# Bernard Nolan

From:

**Edwin Mooney** 

Sent:

06 July 2011 11:55

To:

Bernard Nolan

Subject:

RE: MS51/6/333 Foreshore Licence Application Great Island Gas pipeline & 6/333a site

investigation licence.

### Bernard,

From Engineering perspective I don't see any issue with processing the apllication for the trenchless crossing. It's the 'minimum depth' that we are interested in and this is confirmed to be 10m which is acceptable.

Regards,

Edwin.

From: Bernard Nolan Sent: 06 July 2011 11:48 To: Edwin Mooney Cc: Matthew McLoughlin

Subject: FW: MS51/6/333 Foreshore Licence Application Great Island Gas pipeline & 6/333a site investigation

licence.

Hi Ed,

The applicants have requested that the foreshore licence application for the trenchless crossing (6/333) be considered without further reference to the over-water site investigation application (6/333a).

Could you please advise on whether this is possible/advisable.

regards

Bernard

Bernard Nolan
Foreshore Unit
Planning Policy and Legislation
Department of the Environment, Community and Local Government
Newtown Road
Wexford

053 9117367

From: Daniel Garvey [mailto:daniel.garvey@arup.com]

Sent: 21 June 2011 14:40

To: Bernard Nolan

Subject: RE: MS51/6/333 Foreshore Licence Application Great Island Gas pipeline & 6/333a site investigation

licence.

Thanks for that Bernard.

There are no foreseeable circumstances in which the planned crossing depth for the pipeline will be less the 10 metres below the Estuary bed.

The application for a foreshore licence for the proposed over-water site investigations is to facilitate the provision of additional technical information for the construction contractor. The outcome of these investigations will not provide any further certainty on the depth of the crossing, above that which is known already (>10m depth). The construction contractor will continue to have flexibility to select the trench profile that best suits their methods of working.

On that basis, Bord Gáis Networks request that the foreshore licence application for the trenchless crossing be considered without further reference to the over-water site investigation application.

The conditions proposed by your engineering section are acceptable to Bord Gáis Networks.

Best regards

Dan

From: Bernard Nolan [mailto:Bernard.Nolan@environ.ie]

Sent: 08 June 2011 14:13

To: Daniel Garvey Cc: Matthew McLoughlin

Subject: RE: RE: MS51/6/333 Foreshore Licence Application Great Island Gas pipeline & 6/333a site investigation

licence.

Hello Dan,

The 333 application is dependent upon the results of the site investigation to be conducted under the 333A licence application. Of particular interest will be the depth of the crossing. Depending on the results of the site investigation it may, unfortunately, be necessary for the 333 application to go back out to public notice as the depth of the crossing would definitely be of public interest. We can discuss once the site investigation has been completed.

The Sea Fisheries protection Authority have advised that they are satisfied with your responses in relation to the bentonite and no further conditions will be attached by them.

Please see below the conditions proposed by our engineering section. These conditions are based on a crossing depth of at least 10m. Please advise on their acceptability.

- 1. Applicant to provide certified statement by a chartered Engineer stating that the works as detailed in this application have been designed in accordance with the relevant Irish, British or EU standard specification or Codes of Practice for strength, stability and durability, taking into account current building regulations and safety legislation.
- 2. Within two months of completion of the works, the applicant shall provide a certified statement by a chartered Engineer that the works have been completed in accordance with the information provided and that the foreshore is returned to its original condition.
- 3. During the course of the works all necessary precaution shall be taken to protect the public in accordance with relevant Health and Safety Legislation and as set out in Section 4 of the Environmental Appraisal Report, submitted as part of the foreshore application.
- 4. During the course of the works no mechanical vehicles and/or plant shall enter onto the Foreshore.
- 5. All works shall be carried out in strict accordance with Section 2 'River Barrow Crossing Description and Method Statement' of the Environmental Appraisal Report, submitted as part of the foreshore application.
- 6. All weighted anchors (whether concrete or sand) used to sink the HDD Drilling Fluid Return Line shall be removed from the foreshore on completion and the foreshore shall be returned to its original condition.
- 7. Appropriate methods of operation shall be adopted in order to ensure that no spillages of hydrocarbons, cement, excavation run-off, Bentonite or other hazardous substance occur to the Foreshore during the

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Bernard Nolan

Sent:

06 July 2011 11:48 Edwin Mooney

To: Cc:

Matthew McLoughlin

Subject:

FW: MS51/6/333 Foreshore Licence Application Great Island Gas pipeline & 6/333a site

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Attachments:

image001.png

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Could you please advise on whether this is possible/advisable.

