

**INSPECTORS REPORT ON A LICENCE APPLICATION**

<b>TO:</b>	Each Director	
<b>FROM:</b>	Brendan Wall	Office of Environmental Enforcement
<b>DATE:</b>	30 <sup>th</sup> November 2004	
<b>RE:</b>	Application for a Revised Waste Licence from Drogheda Port Company, Licence Register 52-2	

Application Details	
Type of facility:	Storage of Dredged Sand and Gravel
Class(es) of Activity ( <b>P</b> = principal activity)	4 <sup>th</sup> Schedule: Classes 4 ( <b>P</b> ) and 13
Quantity of waste proposed to be managed per annum:	Remove deposited sand and gravel to pre-determined levels.
Current licence limit	Not Applicable.
Classes of Waste:	Inert (deposited sand and gravel)
Location of facility:	Stagrennan Polder, Stagrennan, Drogheda, County Louth
Licence application received:	5/8/03
Third Party submissions:	Ten
EIS Required:	No
Article 14 Notices sent:	No
Article 14 compliance date:	24/3/04
Article 16 Notices sent:	No
Article 16 Compliance date:	Not Applicable
Site Inspections:	3/9/03 (site notice check) 6/11/03 (enforcement inspection) 25/8/04 (enforcement inspection)

**(1) Introduction:**

This report relates to an application by Drogheda Port Company (DPC) for a Review of the existing Waste Licence (Reg. No. WL 52-1 issued 14/1/99). Classes 4 and 13 of the Fourth Schedule were applied for in the application. Class 4 of the Third Schedule is the principal activity.

Drogheda Port Company was issued with a waste licence on the 14/1/99 for the temporary storage of dredged sand and gravel on a mudflat in the Boyne Estuary. This sand and gravel was dredged from the Boyne shipping channel and deposited under a

waste licence on an area of inter-tidal mudflat called Stagrennan Polder. The polder is located to the south of the River Boyne approximately 1 km to the east of Drogheda. The site covers an area of some 22.5 ha and the area that was taken up by the dredged sand and gravel was 18.5 ha. The licensee has estimated that 948,156 tonnes of sand and gravel was deposited on the site.

Condition 8.4 of the waste licence specifies that all sand and gravel must be removed by the 14<sup>th</sup> January 2004.

*Condition 8.4 Subject only to wastes which the Agency has agreed can remain at the facility as specified engineering works, all waste deposited at the facility shall be removed to the levels determined by the survey referred to in Condition 9.5 after the end of five years, commencing from the date of grant of this licence.*

The removal of recoverable grade sand and gravel commenced in August 2001. This removal work continued until early October 2004. An estimated 651,952 tonnes of commercial grade sand and gravel was removed for use in off-site construction projects. The removal contractor has now de-mobilised from the site and the licensee is in the process of preparing a final restoration plan, which includes proposals for dealing with the remaining deposited materials (this includes silts and sands not suitable for construction). According to DPC the main reason for not removing the material on time was there wasn't a viable market for the sand and gravel. DPC have applied for an extension of the removal date to April 2005.

It is recommended that the application for a revised waste licence incorporating an extend removal timeframe be refused for the reasons outlined in this report and attached Proposed Decision.

## **(2) Compliance History and Current Status**

The dredging project was co-financed by the European Commission subject to restoration of the wetlands functions of Stagrennan Polder (i.e. its role as mudflat habitat suitable for wild birds using the Boyne Estuary Special Protection Area) and designation of the polder as part of the SPA. The temporary loss of the polder was subject to compensatory measures being implemented else where in the estuary.

The European Commission issued a Reasoned Opinion in 2002 alleging that sufficient compensatory measures were not provided. The ecological compensation is an issue for the Department of Communication, Marine and Natural Resources as part of the Foreshore Licence. The Foreshore licence requires the polder to be returned to mudflat five years from the commencement of the dredging operations (i.e. by April 2005 which is 15 months later than the waste licence).

