TOTAL</b>	450,000

Note 1: Freshly excavated peat has a density approximately equal to 1 (1m<sup>3</sup> peat = 1t).

## SCHEDULE B Emission Limits

### B(1) Air

Activities on-site shall not give rise to dust levels off site at any Dust Sensitive Location which exceed a deposition limit of 350 mg/m<sup>2</sup>/day.

[The sampling method to be in accordance with German TA Luft Immission Standards for Particle Deposition (IW1). Dust Sensitive Locations to be agreed in accordance with Condition 8.7].

### B(2) Emissions to Water

**Emission Point Reference No's.:** S5-1, S5-2 and combined Area 5 & Area 6 flow at Location 7.

**Location:** As noted on Plan 1169/01/319, Volume 3 of Waste Licence Application.

**Receiving water:** S5-1 & S5-2 to Owenmore River.  
Location 7 to Munkin River.

Parameter	Emission Limit Value
Suspended Solids	35mg/l

**B(3) Sewer**

N/A



**B(4) Noise**

Day dB(A) L <sub>Aeq</sub> (30 minutes)	Night dB(A) L <sub>Aeq</sub> (30 minutes)
55	45

Note 1: There shall be no clearly audible tonal component or impulsive component in the noise emission from the activity at any noise sensitive location.



## **SCHEDULE C Control & Monitoring**

**C(1.1) Air Emission Control**

N/A



**C(1.2) Air Emission Monitoring**

Refer Condition 8.7.



**C(2.1) Emissions to Water Control**

N/A



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**C(2.2) Emissions to Water Monitoring**

**Emission Point Reference No.:** Location 7 (Combined outfall from Area 5 and Area 6 - S5-1 & S5-2 excepted).

Parameter	Monitoring Frequency	Analysis Method/Technique
Flow	Continuous	On-line flow meter with recorder
pH	Weekly <sup>Note 1</sup>	pH electrode/meter and recorder
Visual Inspection	Twice Daily	-
Conductivity	Continuous	Slectrode/meter and recorder
Chemical Oxygen Demand	Weekly <sup>Note 1</sup>	Standard Method
Biochemical Oxygen Demand	Quarterly	Standard Method
Suspended Solids	Daily <sup>Note 1</sup>	Gravimetric
Total Dissolved Solids	Weekly <sup>Note 1</sup>	Standard Method
Nitrite (as N)	Monthly	Standard Method
Nitrates (as N)	Monthly	Standard Method
Ammonia (as N)	Weekly <sup>Note 1</sup>	Ion selective electrode
Total Phosphorus (as P)	Monthly	Standard Method
Oils, fats & greases	Quarterly	Standard Method

**Note 1:** As part of the development of the surface water system the licensee shall install a composite sampler. All samples thereafter shall be collected on a 7 day 24 hour flow proportional composite sampling basis (or equivalent approved).

**Emission Point Reference No's.:** S5-1 & S5-2

Parameter	Monitoring Frequency <sup>Note 1</sup>	Analysis Method/Technique
pH	Weekly	pH electrode/meter
Suspended solids	Weekly (at least 2 of the sampling occasions per month to follow a heavy rainfall event)	Standard Method
COD	Weekly	Standard Method
Total Ammonia	Weekly	Standard Method
Conductivity	Weekly	Standard Method
Visual Inspection	Daily	Not Applicable

**Note 1:** Based on Grab Sample.

**C(3.1) Emissions to Sewer Control**

N/A

**C(3.2) Emissions to Sewer Monitoring**

N/A



**C(4) Waste Monitoring**

N/A



**C(5) Noise Monitoring**

Refer to Condition 8.10.



**C(6) Ambient Monitoring**

**River-water Monitoring**

**Location:** Munkin River, two locations (Upstream and downstream of discharge from Emission Location Reference Number 7).

Parameter	Monitoring Frequency	Analysis Method/Technique
Suspended Solids	Monthly	Standard Method
Ammonia	Monthly	Standard Method
Biological Quality (Q) Rating/Q Index	Annually <sup>Note 1</sup>	To be agreed with the Agency

Note 1: Monitoring period - June to September.



**Groundwater Monitoring**

**Emission Point Reference No's:** Boreholes identified in Condition 8.9.1

Parameter	Monitoring Frequency	Analysis Method/Technique
COD	Biannually	Standard Method
Nitrate	Biannually	Standard Method
Total Ammonia	Biannually	Standard Method
Conductivity	Biannually	Standard Method
Diesel Range Organics	Biannually	GC-MS



## SCHEDULE D Reports & AER Content

Completed reports shall be submitted to:

The Environmental Protection Agency  
 Regional Inspectorate  
 John Moore Road  
 Castlebar  
 Co Mayo **or** Any other address as may be specified by the Agency

Reports are required to be forwarded as set out below:

### Recurring Reports:

Report	Reporting Frequency	Report Submission Date
Monitoring of emissions to water	Quarterly	Ten days after end of the quarter being reported on.
Surface Water Monitoring	Quarterly	Ten days after end of the quarter being reported on.
Complaints (where these arise)	Monthly	Ten days after end of the month being reported on.
Annual Environment Report (AER)	Annually	By March 31 of each year.

### Once-Off Reports:

Report	Report Submission Date
EMP Proposal (Cond. 2.2.2.3)	Prior to the commencement of site development, thereafter as part of the AER.
Construction Plan (Cond. 3.2)	Prior to the commencement of site development.
Bog Rehabilitation Plan (Cond. 9.3)	Prior to the acceptance of peat for placement in the PDA.