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Bernard

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Planning Policy and Legislation
Department of the Environment, Community and Local Government
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On that basis, Bord Gáis Networks request that the foreshore licence application for the trenchless crossing be considered without further reference to the over-water site investigation application.

# Bernard Nolan

From:

Daniel Garvey <daniel.garvey@arup.com>

Sent:

21 June 2011 14:40

To:

Bernard Nolan

Subject:

RE: MS51/6/333 Foreshore Licence Application Great Island Gas pipeline & 6/333a site

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On that basis, Bord Gáis Networks request that the foreshore licence application for the trenchless crossing be considered without further reference to the over-water site investigation application.

The conditions proposed by your engineering section are acceptable to Bord Gáis Networks.

Best regards

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From: Bernard Nolan [mailto:Bernard.Nolan@environ.ie]

Sent: 08 June 2011 14:13

**To:** Daniel Garvey **Cc:** Matthew McLoughlin

Subject: RE: RE: MS51/6/333 Foreshore Licence Application Great Island Gas pipeline & 6/333a site investigation

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Hello Dan,

The 333 application is dependent upon the results of the site investigation to be conducted under the 333A licence application. Of particular interest will be the depth of the crossing. Depending on the results of the site investigation it may, unfortunately, be necessary for the 333 application to go back out to public notice as the depth of the crossing would definitely be of public interest. We can discuss once the site investigation has been completed.

The Sea Fisheries protection Authority have advised that they are satisfied with your responses in relation to the bentonite and no further conditions will be attached by them.

Please see below the conditions proposed by our engineering section. These conditions are based on a crossing depth of at least 10m. Please advise on their acceptability.

1. Applicant to provide certified statement by a chartered Engineer stating that the works as detailed in this application have been designed in accordance with the relevant Irish, British or EU standard specification

Tile.

#### Bernard Nolan

From:

**Edwin Mooney** 

Sent:

24 May 2011 15:12

To: Cc: Bernard Nolan

PJ Shaw

Subject:

Bord Gais Eireann\_Installation of a 400mm diameter Gas pipe a minimum of 10m

below the bed of the River Barrow. MS51/6/333.

Mr. Bernard Nolan,

Your Ref:MS51/6/333

Foreshore Unit.

Department of Environment, Community & Local Government,

Newtown Road,

Wexford.

24/05/11

#### ENGINEERING REPORT.

Applicant: Bord Gais Eireann

Site: River Barrow Estuary, Counties Wexford and Kilkenny.

Works: Installation of a 400mm diameter Gas pipe a minimum of 10m below the bed of the river barrow.

RE: FORESHORE APPLICATION TO INSTALL A 400MM DIAMETER GAS PIPELINE BENEATH THE BED OF THE RIVER BARROW IN THE ESTUARY BETWEEN COUNTIES WEXFORD AND KILKENNY. MS 51/6/333

I'm Writing in response to Robert Doyle's letter, dated the 27/09/10, to Barry McDonald requesting observations and further clarification from yourself on the 11/04/2011 in relation to the above, my comments are as follows:

