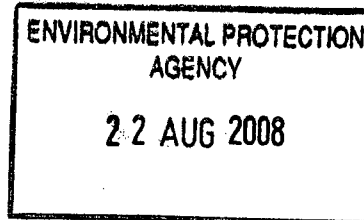




Comhshaol, Oidhreacht agus Rialtas Áitiúil
Environment, Heritage and Local Government

20 August 2008

Our Ref: E2007/61
Your Ref: W0021-02



Mr Joe Reilly
Programme Officer
Office of Climate, Licensing and Resource Use
EPA
Johnstown Castle Estate
Co. Wexford.


**Re: Waste Licence Application - Derrinnumera Landfill Facility at
Derrinnumera/Drumilra, Newport, Co. Mayo**

A Chara,

We refer to your correspondence of 16/07/08, and to your earlier correspondence of 01/06/07, in respect of the waste licence review application for a facility/premises at Derrinnumera Landfill, Derrinnumera and Drumilra, Newport, Co. Mayo. The nature conservation concerns of the Department are set out in the attached correspondence to An Bord Pleanála.

In addition, we wish to emphasise the extreme sensitivity of Newport River cSAC (site code 2144) and its internationally important population of the EU Habitats Directive Annex II species, Freshwater Pearl Mussel (*Margaritifera margaritifera*), to any changes or deterioration in water quality (siltation, pollution, enrichment, toxicity) and water supply. As the landfill site is located within the upstream catchment of the Newport River, discharges and emissions to surface and/or groundwaters from the Derrinnumera site have the potential to negatively affect the Annex II species downstream. It should also be noted that the leachate pipeline between the landfill site and the proposed new outfall at Newport, as currently proposed, is unacceptable to this Department as it passes excessively close to the banks of, and crosses the bed of this river and some of its tributaries. The assessment of the likely significant effects on the SAC and its conservation objectives, which include maintaining the favourable conservation status of the Annex II species, Freshwater Pearl Mussel, is deficient and does not constitute an appropriate assessment in the sense of Article 6(3) of the EU Habitats Directive.

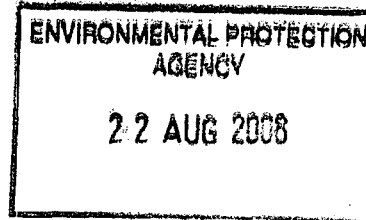
Mise le meas


Mary Boothman
Development Applications Unit



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Our ref: G2007:341
Your ref: JA0002



5 January 2008

Daniel O'Connor (ABP Inspector)
ABP Oral hearing
Hotel Westport,
Westport,
Co. Mayo
Fax no: 098 26739

Re:

- 1) **Derrinnumera Sludge Hub Centre and Leachate Treatment Facility at Derrinnumera Landfill Facility, Derrinnumera, Newport, Co. Mayo: G2007/331**
- 2) **Newport Wastewater Treatment Plant and Upgrade of Wastewater Collection System, Newport, Co. Mayo: G2007/341**

Mr O'Connor

We refer to the above-proposed development. We submit the following nature conservation comments & recommendations of the Department of the Environment, Heritage and Local Government.

PROJECT DESCRIPTIONS

- 1) PL16.JA0002; G2007/331 – Derrinnumera sludge hub centre and leachate treatment facility
Part X – Local Authority Non Road Development requiring an EIS
EIS prepared by Tobin Consulting Engineers

In the case of the Derrinnumera Landfill Facility, the current proposal to add a sludge hub centre and leachate treatment facility represents a significant change to the existing facility. An additional element of this project is the pumping of treated leachate from the landfill site to the location of the proposed Newport Wastewater Treatment Plant for co-discharge with treated effluent to Clew Bay. The route of this pipeline and its construction are the primary concerns for this Department in relation to terrestrial impacts. The route is depicted as a line on an OS Discovery Series map only; insufficient detail is given with respect to which side of the road the pipe will be laid, and of how the pipe will traverse the river.

The proposed changes at the Derrinnumera Landfill Facility represent a significant change to the nature and scale of the activities licensed by the EPA under the existing Waste Licence (ref. W0021-01), and will therefore be the subject of a review by the EPA as a separate process.