## ANNUAL ENVIRONMENTAL REPORT

### Annual Environmental Report Content

Report Period.  
Current management structure.  
Waste management report.  
Emissions to atmosphere summary. <sup>Note 1</sup>  
Emissions to water summary. <sup>Note 1</sup>  
Noise monitoring report <sup>Note 1</sup>  
Groundwater monitoring summary. <sup>Note 1</sup>  
Resource & Energy consumption/efficiency summary.  
Schedule of Environmental Objectives and Targets.  
Environmental management programme – report.  
Environmental management programme – proposal.  
Tank and pipeline testing and inspection report.  
Complaints summary.  
Reported incidents summary.  
Review of nuisance controls.  
Review of rehabilitation plan.  
Placed peat stability assessment.  
Review of Environmental Liabilities Insurance Cover.  
Summary of main changes/developments/works on site in report year.  
Summary of planned works for current year.  
Statement regarding costs of landfill.  
Any other items as may be specified by the Agency

**Note 1:** To include plan showing all monitoring & emission points. Also interpretation/discussion of results.

**Sealed by the seal of the Agency on this the 29th day of October 2004.**

**PRESENT when the seal of the Agency  
was affixed hereto:**

**Larry Stapleton      Director/Authorised Person**

**APPENDIX 1.2**  
**IPC Licence Rehabilitation Plan,**  
**Owenniny Works**

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# Appendix 1

## Condition 9 Bog & PDA Rehabilitation and Aftercare

9.1 Following termination of use or involvement of all or part of the site in the licensed activity, the licensee shall decommission, render safe or remove for disposal/recovery, any soil, subsoils, buildings, plant or equipment, or any waste, materials or substances or other matter contained therein or thereon, that may result in environmental pollution.

9.2 Implement the agreed bog rehabilitation plan (refer Condition 10.2).

9.3 Bog Rehabilitation Plan:

9.3.1 The licensee shall prepare, to the satisfaction of the Agency, a fully detailed and costed plan for permanent rehabilitation of all the boglands within the licensed area. This plan shall be submitted to the Agency for agreement prior to the commencement of deposit of waste in the PDA.

9.3.2 The plan shall be reviewed every two years and proposed amendments thereto notified to the Agency for agreement as part of the AER. No amendments may be implemented without the written agreement of the Agency.

9.4 The Rehabilitation Plan shall include as a minimum, the following:

9.4.1 A scope statement for the plan, to include outcome of consultations with relevant Agencies, Authorities and affected parties (to be identified by the licensee).

9.4.2 The criteria which define the successful rehabilitation of the activity or part thereof, which ensures minimum impact to the environment.

9.4.3 A programme to achieve the stated criteria.

9.4.4 Where relevant, a test programme to demonstrate the successful implementation of the rehabilitation plan.

9.4.5 A programme for aftercare and maintenance.

9.5 A final validation report to include a certificate of completion for the Rehabilitation Plan, for all or part of the site as necessary, shall be submitted to the Agency within six months of execution of the plan. The licensee shall carry out such tests, investigations or submit certification, as requested by the Agency, to confirm that there is no continuing risk to the environment.



## APPENDIX 1

### Condition 9 Bog & PDA Rehabilitation & Aftercare

- 1.1 Following termination, or planned cessation for a period greater than six months, of use or involvement of all or part of the site in the licensed activity, the licensee shall, to the satisfaction of the Agency, decommission, render safe or remove for disposal/recovery, any soil, subsoils, buildings, plant or equipment, or any waste, materials or substances or other matter contained therein or thereon, that may result in environmental pollution.
- 1.2 Following completion of filling of the PDA the licensee shall implement the agreed bog rehabilitation plan (refer Condition 9.3).
- 1.3 Bog Rehabilitation Plan:
  - 1.3.1 The licensee shall prepare, to the satisfaction of the Agency, a fully detailed and costed plan for permanent rehabilitation of the all the boglands within the licensed area. This plan shall be submitted to the Agency for agreement prior to the commencement of deposit of waste in the PDA.
  - 1.3.2 The plan shall be reviewed every two years and proposed amendments thereto notified to the Agency for agreement as part of the AER. No amendments may be implemented without the written agreement of the Agency.
- 1.4 The Rehabilitation Plan shall include as a minimum, the following:
  - 1.4.1 A scope statement for the plan, to include outcome of consultations with relevant Agencies, Authorities and affected parties (to be identified by the licensee).
  - 1.4.2 The criteria which define the successful rehabilitation of the activity or part thereof, which ensures minimum impact to the environment.
  - 1.4.3 A programme to achieve the stated criteria.
  - 1.4.4 Where relevant, a test programme to demonstrate the successful implementation of the rehabilitation plan.
  - 1.4.5 A programme for aftercare and maintenance.
- 1.5 A final validation report to include a certificate of completion for the Rehabilitation Plan, for all or part of the site as necessary, shall be submitted to the Agency within six months of execution of the plan. The licensee shall carry out such tests, investigations or submit certification, as requested by the Agency, to confirm that there is no continuing risk to the environment.



# REHABILITATION PLAN FOR THE SRAHMORE PEAT DEPOSITION AREA AND ASSOCIATED FACILITIES

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**February 2005**

## 1. Background

Bord na Móna was granted a Waste Licence by the EPA in October 2004 to deposit peat from the site selected for the Corrib Gas Terminal site at Bellanaboy on a cutover bog area. The Peat Deposition Area is located within the townland of Srahmore, which forms part of the former Bangor peat production area. As part of the Waste Licence (W199-1), a rehabilitation plan must be detailed for permanent rehabilitation of the boglands within the licensed area. This is covered under Condition 9 of the Waste Licence (Appendix 1).

The *Rehabilitation Plan for the Srahmore Peat Deposition Area and Associated Facilities* should be read in conjunction with the *Srahmore Peat Deposition Site Development EIS* (December 2003) in particular Chapters 6 and 7, and *Cutaway Bog Rehabilitation*, the rehabilitation plan for the Oweninny Works (2003).