### 1.0 Proposed works.

The work comprising this application is required to upgrade the National Gas Network by connecting it with the Great Island Power Station in County Wexford. The pipeline crossing is to be part of a proposed pipeline intended to supply high pressure natural gas from the existing transmission network infrastructure in Kilkenny to the 430MW Great Island Electricity generating station. The work includes the installation, by horizontal directional drilling (HDD), of a 400mm diameter pipe a minimum of 10m below the river bed. The crossing is located from Ballinlaw in County Kilkenny to Dollar Point, Great Island in County Wexford. As the pipe is to be installed by use of directional drilling, with drive pits away from the river bank on both sides, it is envisaged that the works should result in no disturbance to the foreshore. As part of the HDD process a temporary fluid return pipe is required to return Bentonite fluid from the pipe side to the drill side operation. This pipe is a 200mm diameter PE and is fully welded in design, it will be installed in one day, remain in place for the drilling operation (expected to be up to 12 weeks) and removed in one day after drilling operations have been completed, the pipe will be laid on the river bed in the approximate location of the main gas pipe and held in position with weighted anchors made of concrete or sand filled bags. it is again envisaged that this pipe will have minimal impact on the foreshore but its installation, presence and removal will impact on navigation. The Gas pipeline is to designed, constructed and operated in accordance with Irish Standard 328:2003 - Code of Practice for Gas Transmission Pipelines and Pipeline Installations (edition 3.1). The river Barrow is a cSAC and a pNHA in this area.

#### 2.0 Enclosures.

The following documents were submitted in support of the application:

- Completed Application Form,
- Environmental Appraisal Report
- Ordinance survey map dated the 20.09.2010, Drawing No. FL-001, Rev:PL1.
- Longitudinal Section drawing dated the 20.09.2010. Drg No FL-003, Rev:PL1
- Admiralty chart Drawing FL-002, Rev: PL1 dated the 20.09.2010

Note that Map/drawing (Drawing No. FL-001, Rev:PL1, dated 20/09/2010) that should be used for attaching to the lease document.

#### Navigation 3.0

As the drilling fluid return pipe may impact on navigation, it is important that the comments of both the MSO and the s Port Company are considered as part of this application.

#### 4.0 Conclusion/Recommendation.

Conditional to no objections arising from public notification, I have no objection to the granting of a foreshore Licence/Permission for the above works subject to the following conditions:

- Applicant to provide certified statement by a chartered Engineer stating that the works as detailed in this 1. application have been designed in accordance with the relevant Irish, British or EU standard specification or Codes of Practice for strength, stability and durability, taking into account current building regulations and safety legislation.
- 2. Within two months of completion of the works, the applicant shall provide a certified statement by a chartered Engineer that the works have been completed in accordance with the information provided and that the foreshore is returned to its original condition.
- During the course of the works all necessary precaution shall be taken to protect the public in accordance 3. with relevant Health and Safety Legislation and as set out in Section 4 of the Environmental Appraisal Report, submitted as part of the foreshore application.
- During the course no mechanical vehicles and/or plant shall enter onto the Foreshore. 4.
- All works shall be carried out in strict accordance with Section 2 'River Barrow Crossing Description and 5. Method Statement' of the Environmental Appraisal Report, submitted as part of the foreshore application.
- 6. All weighted anchors (whether concrete or sand) used to sink the HDD Drilling Fluid Return Line shall be removed from the foreshore on completion and the foreshore shall be returned to its original condition.
- Appropriate methods of operation shall be adopted in order to ensure that no spillages of hydrocarbons, 7. cement, excavation run-off, Bentonite or other hazardous substance occur to the Foreshore during the works. Contractor's arrangements for the control of pollutants should be notified to both DoECLG and Inland Fisheries Ireland for agreement prior to works on the foreshore commencing. All mitigation measures to protect both the water quality and the ecology outlined in Section 4 of Environmental Appraisal Report, submitted as part of the foreshore application, shall be strictly adhered to.
- Any water abstraction from the River Barrow required for the HDD process shall be subject to the LOCAL 8. GOVERNMENT (WATER POLLUTION) ACT, 1977.

Edwin Mooney Engineering Inspector, Newtown Road, Wexford. 053 9117593.

Ref: MS51/6/633

Mr. Michael Daly ARUP 15 Oliver Plunkett St. Cork

8<sup>th</sup> November 2010

# Re: Foreshore Application for Gas Pipeline to Great Island River Barrow Crossing

Dear Mr. Daly,

Please see observations below from Mr. Terry McMahon of the Marine Institute regarding the above application.