- 2) PL16.YA0001; G2007/431 – Newport Wastewater Treatment Plant (WWTP) and Upgrade of Wastewater Collection System in Newport
Local Authority Foreshore Development (requiring an EIS)
EIS prepared by Mott MacDonald Pettit Ltd

This includes construction of a WWTP at Caulicaun, on the north-western edge of Newport, and two new outfall pipelines (one for treated municipal wastewater and treated landfill leachate, the other for storm water overflow). The main outfall is on the northern side of Rosmore, nearly 3km west of Newport. Discharge is into Clew Bay Complex cSAC (site code 1482).

The upgrade of the wastewater collection system in the town will include a new rising main that crosses the Newport River estuary at the location of the N59 bridge; no further details are provided to indicate if pipes will cross via the bridge, or in or under the bed of the river. The likely impacts of this aspect of the project are not assessed and no mitigation measures are included. The WWTP is likely to progress as a DBO scheme, so the EIS includes a specimen design and layout only.

COMMENTS

Leachate pipeline

The key concern for the nature conservation service of this Department is the risk of severe negative effects on the EU Habitats Directive Annex II species, Freshwater Pearl Mussel (*Margaritifera margaritifera*), in the Newport River, in Newport River cSAC (site code 2144). Among other things, the cSAC has been selected for the conservation of this globally threatened species. There is potential for negative impacts on a second Annex II species for which the site has been listed, Salmon (in freshwater only) (*Salmo salar*).

In earlier comments to the Board, this Department raised serious concerns about the route and likely effects of the leachate pipeline, and requested consideration of alternatives to the in-channel crossing of the Newport River. No further information has been provided to address these concerns, and no alternatives have been proposed or assessed by the developer.

While full details of the pipeline route and its construction are lacking, the EIS indicates an in-channel crossing, at or close to the location of the R311 bridge across the Newport River at Bleachyard/Drumlong. EIS section 4.2.2.1.4 states as follows, "*where the pipe crosses the river, it is intended to sleeve the pipe with a large diameter pipe laid beneath the riverbed ...*" In addition, the pipeline passes extremely close to the river edge for a distance of approximately 700m, and construction may occur in/near the riverbank. Any minor watercourses that will be crossed by the pipeline discharge to the Newport River.

A report by Dr Evelyn Moorkens¹ (2005) has established that Freshwater Pearl Mussels are abundant in the stretch of river, both upstream and downstream of the proposed crossing point.

A river crossing would involve excavation and use of heavy machinery in the river channel and on its banks. In such a situation, no mitigation measures, however rigorous, could prevent direct and indirect impacts on the Freshwater Pearl Mussel population at and downstream of the crossing point. In addition to direct mortality, physical disturbance, siltation and interruption of water flows during the construction phase, there are risks of ongoing or periodic siltation where the riverbank or its vegetation have been disturbed. Risks of pollution events through leaks of leachate into the river have not been discounted.

¹ Moorkens, E.A. 2005. *Monitoring populations of the Freshwater Pearl Mussel Margaritifera margaritifera: Baseline Survey of the Newport River cSAC, County Mayo* (dated 30/11/05). Unpublished Report

The EIS is deficient in respect of its assessment of the likely significant effects on the Freshwater Pearl Mussel and its habitat in the course of construction and operation of the project. Insufficient mitigation is put forward to prevent or reduce negative impacts on this Annex II species and its habitat. Alternatives that avoid or reduce negative impacts are not considered and assessed, contrary to the earlier request from this Department.

The proposed development has very serious implications for Newport River cSAC (site code 2144) and its conservation objectives which include, among other things, maintaining or enhancing the favourable conservation status of the Annex II species, Freshwater Pearl Mussel. The 2005 survey (Moorkens, 2005) has already established that the conservation status of this species in the Newport River is unfavourable. The current project will have negative effects on the Freshwater Pearl Mussel and its habitat during construction; the risk of possible pollution events once operational has not been discounted. In view of this negative assessment, the project (or this part of the project) may not be permitted under Article 6(3) of the EU Habitats Directive (see Commission guidance²). A derogation from the strict protection measures may be pursued under Article 6(4) but it falls on whoever wishes to make use of this exception to prove, as a prerequisite, that there are no alternative solutions that are less damaging to the cSAC, and to prove that imperative reasons of overriding public interest exist.