More recently the European Commission wrote to Ireland claiming that the Habitats Directive and the Waste Directive were not being respected in relation to the works at Stagrennan Polder. One of the main concerns raised by the Commission is an apparent failure to terminate as foreseen the temporary use of Stagrennan Polder and to restore the wetland functions of Stagrennan Polder.

DPC is currently in non-compliance with the waste licence. They have missed the deadline of the 14/1/04 for removal of the sand and gravel. The EPA has advised DPC

in writing that an application for a review of the waste licence does not remove any responsibility from the requirements of the existing licence and the removal work should not be delayed pending a decision on the review application. As far back as 2002 the EPA had concerns that the removal work would not be completed on time, and as a consequence several letters were issued to DPC outlining concerns about the progress of the works. Copies of these letters are attached as Appendix 1 (ref: EPA letters dated the 31/7/02, 21/8/02, 24/9/02, 20/2/03 and 4/3/03).

The most recent inspection of the facility was carried out on the 25/8/04 and a Notification of Non-Compliance issued on the 16/9/04 (Attachment 2). The reply to the notice received from DPC does not reflect the urgency of removing the remaining sand and gravel and progressing the restoration work as soon as possible. DPC stated that their restoration plan would be submitted to the EPA in January 2005 and the restoration work would commence in March 2005.

DPC finished removing the recoverable sand and gravel in early October 2004 and the licensee is now entering the next restoration phase. However, the licensee has not provided specific details on how the non-recoverable materials such as poor quality sand and gravel, silts etc will be dealt with but it appears that they are planning to use some of the materials during the restoration phase. According to consultants working for DPC the plan being prepared aims to ensure that the ecological productivity of the polder is of greater value post-restoration than that which existed prior to the commencement of the reclamation works. They have advised the EPA that they are consulting with the National Parks and Wildlife Section of the Department of the Environment, Heritage and Local Government.

I am not satisfied with the restoration timeframes proposed and have requested DPC to carry out the remaining restoration work as soon as possible and submit a revised timeframe to the Agency. To further complicate matters, storms and high tides have flooded the entire Polder. DPC have also been advised that the Agency may separately consider such additional legal actions as may be necessary to ensure compliance with Condition 8.4 of the waste licence.

### **(3) Amendments to the Existing Licence requested in the application for review.**

The applicant requested a 15-month time extension for removal of the deposited sand and gravel (from the 14/1/04 to April 2005). The application provided the rationale for the proposed change to Condition 8.4. DPC state that the demand for the recovered sand diminished rapidly and while the machinery on site was capable of moving the material in six months the disposal routes were limited.

A summary of the reasons given by the licensee for seeking a time extension is as follows;

- The particle size distribution of the material is such that its end use was limited to applications such as ducting and pipe bedding, subsurface materials for roads, backfill in bridges, floor screenings for building and capping for landfill.
- This was the first pilot project to reuse dredged material rather than disposing it at sea.
- The possible use of the sand and gravel for capping in landfills, land reclamation and restoration did not materialise.

- Local authorities did not accept the use of the material for coastal erosion protection.
- The maximum truck movements of 20 truck movements per hour (33,000 tonnes removed per month) resulted in complaints about traffic, dust and noise from local residents and it was considered by local residents that this traffic level was too high for the roads. The licensee agreed with local residents that this level of traffic would not be reached again. In the review application that licensee states that the maximum movement has been reduced to 14 trucks per hour (23,500 tonnes per month). The licensee contends that is the load that the local environment can cope with without causing significant impact and this in turn placed additional time constraints on the removal operations.

I note that since the review application was submitted this monthly limit on traffic movements was exceeded on several occasions including July 2004 when 36,183 tonnes was removed of site.

#### **(4) Facility Development**

The infrastructure on site was limited to the machinery and plant used for the removal operations, this included mechanical shovels and quarry screening equipment. Sand and gravel was screened on site to produce different grades of aggregate. The licensee did not propose any change to the infrastructure on site. It is noted that this plant and machinery has since been removed.