"The proposed works involves the installation of a gas pipeline under the River Barrow estuary between Ballinlaw, Co. Kilkenny and Dollar Point, County Wexford as shown in Figures FL-001 and FL-002 that accompanied the application.. It is proposed to construct the crossing using a trenchless crossing technique (Horizontal Directional Drilling (HDD)) with the pipeline being installed a minimum of 10m below the estuary bed.

It is noted that the final depth of the crossing has yet to be confirmed and that this will be confirmed during a detail design phase and following a detailed geotechnical assessment. It is not clear form the documentation provided if the geotechnical assessment phase will include site investigation works e.g. drilling of boreholes on the foreshore. Such works would require a separate foreshore permit.

The Marine Institute is satisfied that the use of trenchless crossing technique as proposed will not result in a significant impact on the foreshore and has no objections in principle to a permit being issued subject to confirmation of the final depth of the crossing and full implementation of the mitigation measure set out in the Environmental Appraisal report submit with the application."

I would be grateful if you could address the point in the second paragraph and revert to me please.

Yours sincerely,

Denis Dunne

Foreshore Unit Dept. Environment, Heritage & Local Government Newtown Road Wexford From:

Robert Doyle

To:

Denis Dunne 08/11/2010 10:10

Date: Subject:

Fwd: Foreshore Application: BGE gas pipeline River Barrow crossing(MS51/6/332)

Attachments: Foreshore Application: BGE gas pipeline River Barrow crossing(MS51/6/332)

#### Denis,

The file ref is ms51/6/333 and not ms51/6/332. For all new applications the comments have to go up on DATS.Liaise with Bernard on this.

Please associate with file and return comments to applicant.

Padraic had advised to put this case out to public consultation before consultee immediately so this was done. Please advise applicant of Terry's obs as they may need another licence if seperate site investigation works are to be carried out.

#### Robert.

Foreshore Unit Dept of the Environment, Heritage and Local Government Newtown Rd Wexford

Phone: 053 9117367 Fax: 053 9117603

E-Mail: Foreshore@environ.ie

From: To: Terry McMahon < MCMAHON@marine.ie> Robert Doyle < Robert.Doyle@environ.ie>

Date:

05/11/2010 16:52

Subject:

Foreshore Application: BGE gas pipeline River Barrow crossing(MS51/6/332)

#### Robert

I refer to your correspondence of 27th September 2010 in connection with the above application (MS51/6/332).

The proposed works involves the installation of a gas pipeline under the River Barrow estuary between Ballinlaw, Co. Kilkenny and Dollar Point, County Wexford as shown in Figures FL-001 and FL-002 that accompanied the application. It is proposed to construct the crossing using a trenchless crossing technique (Horizontal Directional Drilling (HDD)) with the pipeline being installed a minimum of 10m below the estuary bed.

It is noted that the final depth of the crossing has yet to be confirmed and that this will be confirmed during a detail design phase and following a detailed geotechnical assessment. It is not clear form the documentation provided if the geotechnical assessment phase will include site investigation works e.g. drilling of boreholes on the foreshore. Such works would require a separate foreshore permit.

The Marine Institute is satisfied that the use of trenchless crossing technique as proposed will not result in a significant impact on the foreshore and has no objections in principle to a permit being issued subject to confirmation of the final depth of the crossing and full implementation of the mitigation measure set out in the Environmental Appraisal report submit with the application.

# Terry

Dr. Terry McMahon
Section Manager
Marine Environment and Food Safety Services
Marine Institute
80 Harcourt Street
Dublin 2

Tel: + 353 1 4766504 Fax: + 353 1 4784988

e-mail: terry.mcmahon@marine.ie

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tharla?onn le linn a sheachadadh.

26th October 2010

Our Ref: M00167

Your Ref. WZ-DAFFWX-A100929-0004

Bord Gais Eireann

Re: Proposed Foreshore licence application and Environmental Appraisal Report from Bórd Gáis to insert a distribution gas main across the River Barrow Estuary from Kilkenny to Wexford.