Is mise le meas

Tony O'Flynn
Development Applications Unit

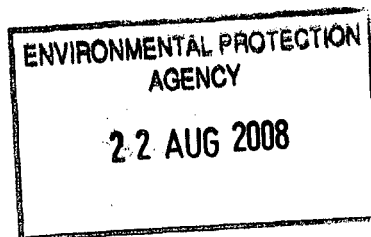
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² European Commission, 2000. Managing Natura 2000 sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC. Office for Official Publications of the European Communities, Luxembourg.

European Commission, 2002. Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. Office for Official Publications of the European Communities, Luxembourg.

European Commission, 2007. Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC. Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the Commission

29 June 2007



Our Ref: G2007/341

The Secretary,
An Bord Pleanála,
64 Marlborough Street,
Dublin 1.

Re: Newport Waste Water Disposal Scheme, Construction of Waste Water Treatment Plan, Caulicaun, Newport, Co. Mayo – Publication of the Environmental Impact Statement (EIS)

A Chara,

We refer to the letter of 16 May 2007 from Mayo County Council in relation to the above-proposed development. Outlined below are the archaeological and nature conservation recommendations of the Department of the Environment, Heritage and Local Government.

Archaeology

We have received and assessed the archaeological impact assessment report submitted in connection with this development. On the basis of this report and our own evaluation, the recommendations of the Department of Environment, Heritage and Local Government are as follows:

- Section 3.8.5 of the Environmental Impact Statement submitted should be included as conditions of any grant of planning issued.

Reason: To ensure the continued preservation (either *in situ* or by record) of places, caves, sites, features or other objects of archaeological interest.”

Nature Conservation

It is noted that the discharge from the proposal will flow into Clew Bay Complex candidate Special Area of Conservation (cSAC) site code no. 001482 (see attached site synopsis). This site is proposed for designation for the marine interests Large Shallow Inlets & Bays and Harbour Seals.

1. The Department of the Environment, Heritage & Local Government notes that Regulation 27 of the European Communities (Natural Habitats) Regulations 1997 obliges An Bord Pleanála to ensure that an appropriate assessment has been carried out for developments not directly connected with or necessary to the management of a European Site.

2. The Department of the Environment, Heritage & Local Government is concerned that the Environmental Impact Statement has not included an appropriate assessment of possible alternatives to avoid impacts in Clew Bay Complex candidate Special Area of Conservation.

As avoidance is an effective solution to mitigate against environmental impact, it is unclear why the Environmental Impact Statement only assessed the nearest coastal discharge location and did not assess a coastal discharge location outside Clew Bay Complex candidate Special Area of Conservation.

The Department of the Environment, Heritage & Local Government recommends that the Environmental Impact Statement be amended to assess possible options to avoid impacts in Clew Bay Complex candidate Special Area of Conservation.

3. The Department of the Environment, Heritage & Local Government is concerned that the Environmental Impact Statement does not contain an appropriate assessment of the likely impact of physical disturbance on protected species in Clew Bay Complex candidate Special Area of Conservation.

Marine mammals are particularly sensitive to noise impacts. Of particular concern are sources that are generated either intermittently or that may produce a damaging effect through either physiological or behavioural responses. The likely impact of noise on a particular marine mammal species is dependent on the three components of noise, i.e., sound intensity, sound frequency and sound tone, and the species concerned.

Clew Bay Complex candidate Special Area of Conservation has been proposed for designation for *inter alia* Harbour Seals (*Phoca vitulina*) and the immediate vicinity of the proposed development is known to host this species and a haul out exists closeby. However, while the Environmental Impact Statement rightly identifies that marine mammal populations may be subject to disturbance and displacement as a result of the proposed construction works, it does not (i) evaluate the likely significance or duration of such events and (ii) further assess what aspect of the construction-related noise is most likely to impact significantly and how it might best be mitigated.

This is particularly significant as Section 23(5) of the Wildlife (Amendment) Act 1976 & 2000 also makes it an offence to wilfully interfere with or destroy the breeding place or resting place of any protected wild animal. It is worth noting that while the Harbour Seal is also a protected wild animal under the Wildlife (Amendment) Act 1976 & 2000, so too are the Harbour Porpoise and Bottlenose Dolphin both of which have also been recorded in Clew Bay Complex candidate Special Area of Conservation.