After removal of the sand and gravel the exposed surface of the polder will be re-profiled to match the pre-infilling bathymetry. The entrance dykes and channel will be restored, and the licensee as part of the restoration plan notes that they will try to prevent compaction by heavy machinery. The depth of sand removal is critical in order to create a viable inter-tidal habitat. The licensee also notes that a detailed scientific plan will be required before this work can commence. In the review application the licensee is proposing that the main restoration work will take place during the Summer of 2005. More recent correspondence from the licensee proposed a March starting date. The creation of inter-tidal mudflat on this scale is a unique restoration project and there does not appear to be a similar project carried out before in Ireland.

#### **(5) Waste Types and Quantities**

At the time of the review application the licensee stated that the facility stored 645,645 tonnes of material. The best estimate that from the licensee is that 948,156 tonnes was initially deposited from the dredging project. The total amount removed was 651,952 tonnes. This means that approximately another 296,204 tonnes was deposited but not yet removed. However, it should be noted that due to consolidation (both through the weight of the sand itself and trafficking with heavy plant) the volume of dredged material deposited on site is estimated to have reduced by approximately 5 percent. It is also anticipated that some silt material will be set aside for use in mudflat and salt marsh restoration but specific details on the proposals to deal with the remaining materials have not been submitted.

#### **(6) Emissions to Air**

### Dust

Dust blow is a potential emission and the licensee has put in place a bowser for damping down haul roads. Dust monitoring results have shown dust emissions to be generally within the licence limits.

### Noise

The licensee has carried out noise monitoring and has not found any significant impact or breach of the licence limits.

## **(7) Emission to Groundwater**

This is not an issue at this facility. The area is tidal.

## **(8) Emission to Waters**

This is not an issue at this facility since any runoff from the clean sand and gravel will be either to surface water or tidal water.

## **(9) Other Significant Environmental Impacts**

The applicant carried out an environmental assessment to assess any potential impact of the extension of the time limit on the polder, which is now part of the Special Protection Area. The EPA requested this assessment to be carried out using guidance published by the European Commission; *Assessment of plans and projects significantly affecting Natura 2000 site: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive (92/43/EEC)*

The applicant has stated that *“Bird monitoring has qualitatively demonstrated that the waste recovery operations at Stagrennan Polder have not given rise to any statistically significant impact to key species within the Boyne River SPA”*.

The main impact identified in the assessment is that the extension of the timeframe will delay the conservation objective of returning the polder to mudflat by fifteen months.

## **(10) Waste Management and Water Quality Plans**

The plans for the region have been considered during the assessment of this review application for a waste licence.

## **(11) Submissions**

Ten valid submissions were made in relation to this application as set out below.

**1. Submissions from Karin Dubsky, Coastwatch Coordinator, Whitewalls, Ballymoney, Gorey dated the 1/9/03, 18/9/03, 14/1/04 and 26/10/04.**

*Four submissions were received from Karin Dubsky. Two of these submissions were very similar in content (1/9/03 & 18/9/03), the third was a brief submission requesting an update on the application and stating that*

*licence ran out on the 15/1/04 and the fourth was a submission received on the 26/10/4.*

*The first issue raised by Ms Dubsy is that she is concerned with the assertion in the application that she initiated nine High Court proceedings against Drogheda Port Company in relation to the dredging scheme and spoil storage. Ms Dubsy does not agree with the legal history as presented in the application. Ms Dubsy asks what the EPA procedure is if incorrect information is submitted in an official application and states that a correction would follow.*

*The second issue raised is in relation to the western section of the polder and Ms Dubsy urges the EPA to urgently consider restoration of this area as an essential licence condition, if a time extension is granted. Ms Dubsy claims that the applicant's refusal to allow partial restoration is not backed up by good evidence and some issues require clarification. The conditions should according to Ms Dubsy be detailed based on independent engineering advice and leave no room for misunderstanding and link the licensee to direct and significant penalties to ensure compliance.*