## 2. Scope of the Rehabilitation Plan

The scope of the plan follows the guidelines set out by the EPA in Condition 9 of Waste Licence (W199-1). A draft plan was circulated in November 2003 to statutory consultees and other interested parties identified by Bord na Móna. The consultees were:

- EPA
- National Parks and Wildlife Service (*NPWS*)
- North West Regional Fisheries Board (*NWRFB*)
- Mayo County Council
- Coillte
- An Taisce
- Irish Peatland Conservation Council
- Bangor residents
- Other interested parties

Comments were received from *NPWS*, the *NWRFB* and Coillte. There were no additional issues of concern raised and the responses were complementary. It was highlighted however, that the rehabilitation plan should be cross-referenced to other related documents (*NPWS*). It should be noted that site drainage and issues relating to hydrology and water quality monitoring are covered under Condition 8 of Waste Licence (W199-1) and Chapter 8 of the *Srahmore Peat Deposition Site Development EIS* (December 2003). They are dealt with separately but will come under discussion at meetings of the Environmental Monitoring Group (EMG).

### 3. Characteristics of the activity

A brief outline of the peat deposition facility is provided here to highlight the salient features relevant to the ecological aspects of the development.

Shell (E & P) was granted permission by An Bord Pleanála to transfer ca. 450,000m<sup>3</sup> of peat from the Corrib Gas Terminal site at Bellanaboy to a suitable location within the BnM Holdings at Bangor. The peat overburden at the Bellanaboy site consists of a series of former reclaimed grassland fields surrounded by coniferous tree shelterbelts. The former grassland sward has been replaced by a soft rush (*Juncus effusus*) sward due to the increased wetness of the site caused by drainage breakdown, loss of nutrients and an increase in acidity.

The actual peat itself is predominantly a soft brown peat with humification levels increasing as peat depth increases (lower peat layers have high Von Post values, indicating they are highly humified with less structure binding properties). The excavation of the peat will inevitably involve mixing of peat layers – from vegetated top layers and highly humified bottom layers, with minimal contamination from underlying till.

The proposed development requires a suitable area of cutover bog for (a) off-loading the peat on BnM property, (b) subsequent transfer of the peat to the deposition area and (c) a suitable area for deposition of the peat. Support mechanisms include a competent transport and drainage infrastructure and safeguards to mitigate against peat run-off into adjacent watercourses. A rigorous selection process highlighted the most appropriate site for introduction of the peat to the BnM holdings, and this also took the ecological features and rehabilitation potential of the bog area into consideration.

The site selected for off-loading of the peat is at the closest distance from the Corrib Gas Terminal to the BnM Holdings (Fig. 1: Area 5 north of Owenmore River). Development of this site will require the construction of a large concrete hard-standing area and bridges to cross a deepened drain from Area 5 to the adjacent PDA in Area 6. Other associated developments in Area 5 will be the excavation of sedimentation ponds and the provision of parking and/or other service facilities for incoming vehicular transport. A significant area will have to be cleared of peat. This will be dozed over adjacent cutover bog.

The site selected for actual deposition of the peat (Fig. 1: Area 6) is basin shaped and suitable for peat deposition for a number of reasons. These include compartmentalised site, facility to drain the area through a series of silt sedimentation ponds before entering the Munhin River and proximity to the Corrib Gas Terminal Site. Development in Area 6 will involve the creation of suitable foundation for temporary roads on the high fields. Peat will be transported by tractor and trailer on these roads from Area 5, and off-loaded into the low-lying production fields. Introduction of the peat into Area 6 will be in a manner to stabilise the peat (i.e. cambered surface over the spread peat and competent drainage system to eliminate flood events) and this will involve peat handling by excavators and dozing by tracked machines. All of these machine types were utilised for peat production in both Areas 5 and 6 and are adapted for such conditions. Development in Area 6 will also involve the excavation of sedimentation ponds and the provision of an over flow mechanism for high precipitation events.

The provision of the overflow mechanism will result in the overflow of water from Area 6 into an adjacent former production area known as Area 7 (Fig. 1: Area 7). This will be utilised as a 'floodplain' facility. There is no actual development proposed for this area and the use of this area as a floodplain facility is consistent with the activities outlined under the IPC licence *Rehabilitation Plan* for that area (IPC Licence Reg. No. 505). The field drains in Area 7 will be blocked in line with the *Rehabilitation Plan* and the overflow will be a complementary use of Area 7 and not an alternative use.

Following completion of the peat transfer and deposition operations and subsequent monitoring period, the area within the activity boundary will be decommissioned and rehabilitated in agreement with the consultees, the planning authority and the EPA, as detailed in Chapter 6 of the *Srahmore Peat Deposition Site Development EIS* (December 2003).

#### 4. Criteria that define successful rehabilitation of the site

The main criteria<sup>1</sup> defining successful rehabilitation of the Srahmore PDA and associated facility are:

- (i) Stabilisation of the deposited peat<sup>2</sup>
- (ii) Mitigation of silt run-off

#### 5. Proposed programme of rehabilitation work

##### **Srahmore PDA (Area 6)**

The dozers that will be spreading the peat between high fields will carry out the actual rehabilitation work. The peat will be shaped to allow for run-off into drainage channels and left undisturbed to natural revegetation processes.

It is anticipated, due to the high soft rush (*Juncus effusus*) seed content of the Bellanaboy peat, that there will be a flush of rush seedlings established within the first growing season with rapid spread and establishment of vegetation on the site in the following 4 to 5 years. This is based on: (a) a knowledge of the ecology of the soft rush; (b) the successional development of vegetation on bare peat from cutaway bog at Bellacorick, and dozed peat from silt ponds; and (c) Bord na Móna knowledge and expertise that ranges from agricultural activity to encouraging the establishment of wetland communities on a range of peatland types in Ireland.

Soft rush will dominate the vegetation establishing on the introduced peat. This plant has a wide ecological tolerance and is found in a number of plant communities. The plants are known to be the first to establish on peat soils bared by disturbance.