A Chara,

Thank you for forwarding the information on the proposed work, including the archaeological assessment report by Lane Purcell Archaeology Ltd. It is our understanding from the attached information that there are 3 main aspects to this work:

- The pipeline across the river, including the foreshore areas, which will be installed via deep core drilling with no impact to the river bed, rather it will go under the river bed.
- 2) Open cut construction through green field areas from the plants to the location where the launch pit will be excavated on either side of the river.
- 3) The temporary pipeline is to be laid on the river bed via rollers on the foreshore areas of either banks of the river.

It is also our understanding that an intertidal archaeological survey is to be done in advance of any works commencing. A report on the results of this survey shall be forwarded to this Department for consideration and comment before any works commences.

Having considered the proposed methodology and the results of the archaeological assessment, the following are the comments and further recommendations of this Department. The Underwater Archaeology Unit has no objections to this application be processed and the foreshore licence being granted once the following is included as conditions on the licence:

- The results of the intertidal survey be forwarded to this Department for consideration and comment in advance of any works commencing in the foreshore areas. Further recommendations may be forthcoming depending on the results of this survey, including further assessment, archaeological testing, preservation in situ/avoidance or archaeological monitoring.
- Works in the green field areas be subject to archaeological monitoring. This shall be undertaken by a suitably qualified archaeologist.
- The archaeological monitoring shall be licensed to the Department of Environment, Heritage and Local Government (DEHLG) and a detailed method statement shall accompany the licence application.
- A find's retrieval strategy shall be incorporated into the monitoring methodology.
- The monitoring archaeologist shall have the power to have works stopped if potential archaeology is impacted and all works in that area shall be suspended until the potential archaeology has been fully resolved.
- The applicant shall be prepared to be advised by the National Monuments Service (DEHLG) in regard to the resolution of any potential archaeology identified.
- Should there be any changes to the proposed works or any further proposed impacts to the terrestrial, foreshore or underwater environments, the Underwater Archaeology Unit shall be informed in advance, as further archaeological mitigation may be required.

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



### **Pernard Nolan**

From:

Michael Daly <michael.daly@arup.com>

Sent:

18 November 2010 12:20

To:

Bernard Nolan

Cc:

Daniel Garvey; 'Ciara Allen'; 'John. Quinn'

Subject:

Ref.: MS51/6/633 - Observations by the Marine Institute

Attachments:

Letter from Foreshore Unit - Marine Institute - 08 November 2010.pdf

Ref.: MS51/6/633

#### Bernard,

Further to recent correspondence received from the Foreshore Unit (attached herewith for your reference) regarding the foreshore licence application by Bord Gáis Éireann for a trenchless gas pipeline crossing of the River Barrow Estuary, in response to the observation raised by the Marine Institute with regard to the need for a foreshore licence for any borehole site investigation works, we confirm that BGÉ is considering carrying out borehole site investigations in the estuary and is aware of the need for a foreshore licence for such works. BGÉ is currently preparing a scope of works for the site investigation works and hopes to commence pre-application consultations on a licence application in the near future. We propose to contact you again in due course in this regard.

# Kind regards,

#### Michael

# Michael Daly

Associate Director

#### Arup

15 Oliver Plunkett Street, Cork, Ireland t +353 (0)21 422 3200 | f +353 (0)21 427 2345 www.arup.ie

Awards UCC Brookfield House wins top award

Please consider the environment before printing this e-mail



15th October 2010

Mr. Roibeard O' Dúill, Foreshore Unit, Department of Environment, Heritage & Local Government, Newtown Road, WEXFORD. Dept. of Environment, Heritage & Local Government 2 0 OCT 2010

Wexford

Application for a Foreshore Licence by Bord Gais Eireann in Respect of a Gas Pipeline to Great Island Power Station by means of a Trenchless Crossing of the Barrow Estuary.