*The third issue raised by Ms Dubsy is that since the application was made during the middle of the summer few local people were aware of the application to change the waste licence. Coastwatch request a public meeting regarding this application before the EPA makes a final decision. At the meeting they suggest that an independent engineer could present details on the partial clearance of the polder as suggested in the second issue above.*

*A detailed reply to this submission was received from Robertson & Associates (dated 4/11/03) on behalf of Drogheda Port Company. It is noted that the consultants disagree with the claim that the legal history is not accurate and they state that the legal synopsis was agreed (subject to some minor changes) by the Port Company's solicitor handling their legal issues. The consultants restate their view that the waste licence does not require partial restoration of the western section of the polder. The consultants outline a number of reasons why partial restoration would be inadvisable and impossible including ecological grounds (pond provides roosting, resting and drinking for birds), threat of instability of training walls, health and safety, existing contracts, foreshore licence (which specifically states that restoration work does not take place until such time as all materials are removed from the polder) and causing hindrance to the existing removal operations.*

*The final submission received from Karen Dubsy on the 26/10/04 states that they are concerned that the port company have totally stopped work on the site and asks whether the old licence covers them. The submission also raises concerns about the plan to dispose of fine silt which cannot be sold on the mudflat surface and claims that this would make it unsuitable for muddysand macrofauna due to raising the surface and poor oxygenation.*

#### **Comment**

The contents of the submissions and reply from the applicant are noted and have been taken into consideration when making my recommendation on the review application. The waste licence (Reg. No. 52-1) for Stagrennan Polder is

still valid and has not expired. The existing licence can only be surrendered using the provisions in the Waste Management Act.

There has been a history of third party litigation in relation to this facility and the EPA has not been party to these proceedings and therefore cannot comment further.

On several occasions the EPA requested the licensee to carry out a phased restoration of the polder. DPC were also requested to mobilise additional plant and machinery to speed up the removal work. In my opinion the licensee has stalled on this issue. DPC has argued that the licence does not require phased restoration and that the limiting factor for the removal works was the difficulty in sourcing recovery outlets and not the machinery on site. The issues raised in relation to restoration of the site will be followed up as part of the enforcement of the existing waste licence.

**2. *Submission from Michael Gunn, 6 Coney Hall, Mornington dated 4/9/03.***

*Mr Gunn is concerned that the application is a step along the way to permanent retention of the spoil on the site, which will result in the eventual development of a land bank at the site. There was he claims no serious effort to remove the material during high economic growth and it only speeded up since DPC were warned by the European Commission. In his view with their present record there is no evidence that DPC will have the spoil removed if their licence is extended.*

*He argues that no effective compensation was provided and claims that the loss of the flood abatement capacity of Stagrennan mudflat has been associated with flooding at the mouth of the River Boyne and in Drogheda. Mr Gunn also disputes the bird survey methods and interpretation of data in the application. He states that since the loss of Stagrennan there has been a marked decline in bird numbers of the Boyne estuary.*

*A detailed reply to this submission was received from Robertson & Associates (dated 4/11/03) on behalf of the Drogheda Port Company. The consultants state that Drogheda Port have no plans to develop the polder but this site was considered along with ten other sites along the eastern seaboard for development as a port facility. They state that it has been determined by the High Court that DPC have provided adequate compensation for their activities within the Boyne Estuary. In relation to the concerns about flooding this is no engineering or hydrological evidence to suggest that the loss of the polder led to the recent flooding (which was a once in fifty year event). The bird monitoring survey was designed by Birdwatch Ireland and all data is in the application. The consultants acknowledge that the bird numbers on the polder drastically reduced following its infilling. However, they argue that the monitoring data does show that the loss of the polder cannot be linked to any declines in total waterfowl populations over the Boyne estuary as a whole as the displaced birds have been absorbed by the many other polders within the estuary. This view they claim is backed up by Duchas.*

**Comment**

The contents of the submission and reply from the applicant are noted and have been taken into consideration when making my recommendation on the review application. The issue of compensatory habitat is not covered by the waste licence but is a matter for the Department of Communications, Marine and Natural Resources.