Once the soft rush establishes it is anticipated that the plant roots will bind the introduced peat layer to the underlying cutover peat layer, altering the peat structure to create a homogeneous peat mass and thereby stabilising the peat. The establishment of other species between the tussocks of soft rush will further bind the peat together and eventually lead to a complete cover and stabilisation of the introduced peat.

This confers a number of advantages:

- The vegetation establishing will comprise native species that have a natural ability to establish and spread rapidly on peatland habitats that are drained or disturbed.
- The rapid establishment of vegetation ensures that the peat is stabilised in a relatively short timeframe without using fertilisers or non-native seed.
- The vegetation is akin to a successional vegetative stage of bog development.
- *Juncus*-dominated vegetation is common in north-west Mayo on agricultural fields that have been reclaimed from boglands and as such will blend with the surrounding landscape.

##### **Water over-spill area (Area 7)**

This area will be rehabilitated in line with the rehabilitation plan for the Oweninny Works, *Cutaway Bog Rehabilitation* (2003). This will involve field drain blocking and it is anticipated that natural revegetation processes will proceed in this area and over the duration of the peat deposition activity. The overflow facility will be maintained for the duration of the peat deposition and also for a number of years following the activity to ensure that there is no build-up of water on site. When the area is no longer required, the site will be re-surveyed to determine the vegetative condition and whether further rehabilitation work is required (*unlikely to be more than superficial*).

##### **Off-loading facility (Area 5)**

Following decommissioning of Area 5, the site will be decommissioned and/or rehabilitated in line with the outcome of consultations with statutory bodies.

---

<sup>1</sup> These are the basic criteria as identified in the consultation process for development of *The Rehabilitation Plan* for the entire Oweninny Works.

<sup>2</sup> Stabilisation of these areas infers revegetation. Once stabilised there will be no potential peat run-off from the site, which will cover the second criterion for successful rehabilitation.

## 6. Test programme

The Bord na Móna Bellacorick site has been largely rehabilitated in full, with some rehabilitation work completed at the Bangor site. These areas demonstrate the effectiveness of the rehabilitation processes.

## 7. Programme for aftercare and maintenance

Vegetation establishment will be monitored to determine the rate and success of the revegetation process. Permanent quadrats and permanent transects will be established to allow for consistency of method and assessment.

Annual assessments of the revegetation will be completed to determine if further rehabilitation measures are required, and there will be annual updates of the condition of the site to the EMG. There will also be an assessment in 5 years following the deposition of the peat to assess the scope for rewetting and/or other long-term rehabilitation measures proposed by the licensee and the consultees as detailed in Chapter 6 of the *Srahmore Peat Deposition Site Development* EIS (December 2003).

It is not anticipated that there will be a requirement for intensive aftercare and maintenance.

## 8. Timeframes and costing

See preliminary outline below (Table 1)

It is anticipated that peat transfer will commence in spring 2005 and be completed by autumn 2005, depending on suitable operating conditions.

A qualified ecologist will be required to make the site visits and site assessments. Final assessments will have to involve consultation with relevant bodies such as NPWS, etc. Bord na Móna will cover the cost of rehabilitation (details of costing not available at this time).

## 9. References

- Bord na Móna. (2003). *Cutaway Bog Rehabilitation: A document to detail the rehabilitation and aspects of decommissioning of the Oweninny Works in compliance with Condition 10 of IPC Licence Ref. No. 505, and incorporating rehabilitation following the development of the proposed Oweninny wind farm*. Bord na Móna, Mayo.
- TES Environmental Consulting Engineers. (December 2003). *Srahmore Peat Deposition Site Development* EIS.
- EPA. (2004). Waste Licence (W199-1). EPA, Wexford.

## APPENDIX 1

### Condition 9 Bog & PDA Rehabilitation & Aftercare

- 1.1 Following termination, or planned cessation for a period greater than six months, of use or involvement of all or part of the site in the licensed activity, the licensee shall, to the satisfaction of the Agency, decommission, render safe or remove for disposal/recovery, any soil, subsoils, buildings, plant or equipment, or any waste, materials or substances or other matter contained therein or thereon, that may result in environmental pollution.
- 1.2 Following completion of filling of the PDA the licensee shall implement the agreed bog rehabilitation plan (refer Condition 9.3).
- 1.3 Bog Rehabilitation Plan:
  - 1.3.1 The licensee shall prepare, to the satisfaction of the Agency, a fully detailed and costed plan for permanent rehabilitation of the all the boglands within the licensed area. This plan shall be submitted to the Agency for agreement prior to the commencement of deposit of waste in the PDA.
  - 1.3.2 The plan shall be reviewed every two years and proposed amendments thereto notified to the Agency for agreement as part of the AER. No amendments may be implemented without the written agreement of the Agency.
- 1.4 The Rehabilitation Plan shall include as a minimum, the following:
  - 1.4.1 A scope statement for the plan, to include outcome of consultations with relevant Agencies, Authorities and affected parties (to be identified by the licensee).
  - 1.4.2 The criteria which define the successful rehabilitation of the activity or part thereof, which ensures minimum impact to the environment.
  - 1.4.3 A programme to achieve the stated criteria.
  - 1.4.4 Where relevant, a test programme to demonstrate the successful implementation of the rehabilitation plan.
  - 1.4.5 A programme for aftercare and maintenance.
- 1.5 A final validation report to include a certificate of completion for the Rehabilitation Plan, for all or part of the site as necessary, shall be submitted to the Agency within six months of execution of the plan. The licensee shall carry out such tests, investigations or submit certification, as requested by the Agency, to confirm that there is no continuing risk to the environment.