Your Reference MS 51/6/332

Dear Mr. O' Dúill,

I refer to your Departments' letter dated 27th September 2010 addressed to Ms. Gretta Hannigan at our Blackrock, Co. Dublin office. At the outset, I wish to thank your Department for forwarding the application to us, and for seeking our observations and comments thereon. Please note, that as the proposed pipeline route lies in its entirety within the former Southern Fisheries Region, and accordingly is now within the South Eastern River Basin District for which the Clonmel Office of Inland Fisheries Ireland (IFI) has responsibility, any and all further communications and correspondence in relation to the proposed pipeline should be addressed to our Clonmel Office for my attention.

Having examined the licence application, Inland Fisheries Ireland (IFI) has no objection to the granting of the licence, subject to the following matters being addressed by way of appropriate licence conditions.

Applications such as this for which permission is sought involving construction adjacent to and with the possibility of discharge to surface waters, have the potential to significantly impact on the aquatic environment and fisheries resource if they are not carried out in an environmentally sensitive manner.

Uncured concrete can kill fish and macro invertebrates by altering the pH of the receiving waters. When cast in place concrete is required for temporary works associated with the pipeline installation, all work must be done in the dry and effectively isolated from any water that may directly or indirectly enter surface waters for a period sufficient to cure the concrete.

One of the potential impacts during the construction phase of the proposed development is the discharge of silt laden waters to surface waters from newly developed areas at which earth moving and excavation works are ongoing. Silt can damage river bed habitat areas, and juvenile



fish species are particular sensitive to siltation of gill structures. Similarly, plant and macro invertebrate communities can literally be blanketed over, and eliminated. It is essential to incorporate best practices into construction methods and strategies to minimise discharge of silt and suspended solids to water.

All oils and fuels used to service plant and machinery during the construction phase should be stored in secure bunded areas, and particular care and attention taken during refuelling and maintenance operations on such plant and equipment. Where site works involve the discharge of drainage waters to surface waters, temporary oil interceptor facilities should be installed and maintained.

In recent years, there have been a number of significant discoveries of what are generally termed invasive species in our waters. In many instances these unfortunately are likely to have long term adverse impacts on native flora and fauna. Drilling equipment such as proposed for use in the pipeline crossing may potentially have been used in waters containing such invasive species. The applicants will need to be able to satisfactorily demonstrate that equipment coming in contact with the waters of the Barrow is free of such species.

The proposed abstraction of ca. 100-300m<sup>3</sup> of water from the Barrow is not considered significant, subject to the provision of screening on the water intake chamber/device.

Having regard to the above, it is considered that the following or conditions to like effect should be imposed.

- 1. When cast-in-place concrete is required, the applicant shall ensure work is done in the dry and effectively isolated from any water that may enter the Barrow Estuary for a period sufficient to cure the concrete.
- 2. The applicant shall, for the purposes of elimination of construction impacts, be required to install silt traps at locations that will intercept construction run-off to waters. Traps shall not be located immediately adjacent to waters. A buffer zone shall remain between the silt trap and the receiving waters with natural vegetation left intact so as to assist in silt interception and removal.
- 3. The entry to or crossing of the River Barrow via it's' bed by construction plant and machinery is strictly prohibited.
- 4. The applicant shall ensure all oils and fuels used to service plant and machinery during the construction phase together with any and all other potentially polluting or hazardous materials are stored in secure bunded areas.
- 5. Where site works involve the discharges of drainage water to the receiving aquatic environment, temporary oil interceptor facilities shall be installed and maintained by the applicant.



- 6. Servicing of plant and equipment shall only be undertaken on impermeable hard standing areas linked to on-site oil interceptor facility.
- 7. The abstraction of water from the River Barrow for use during the pipeline crossing works shall be by means of a screened intake, with the screen size not exceeding 10mm.
- 8. The applicant shall ensure that all elements of engineering plant and equipment including boats, ropes, buoys, diving equipment, etc likely to be used in or be in contact with the waters of the Barrow shall be free of any non native species.
- 9. Advance notice shall be given to the statutory fisheries authority, Inland Fisheries Ireland (IFI), Anglesea Street, Clonmel in respect of commencement of pipeline crossing works.

I would be obliged if you would please confirm in writing receipt of this submission.