The Department of the Environment, Heritage & Local Government recommends that the Environmental Impact Statement be amended to satisfactorily assess and propose mitigation against the likely impacts of physical disturbance of protected species in Clew Bay Complex candidate Special Area of Conservation.

4. The Department of the Environment, Heritage & Local Government is concerned that the Environmental Impact Statement does not contain an appropriate assessment of the impacts of landfill leachate discharge on protected habitats and species in Clew Bay Complex candidate Special Area of Conservation.

Apart from direct lethal effects from leachate discharge, some wildlife species are likely to suffer sub-lethal effects through bioaccumulation (i.e., the storage of chemical contaminants in body tissue) and the Environmental Impact Statement further notes that "the potential impact of contaminating elements from leachate extends to apex predators where bioaccumulation through the food chain can magnify concentrations of contaminants many times" (Volume III, Appendix 3, page 70). Therefore, it is clear that significant elements of the leachate have the potential to impact many components of the aquatic ecosystem of Clew Bay Complex candidate Special Area of Conservation (Volume III, Appendix 3, page 67) including its typical flora and fauna as well as apex predators such as seals.

More concerning is the section in the Environmental Impact Statement that states "should the character of the leachate change, the impacts or significance of the impacts may no longer be valid. Also, if there are other contaminants present in the discharge that have not been declared there could be further significant impacts. Existing levels of contaminants will also affect the capacity of the environment to assimilate the discharge. In some cases the levels of contaminants could still cause problems below the limit of detection for the analyses used. The significance of impacts is generally based on individual contaminants. The synergistic affects of the discharges are not known and would, if present, increase significance" (Volume III, Appendix 3, page 63).

In Clew Bay Complex candidate Special Area of Conservation, there is a legal requirement under the 1992 EU Habitats Directive and the 1997 European Communities (Natural Habitats) Regulations for *inter alia* the Annex I habitat Large Shallow Inlet & Bay and the Annex II species *Phoca vitulina* (Harbour Seal) to be maintained at, or restored to, favourable conservation status. Specifically, the bay's extent, structure and function should be conserved as should populations of its typical species while the Harbour Seal's range should not be reduced and its habitat must be sufficiently large to maintain its populations on a long-term basis.

The Environmental Impact Statement has described some effects that might arise from leachate poisoning on various components of the ecosystem and referred, by way of mitigation, to various discharge criteria under water quality legislation. However, the Environmental Impact Statement has not specifically assessed what impact the discharge of leachate at the prescribed concentrations will have on the structure, function and typical species of Clew Bay Complex candidate Special Area of Conservation or on the Harbour Seal population therein over space and time.

The Department of the Environment, Heritage & Local Government recommends that the Environmental Impact Statement be amended to satisfactorily assess the impacts of landfill leachate discharge on protected habitats and species in Clew Bay Complex candidate Special Area of Conservation.

5. The Department of the Environment, Heritage & Local Government is concerned that the Environmental Impact Statement has not fully assessed the impact of discharge on the *Ostrea edulis* beds in Clew Bay Complex candidate Special Area of Conservation.

Ireland is a signatory to, and has ratified, the OSPAR Convention for the Protection of the Marine Environment in the North East Atlantic. Under Annex V of that Convention, *Ostrea edulis* beds are identified on the 2004 Initial OSPAR List of Threatened and/or Declining Species and Habitats and thus in need of protection in this region. Clew Bay Complex candidate Special Area of Conservation contains *Ostrea edulis* beds of national significance. While the Environmental Impact Statement notes the proposed discharge location is situated in close proximity to several *Ostrea edulis* beds and an area important to the life cycle of *Ostrea edulis* in Clew Bay Complex candidate Special Area of Conservation, there is no assessment of the nature and/or scale of the likely impact to the *Ostrea edulis* beds. For example, it is unclear whether the extent of *Ostrea edulis* beds might be reduced and, if so, whether such a reduction might be significant.

The Department of the Environment, Heritage & Local Government recommends that the Environmental Impact Statement be amended to satisfactorily assess the impacts of discharge on the *Ostrea edulis* beds in Clew Bay Complex candidate Special Area of Conservation.

6. In summary, the Department of the Environment, Heritage & Local Government recommends that the Environmental Impact Statement be amended to contain an appropriate assessment of the proposed project for the Clew Bay Complex candidate Special Area of Conservation as required under Regulation 27 of the European Communities (Natural Habitats) Regulations 1997.