**Table 1 Timeframe and costing**

	<b>Task and area</b>	<b>Frequency</b>	<b>Duration</b>	<b>Year</b>	<b>Reason</b>
	<b>Consultation</b>				
1	Pre-deposition phase	Indeterminate	Nov 04 – Mar 05	2004-2005	To agree rehabilitation plan and methods
2	Meetings to review rehabilitation, EMG meetings	Quarterly to annual	May 05-2010	2005-2010	To update consultees on rehabilitation progress To update on monitoring procedures
3	Meeting to discuss long-term rehabilitation	One-off (or several meetings)	Indeterminate: probably summer 2010	2010	To agree on final rehabilitation of PDA
	<b>Srahmore PDA</b>				
1	On-site monitoring of peat condition during actual deposition process	Weekly visits during deposition	For duration of deposition process	2005 – 2006 (May-Sept)	To monitor peat condition and effects of dozing To determine the range of conditions resulting from variation across PDA
2	Establishment of permanent quadrats and transects	One-off	Up to 1 week	2005/2006 (Sept)	To establish fixed areas to monitor rate of revegetation
3	Assessment of vegetation establishment	Immediately following peat deposition	Less than 1 week	2005/2006 (Sept)	To establish a baseline for the first year
		Annual	Up to 1 week and for up to 5 years	2006-2010 (Summer)	To monitor changes in vegetation establishment
4	Final site assessment	One-off	At end of 5 year period	2010 (Summer)	To determine the long-term rehabilitation potential in consultation with relevant bodies
5	Final rehabilitation	One-off	up to 1 month	2010	To implement final work
6	Monitoring of final rehabilitation plan	Annual	Up to 1 week and for up to 2 years	2010-2012 (pending progress)	To monitor effectiveness of work
	<b>Area 7: Overflow area</b>				
1	Rehabilitation	Prior to deposition	1 to 2 weeks	Jan-Mar 2005	To block field drains in line with <i>Rehabilitation Plan</i>
2	Assessment of vegetation establishment	Immediately following peat deposition	Less than 1 week	2005 (Sept)	To establish a baseline for the first year
		Annual	Up to 1 week and for up to 5 years	2005-2010 (Summer)	To monitor changes in vegetation establishment
	<b>Area 5: Off-loading facility</b>				
1	Rehabilitation of site following decommissioning using methods outlined	Immediately following decommissioning	up to 1 month	2005 (Oct)	To implement final work
2	Assessment of vegetation establishment	Immediately following rehabilitation	Less than 1 week	2005 (Oct)	To establish a baseline for the first year
		Annual	Up to 1 week and for up to 5 years	2005-2010 (Summer)	To monitor changes in vegetation establishment



# **APPENDIX 1.3**

## **Consultation Letter Responses**

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# North Western Regional Fisheries Board

Bord Iascaigh Réigiúnach an Iarthuaiscirt



**Fisheries Ireland**

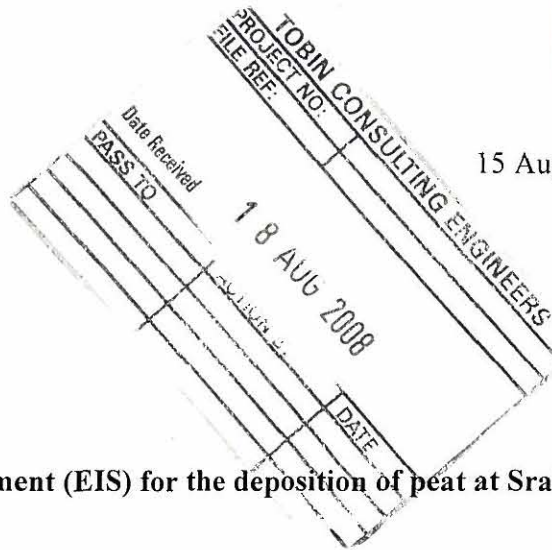
Our Natural Heritage

15 August 2008

Mark Conroy  
TOBIN  
Block 10-4  
Blanchardstown Corporate Park  
Dublin 15

**Ref: 4903**

**RE: Environmental Impact Statement (EIS) for the deposition of peat at Srahmore, Bangor, Co. Mayo**



Dear Mr Conroy,

I refer to your letter dated 18 July 2008 regarding the above EIS. The Board was satisfied with the measures put in place during the deposition of peat at Srahmore as carried out between April 2005 and June 2007 to protect nearby watercourses.

The above site drains into the Munhin River and the Owenmore River. Both rivers are important to salmon and sea trout migration. The Board requests that similar measures be taken for the proposed deposition of peat as for the previous deposition works. The Board also has the following comments to make.

1. Discharges of polluting matter including suspended solids should not occur during or after deposition. Settlement lagoons and silt traps should be utilised to prevent suspended solids entering nearby watercourses. The design should ensure that lagoons and traps fully function during extreme rainfall events. A maintenance schedule should be prepared for lagoons and traps. A schedule for monitoring watercourses leaving the site should be prepared.
2. Fuels, oils, greases and hydraulic fluids must be stored in bunded compounds well away from the watercourse. Refuelling of machinery should be carried out off site or in a contained bunded area on site.
3. Works are to be carried out during dry weather conditions. Extreme caution should be taken during fish migration periods which are October to April for adult salmon, April to May for smolts and July for sea trout.
4. The peat material which will be removed during pipe laying will be from a range of locations. Investigation into the soil types being excavated should be carried out in advance. Parameters for material to be accepted onto the Srahmore site for deposition should be established.

The North Western Regional  
Fisheries Board

Ardnaree House  
Abbey Street  
Ballina  
Co. Mayo

**T: (096) 22788**

**F: (096) 70543**

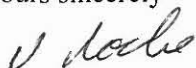
**E: info@nwrfb.com**

**www.northwestfisheries.ie**



5. Transportation of material from the pipeline site to the deposition site should be carried out in sealed containers to ensure no spill of material during transport. Transport of the peat material on the deposition site should be carried out in suitable machinery by fully trained staff.
6. The Board requests notification prior to works commencing. Contact Fisheries Environmental Officer Aisling Donegan (087-1264446) or Fisheries Inspector Michael Hughes (087-2399989) for any further information.