**3. Submission from Declan Collins, 8 Coney Hall, Mornington dated 6/9/03.**

*The letter from Mr. Collins contains a number of observations on the application and notes a number of contradictions in the information presented.*

*Mr. Collins argues that the applicants view that the demand for recovered sands has diminished rapidly is contradicted by the information in the application which shows that the last 6 months have been the busiest (with 35.4% of the total being extracted). Mr Collins also made a number of other observations including a concern that DPC is now only claiming that there is limited scope for disposal of the material due to the particle size distribution of the material. He also notes that DPC are now suggesting removal of 30,745 tonnes per month which is more than max removal rate which they claim is acceptable to local residents. The concern about traffic movements by the port is he claims is also a contradiction since almost 5 times this amount of traffic use the port on the north side of the estuary.*

*Mr Collins makes a number of observations on the Article 6 assessment and also states that no evidence has been submitted that birds actually roost or feed on the pond in the western part of the polder. In relation to the risk of training wall collapse Mr Collins states that no evidence has been produced to back up this claim. He mentions that beach re-nourishment at Laytown would be a very simple solution.*

*A detailed reply to this submission was received from Robertson & Associates (dated 4/11/03) on behalf of the Drogheda Port Company. The consultants note that finding outlets for the sand and gravel have been difficult and DPC are the first port company in Ireland to pioneer the reuse, as opposed to dumping at sea of dredged materials. They note that according to the DEHLG the designation of the polder as SPA was on the basis of it being an integral part of the estuary, and not upon its ecological value. In effect the polder was being designated as a condition for the receipt of EU Grant aid. The consultants refer to the bird monitoring carried out which shows that the western end of the polder holds by far the greatest bird count on the polder. The consultants provide details on the consultation carried out in relation to the conservation objectives of the site and outlines the findings of the birds monitoring carried out over six years. In conclusion the findings are the temporary loss of the polder habitat is not having an impact on overall bird populations within the Boyne estuary. In relation to beach re-nourishment at Laytown they state that this would not be feasible without some form of engineering measures.*



### **Comment**

The contents of the submission and reply from the applicant are noted and have been taken into consideration when making my recommendation on the review application.

4. ***Submission from the Development Applications Section of the Department of the Environment, Heritage and Local Government dated 18/9/03 and 16/2/04.***

*The first letter dated the 18/9/03 requests further information on how and when Drogheda Port proposes to reinstate the area back to a mudflat. The second letter notes that the consultants for the licensee Robertson & Associates forwarded a full copy of the Waste Licence Review Application to the DEHLG on the 17/10/03. The DEHLG in their letter dated the 16/2/04 notes that they while they have no objection in principle to the extension, this would be subject to conditions, which they request the EPA to attach to any licence should it be granted. These conditions are;*

- *The applicant should confirm commitment to the reinstatement of the polder.*
- *The applicant must provide the detailed scientific plan as per Appendix G1.*
- *The detailed scientific plan must address the reinstatement, monitoring etc. within a specified time frame.*
- *Apart from the storage and removal of dredged material, the scientific investigation and monitoring, no other works will be allowed on Stagrennan Polder.*

### **Comment**

The contents of the submission and reply from the applicant are noted and have been taken into consideration when making my recommendation on the review application. The issues raised in relation to the scientific plan for the restoration of the site will be followed up as part of the enforcement of the existing waste licence.