Please let us have a copy of the Board's determination when a decision has been made in this case.

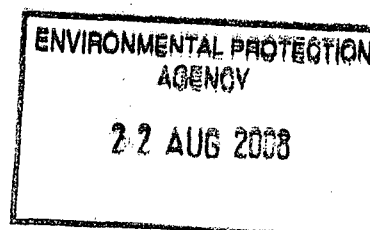
Mise le meas,

Aoife O'Shea
Development Applications Unit

Encl.

29 June 2007

Our Ref: G2007/331



The Secretary,
An Bord Pleanála,
64 Marlborough Street,
Dublin 1.

Re: Derrinnumera Sludge Hub Centre and Leachate Treatment Facility at Derrinnumera Landfill Facility, Derrinnumera, Newport, Co. Mayo – Publication of the Environmental Impact Statement (EIS)

A Chara,

We refer to Mayo County Council's letter of 16 May 2007 in relation to the above-proposed development. Outlined below are the archaeological and nature conservation recommendations of the Department of the Environment, Heritage and Local Government.

Archaeology

It is noted that the proposed development is large in scale. Given the scale, extent and location of the proposed development it is possible that subsurface archaeological remains could be encountered during the construction phases that involve ground disturbance. It is our recommendation that Archaeological Monitoring, as described below be carried out at this site and included as a condition in any grant of planning permission that may issue.

“Archaeological Monitoring shall consist of the following:

1. The applicant is required to engage the services of a suitably qualified archaeologist to monitor all topsoil stripping associated with the development.
2. Should archaeological material be found during the course of monitoring, the archaeologist may have work on the site stopped, pending a decision as to how best to deal with the archaeology. The developer shall be prepared to be advised by the Department of Environment, Heritage and Local Government with regard to any necessary mitigating action (e.g. preservation *in situ*, and/or excavation). The applicant shall facilitate the archaeologist in recording any material found.
3. The Planning Authority and the Department of Environment, Heritage and Local Government shall be furnished with a report describing the results of the monitoring.

Reason: To ensure the continued preservation (either *in situ* or by record) of places,

caves, sites, features or other objects of archaeological interest.”

Nature Conservation

All parts of this application area drain towards the Newport River catchment, which is designated as a Special Area of Conservation (SAC) site code no. 002144 (see attached site synopsis). This river supports the globally threatened species, Freshwater Pearl Mussel (*Margaritifera margaritifera*), which is listed as an Annex II species on the EU Habitats Directive (Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora). It should be noted that the main population of *M.margaritifera* is at and downstream of the proposed location for the pipeline river crossing so the potential for direct and indirect impacts on the species is extremely high. The following comments concentrate specifically on the threat to water quality in the Newport River cSAC and the population of *M.margaritifera* that the river supports.

1. It is proposed to lay the leachate pipeline across the riverbed in a *M.margaritifera* area. The EIS has not explored any alternative locations for this crossing. It is imperative that alternative pipeline crossings are examined so that any potential impacts to the *M.margaritifera* population are minimised.
2. If the pipeline is to cross the Newport River at any point then the following measures must be implemented;
 - There should not be any silt run-off into the Newport River. Silt control measures must be outlined clearly in a method statement and agreed with the National Parks and Wildlife Service (NPWS) of this Department before any pipelaying work commences.
 - If there is any silt run off from the pipelaying, all works should cease until appropriate measures have been implemented to prevent further run-off.
 - An ecologist with experience in freshwater and *M.margaritifera* ecology should be present at all times during pipelaying, adjacent to, and across the Newport River.
 - The work area within the Newport River should be surveyed for *M.margaritifera* one day prior to the pipelaying. Any *M.margaritifera* found should be moved upstream of the works area by the ecologist. This must be done under licence issued by National Parks and Wildlife Service.
3. All mitigating measures outlined in the terrestrial ecological assessment (pipeline route) should be implemented.
4. The on-site ecologist should check all drains and ponds for frog spawn prior to any works. If spawn is found it should be moved under licence from NPWS by the ecologist to an alternative site.

Please let us have a copy of the Board's determination when a decision has been made in this case.

Mise le meas,

Aoife O'Shea

Development Applications Unit
Encl.

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