Yours sincerely



VINCENT ROCHE  
Chief Executive Officer  
Eis-psb88

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Patrick J. Tobin & Co Ltd.

Michael Lodge,  
Shankhill,  
Co. Dublin.

Your Ref. 4903

NO:	
30 JUL 2008	
ACTION BY	
MC	

28<sup>th</sup> July 2008

Dear Mark,

I write to acknowledge receipt of your letter dated 18<sup>th</sup> July as requested by you.

The information contained in your letter that Bord na Mona have plans to deposit a further 75,000m on the site at Shramore surprises and concerns me.

Shramore is a highly sensitive area bounded on three sides by 2 rivers which form an integral part of our Fishery. I do not at this stage intend going into details of past history on the effects of damage caused by the Bord na Mona operations at Bellacorich and Bangor - suffice it to record that there is quite a file on instances where conditions of licences have not been implemented and of pollution prevention/control measures not being properly maintained/operated by them.

In May 2004 we received a letter from the Wynne of Bord na Mona, stating inter alia "We, of course, will fully comply with all the conditions of the Waste licence and the Planning Consents and will accept responsibility for damage attributable to the operation of



Placement and storage of the peat."

It is evident ~~that~~ from this new proposed deposition that the waste licence and planning conditions of the original 450,000 m<sup>3</sup> relating to Bog Rehabilitation and Aftercare etc, despite this assurance from Bord na Mona, have not been fulfilled. For example a period greater than six months has elapsed since the termination of the 450,000 m<sup>3</sup> deposition and condition 9.1 has not been, to my knowledge, carried out - also has "the flush of rush seedlings ... been established within the first growing season?" etc etc.

I cannot understand how this additional 75,000 m<sup>3</sup> has arisen now - presumably if deposition from the pipe laying process had been envisaged it would have been included with the 450,000 m<sup>3</sup> from the Terminal. Why has there been a change? Are all the safeguards which were designed for 450,000 m<sup>3</sup> adequate to handle the additional volume? Will the guarantees by Bord-na-Mona in respect of the 450,000 m<sup>3</sup> be renewed to cover the additional volume - How can conditions, particularly those relating to Bog Rehabilitation and Aftercare be guaranteed to be carried out within the time frame

These are my initial thoughts on the proposal as I have not had an opportunity to discuss it with any of the other fishery owners. I should be obliged if you would ensure that I am kept fully informed on developments

Yours sincerely

Richard Hewitt.

353 94 9021534



Comhshaol, Oidhreacht agus Rialtas Áitiúil  
**Environment, Heritage and Local Government**



26 August 2008

Your Ref: 4903

Our Ref: G2008/341

Tobin Consultants  
 Market Square  
 Castlebar  
 Co. Mayo

TOBIN CONSULTING ENGINEERS CASTLEBAR		
PROJECT NO.	4903	
FILE REF:	02.06	
Date Received	27 AUG 2008	
PASS TO	ACTION BY	DATE
mrg		

**Re: Environmental Impact Statement for the deposition of peat at Srahmore, Bangor, Co. Mayo**

A Chara,

We refer to your scoping request regarding the above. Outlined below are the archaeological recommendations of the Department of the Environment and Local Government.

As part of an environmental review of the project this office will require a full archaeological impact assessment to be carried out and the results of the same to be forwarded to this office.

In assessing impacts on the archaeological heritage regard must be had to the following:

The area's monuments can be identified from the Record of Monuments and Places, County Mayo. Those monuments that are **National Monuments in State ownership or guardianship and monuments subject to Preservation Orders** should be identified and **zones of visual amenity defined for them**. It should be noted that and direct impact on national monuments in State or Local Authority care or subject to a preservation order will require the consent of the Minister for the Environment, Heritage and Local Government under section 14 of the National Monuments Act 1930 as amended by Section 5 of the National Monuments (Amendment) Act 2004. **Areas of high archaeological potential including subsurface archaeological structures should be identified**. A pointer to the potential for the occurrence of subsurface archaeology is the annual Excavations Bulletin which contains brief accounts of excavations conducted in Ireland each year; these reports are also at [www.excavations.ie](http://www.excavations.ie). Information on occurrences of **chance finds** of archaeological objects is also a useful indicator of archaeological potential – information may be obtained from the National Museum and local museums. Any potential impacts on archaeological heritage should be subject to full archaeological assessment.



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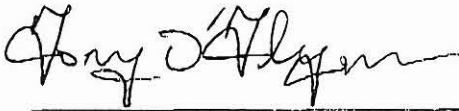
353 94 9021534

Please forward any further information to the following address:

Development Applications Unit  
Department of the Environment, Heritage,  
And Local Government.  
Dún Scéine,  
Harcourt Lane  
Dublin 2

If you have any further queries please do not hesitate to contact the undersigned.