5. ***Submission from the Mrs E. Valla dated the 14/10/03.***

*Mrs Valla wrote to the Department of Communications Marine and Natural Resources and her letter was forwarded to the EPA and treated as a submission. Mrs Valla objects to the review and says that they have been living with the mountains of silt that the port dredged to make a turning place for ships. Mrs Valla claims that the turning of ships causes tremors to her house and loud noise, and during the dredging they were inconvenienced. Ms Valla believes that DPC dragged its heels in getting rid of the silt and object on the grounds of dust and visual pollution.*

*A reply to this submission was received from Robertson & Associates (dated 4/11/03) on behalf of the Drogheda Port Company. The consultant's note that DPC replied directly to Mrs Valla and that a copy of this letter was forwarded to the EPA with a request to treat the letter as confidential.*

### **Comment**

The contents of the submission and reply from the applicant are noted and have been taken into consideration when making my recommendation on the review application. The copy of the letter received from DPC replying to Mrs Valla was returned to the port with a request that it should be resubmitted in a format that allows the letter to go on public file. Dust and noise monitoring is a requirement of the existing waste licence. Monitoring results have shown dust emissions to be generally within the licence limits. Recent results for the monitoring point D1 (which is the closest monitoring point to Mrs Valla's residence) were in compliance with the waste licence limit (53mg/m<sup>2</sup>/day versus a licence limit of 250 mg/m<sup>2</sup>/day).

#### **6. *Submission from the Eastern Regional Fisheries Board dated the 24/10/03.***

*The Eastern Regional Fisheries Board has no objection to the application once the relevant surface waters continue to be monitored on an ongoing basis as per the original licence.*

### **Comment**

The contents of the submission and reply from the applicant are noted and have been taken into consideration when making my recommendation on the review application. The Agency has agreed to the monitoring of surface water on an annual basis and this frequency is considered sufficient in view of the activities carried out on site.

### **(13) Reasons for the Recommendation**

**I recommend that the application for a revised waste licence incorporating an extended removal timeframe be refused for the five specific reasons detailed in the attached recommended Proposed Decision. In making this recommendation I note the following;**

- The delay in restoration would adversely affect a place of special interest by delaying the restoration of the mudflat back to inter-tidal mudflat habitat.
- Stagrennan Polder is now designated as part of the Special Protection Area for the Boyne Estuary and in my opinion the restoration of the polder to mudflat habitat suitable for wild birds using the Boyne Estuary should be completed as soon as possible.
- Drogheda Port Company has not demonstrated that the extended timeframe could be adhered to and they have not demonstrated how they will deal with the non-recoverable materials within the proposed timeframe.
- I consider that facilitating Drogheda Port Company to regularise its activities is not appropriate particularly in view of the reminders issued by the EPA to the company to ensure that sand and gravel was removed by the 14/1/04.
- Drogheda Port Company have not finalised the restoration plan and the company do not expect this plan to be ready for submission to the EPA until the end of January 2005. They plan to commence the restoration work at the beginning of

March 2005. In my opinion this delay is not acceptable given that the restoration work should have commenced this year.

- Keeping the existing timeframe in place (even though it has passed and the licensee is in non-compliance) will allow the EPA to exert maximum enforcement pressure on Drogheda Port Company to carry out the remaining removal work as soon as possible. In my opinion the approval of the extended timeframe might lead to further delays in the restoration of the polder.
- The European Commission approved the co-financing of the dredging works on the basis inter alia that Stagrennan Polder would be classified as part of the SPA, that the use of the Polder for waste storage would be temporary and made subject to a waste permit pursuant to the Waste Directive. In view of this I do not consider appropriate to change the “goalposts” on the removal timeframe.
- This facility is the subject of a Reasoned Opinion and a letter of Formal Notice from the European Commission and every effort should be made by Drogheda Port Company to carry out the remaining removal and restoration work as soon as possible.

Signed: \_\_\_\_\_

Dated: \_\_\_\_\_

Brendan Wall  
Senior Inspector  
Office of Environmental Enforcement

## APPENDIX 1

## APPENDIX 2