Yours sincerely,

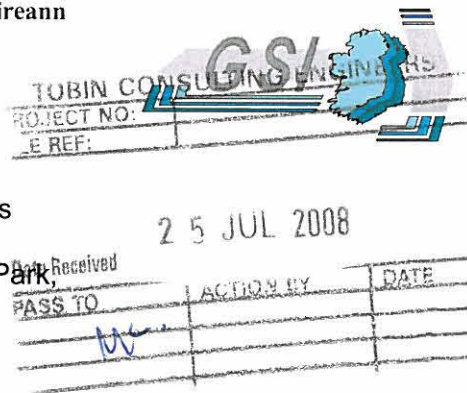


Tony O'Flynn

Development Applications Unit.  
Tel: (01) 888-3190

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Suirbhéireacht Gheolaíochta Éireann  
Tor an Bhacaigh  
Bóthar Haddington  
Baile Átha Cliath 4



Geological Survey of Ireland  
Beggars Bush  
Haddington Road  
Dublin 4

Irish Geological Heritage Section  
Tel: 01-6782741/Fax 01-6782559  
Email: [sophie.preteseille@gsi.ie](mailto:sophie.preteseille@gsi.ie)  
<http://www.gsi.ie>

Mark Conroy  
TOBIN Consulting Engineers  
Block 10-4,  
Blanchardstown Corporate Park,  
Dublin 15

23<sup>rd</sup> July 2008

**Re: EIS for the deposition of peat at Srahmore, Bangor, Co. Mayo**  
**Ref: 4903**

Dear Mr Conroy,

With reference to your letter of the 18<sup>th</sup> July 2008, concerning the above EIS, **there are no geological heritage sites currently on our database that lie within or near the area.**

For your information, the Geological Survey of Ireland (GSI) is in partnership with the National Parks and Wildlife Service (NPWS) of the Department of Environment, Heritage and Local Government to identify and select important geological and geomorphological sites throughout the country for designation as NHAs (Natural Heritage Areas). This is being addressed under 16 different geological themes. For each theme a larger number of sites from which to make the NHA selection are being examined, in order to identify the most significant scientifically. Our criterion of designating the minimum number of sites to exemplify the theme means that many sites of national importance are not selected as the very best examples. However, a second tier of County Geological Sites (CGS) (as per the National Heritage Plan) means that many of these can be included in County Development Plans and receive a measure of recognition and protection through inclusion in the planning system. Please note that we are still in the process of finalizing these proposed sites.

Should development go ahead (all other factors considered), GSI would much appreciate a copy of reports detailing any site investigations carried out. The data would be added to GSI's national database of site investigation boreholes, implemented to provide a better service to the civil engineering sector.

The Geological Survey of Ireland (GSI) is the national earth science agency and has datasets on Bedrock Geology, Quaternary Geology, Geological Heritage Sites, Mineral deposits, Groundwater Resources and the Irish Seabed. These comprise maps, reports and extensive databases that include mineral occurrences, bedrock/mineral exploration groundwater/site investigation boreholes, karst features, wells and springs. Please see our website at <http://www.gsi.ie> for data availability.

Please note that some maps/databases are available on the GSI website under "Online Mapping" or "Web Mapping"- direct link: <http://www.gsi.ie/Mapping.htm>  
Data currently available is for Bedrock, Groundwater, Karst, Geotechnical boreholes, Mineral locations and the Quarry Directory. Geological Heritage data is in the process of being migrated to this website, but please continue to contact Sophie Preteseille at [sophie.preteseille@gsi.ie](mailto:sophie.preteseille@gsi.ie), Sarah Gatley at [sarah.gatley@gsi.ie](mailto:sarah.gatley@gsi.ie), or Bernie Mockler at [bernadette.mockler@gsi.ie](mailto:bernadette.mockler@gsi.ie), directly.



I hope that these comments are of assistance, and if the GSI can be of any further help, please contact me.

Kind regards,



---

Sophie Préteseille  
Irish Geological Heritage Programme

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Tor an Bhacaigh  
Bóthar Haddington  
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Fax. +353 1 6681782  
<http://www.gsi.ie>

Mr Mark Conroy  
Tobin Consulting Engineers  
Block 10-4,  
Blanchardstown Corporate Park,  
Dublin 15

24/07/2008

**RE: M20 Deposition of Peat at Srahmore, Bangor, Co Mayo**

Dear Sir/Madam,

I would like to acknowledge receipt of your letter of July 21<sup>st</sup> 2008 concerning the above scheme.

The Geological Survey of Ireland (GSI) is the national earth science agency and has datasets on Bedrock Geology, Quaternary Geology, Geological Heritage Sites, Mineral deposits, Groundwater Resources and the Irish Seabed. These comprise maps, reports and extensive databases that include mineral occurrences, bedrock/mineral exploration groundwater/site investigation boreholes, karst features, wells and springs. Please see our website at <http://www.gsi.ie> for data availability.

Please note that some maps/databases are available on the GSI website under "Online Mapping" or "Web Mapping"- direct link: <http://www.gsi.ie/Mapping.htm>  
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Please note that it would greatly facilitate our database search if the site location in all EIS and related planning enquiries is given in Irish National Grid (ING) co-ordinates, i.e. as six-digit Eastings (X) and six-digit Northings (Y) [For example, O'Connell Bridge, Dublin would be X 315988 Y 234396].  
Co-ordinates in this format can be obtained from GSI's online mapping service at <http://www.gsi.ie/Mapping.htm>

There is currently a 1-2 week turnaround for answering EIS enquiries. We will endeavour to meet your closing date. However, we would like to bring to your attention the frequent late arrival in this office of requests for input into EIS, etc for proposed developments, rendering GSI unable to comment within the specified timeframe.

If you need any further information, please do not hesitate to contact this office.

Yours sincerely,

John Butler/Ronnie Creighton  
Senior Geologist, Head Geotechnical Programme



Dear Sir/Madam,

**Re: Environmental Impact Assessments (EIA)/Environmental Impact Statements (EIS)**

Thank you for your enquiry. Unfortunately, the Groundwater Section does not have the resources to assess, or make observations on, specific EIAs/EISs.

However, we do advise that when considering environmental impacts of planned activities/developments that all of the Groundwater Section's datasets are taken into consideration. These data comprise:

- 1) **National Maps**, which can be obtained from the GSI's website ([www.gsi.ie](http://www.gsi.ie)), and include:
  - *Generalised Bedrock Map*, which groups the different Irish bedrock formations (>1000) into 28 classes based on their stratigraphy and the main lithological and structural properties that influence their groundwater flow properties;
  - *Bedrock Aquifer Map*: subdivides Irish bedrock into three main categories and seven sub-categories depending on their specific aquifer properties;
  - *Gravel Aquifer Map*: identifies the Irish sand/gravel deposits that function as aquifers and sub-divides them into two categories depending on their specific properties;
  - *Interim Vulnerability Map*, which is a composite map comprising (i) full<sup>1</sup> and interim<sup>2</sup> vulnerability mapping undertaken by the GSI for Local Authorities (i.e. the Groundwater Protection Schemes – 11 available digitally) and (ii) interim vulnerability mapping undertaken by consultants working for one or more of each of the seven River Basin Districts (RBDs);
  - *Source Protection Areas Map*, which constitute the outer (zone contributing groundwater to the abstraction point) and inner (estimated 100 day time of travel of the groundwater to the abstraction point) source protection areas delineated by the GSI (120 sources) and other consultants (5 sources).
- 2) **National Data**, which can be requested from Groundwater Section enquiries desk ([Groundwaterinfo@gsi.ie](mailto:Groundwaterinfo@gsi.ie)), and include:
  - *Groundwater Body (GWB) Delineation and Descriptions*: subdivision of the aquifers based on their flow regime and no-flow boundaries. Each GWB is fully described, with all available data and information sources referenced.
  - *Wells Database*: c.36,000 wells and boreholes, from different sources, with varying amounts of information e.g. location, depth to bedrock, yields.
  - *Karst Features Database*: c.4,000 recorded features with varying amounts of information.
  - *Karst Tracer-Tests Database*: c.275 recorded connections with varying amounts of information.

<sup>1</sup> Full vulnerability maps comprise up to five vulnerability classes – E (Rock near Surface or Karst), Extreme, High, Moderate and Low).

<sup>2</sup> Interim vulnerability maps comprise three vulnerability classes – E (Rock near Surface or Karst), Extreme and undifferentiated High-Low.





### 3) Other Reports

- *Groundwater Protection Scheme (GWPS) Reports*: more recent (digital) GWPSs are available for 11 counties, older schemes are available for 4 counties and 2 are due to be completed in 2007 ([Groundwaterinfo@gsi.ie](mailto:Groundwaterinfo@gsi.ie)).
- *Source Protection Reports*, which describe all available information for the particular source and how the source protection zones were delineated ([Groundwaterinfo@gsi.ie](mailto:Groundwaterinfo@gsi.ie)).
- *Various historic reports*, which can be obtained on the Document Management System (via the GSI's Customer Centre).

It is hoped that most of these data will be soon available through the website. In the meantime, when making an enquiry, please supply a location map and/or grid coordinates in order to facilitate the data search.

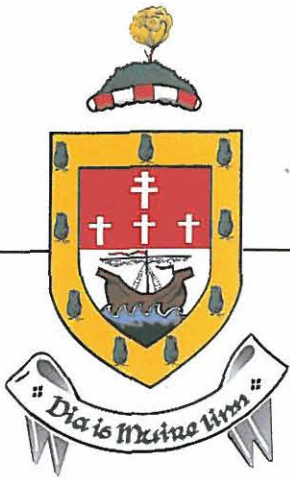
Other useful and related data can be found on Water Framework Directive Ireland website (<http://www.wfdireland.ie>)

I hope that you find this information of use.

Yours faithfully,

Monica Lee.  
Groundwater Section.

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# COMHAIRLE CONTAE MHAIGH EO

Aras an Chontae, Caislean a 'Bharraigh, Contae Mhaigh Eo.  
Teileafóin (094) 9024444 Fax (094) 9023937 Website: [www.mayococo.ie](http://www.mayococo.ie)

Your Ref.

Our Ref.

19<sup>th</sup> August 2008.

Ms. Emma Delaney,  
Block 10 - 14,  
Blanchardstown Corporate Park,  
Blanchardstown,  
Dublin 15.

## EIS for Deposition of Peat at Srahmore, Bangor, Co. Mayo.

Dear Ms. Delaney,

I refer to the above and to correspondence dated the 18<sup>th</sup> July 2008 in relation to same.

I am to inform you that the Water Services Capital Section of Mayo County Council have no issues in relation to this proposed development.

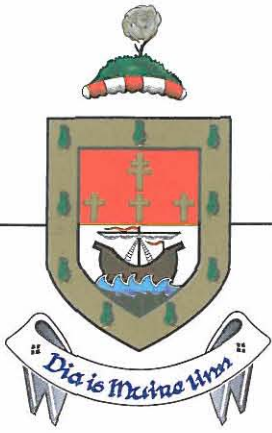
Yours sincerely,

*Brian O'Reilly, S.E.,  
Water Services, Capital Works.*

BOR/mm

TOBIN CONSULTING ENGINEERS

PROJECT NO:		
FILE REF:		
Date Received	26 AUG 2008	
PASS TO		DATE



# COMHAIRLE CONTAE MHAIGH EO

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Teileafóin (094) 90 24444 Fax (094) 90 23937  
www.mayococo.ie

Your Ref.

Our Ref.

29<sup>th</sup> July, 2008

Mr. Mark Conroy,  
Associate,  
TOBIN Consulting Engineers,  
Patrick J. Tobin & Co. Ltd.,  
Market Square,  
Castlebar,  
CO. MAYO.

**RE: Your Ref: 4903 – Environmental Impact Statement (EIS) for the  
deposition of peat at Srahmore, Bangor, Co. Mayo.**

Dear Mr. Conroy,

As requested, I wish to acknowledge herewith receipt of your letter dated 18<sup>th</sup> July, 2008  
in relation to the above.

Yours sincerely,

John Magee,  
Acting Director of Services,  
Community & Enterprise.

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TOBIN CONSULTING ENGINEERS		
PROJECT NO:		
FILE REF:		
Date Received	06 AUG 2008	
PASS TO	ACTION BY	DATE