Yours sincerely,

Patrick Kilfeather,

Senior Fisheries Environmental Officer.

From:

"McGabhann, Declan" < Declan. McGabhann@sfpa.ie>

To:

Robert Doyle DEHLG <Robert.Doyle@environ.ie>

CC:

"Keddie, Lindsay" <Lindsay.Keddie@sfpa.ie>

Date:

02/10/2010 14:49

Subject:

MS51/6/332 Foreshore Licence application for a Gas Pipeline togreat Island, River

barrow crossing by Bord Gais Eireann

Hello Robert,

I have reviewed the report submitted along with the application and I have the following comments to make regarding the report.

Can you have the applicant confirm that the possible release of bentonite will not affect the cultivated mussels downstream of the proposed site? I am concerned that any possible release of bentonite into the water column will not have a direct affect on the mussels as an animal and also and more importantly that any possible release of bentonite will not accumulate in the mussel and therefore render the animal unsafe to eat (By humans).

The possible release if issues arise are covered under section 6.11.1 Predicted Impacts on Fauna, subheading "Aquatic Species"

Secondly, Under Section 11.6 Control of pollution, dust and noise measures, Subsection 11.6.1 details the authorities that will be contacted should a pollution event happen It is important that should any pollution event arise, the Sea Fisheries Protection Authority, Dunmore East Office is contacted immediately so it can put measures in place that all shellfish producers in Waterford Estuary are notified of such an event.

Contact details for SFPA Dunmore East are;

Telephone: +35351 383135 Fax: +35351383045

Email: Dunmore@sfpa.ie<mailto:Dunmore@sfpa.ie> Senior Port Officer: Eugene Wallace 087 9294729

Email: eugene.wallace@sfpa.ie<mailto:eugene.wallace@sfpa.ie>

Thank you,

Declan

Sea-Fisheries Protection Authority

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?dar?s Chosaint Iascaigh Mhara

T? an t-eolais san r?omhphost seo, agus in aon ceangl?in leis, faoi phribhl?id agus faoi r?n agus le h-aghaigh an seola? amh?in. D'fh?adfadh ?bhar an seoladh seo bheith faoi phribhl?id profisi?nta n? dl?thi?il. Mura tusa an seola? a bh? beartaithe leis an r?omhphost seo a fh?il, t? cosc air, n? aon chuid de, a ?s?id, a ch?ipe?l, n? a scaoileadh. M? th?inig s? chugat de bharr dearmad, t?igh i dteagmh?il leis an seolt?ir agus scrios an t-?bhar ? do r?omhaire le do thoil.

#### Bernard Nolan

From:

McGabhann, Declan < Declan.McGabhann@sfpa.ie>

Sent:

29 April 2011 16:08

To:

Bernard Nolan

Subject:

RE: RE: MS51/6/333 Foreshore Licence Application Great Island Gas pipeline

Attachments:

image002.gif

Hello Bernard,

Thank you for the email.

The questions that I had asked have been explained to me and I have no objections.

Thank you,

Declan

From: Bernard Nolan [mailto:Bernard.Nolan@environ.ie]

Sent: 29 April 2011 15:40 To: McGabhann, Declan

Subject: FW: RE: MS51/6/333 Foreshore Licence Application Great Island Gas pipeline

Declan,

please see response from the applicants in respect of your bentonite queries.

Could you please advise if this suffices or whether additional information is required.

regards

Bernard

Bernard Nolan
Foreshore Unit
Planning Policy and Legislation
Department of the Environment Heritage and Local Government
Newtown Road
Wexford

053 9117367

From: Daniel Garvey [mailto:daniel.garvey@arup.com]

Sent: 06 April 2011 14:43

To: Bernard Nolan
Cc: Matthew McLoughlin

Subject: RE: RE: MS51/6/333 Foreshore Licence Application Great Island Gas pipeline & 333(a) geotechnical survey

Hello Bernard and Matthew

In relation to the concerns expressed by the Sea Fisheries Protection Authority, we can confirm the following:

1 Bentonite is an inert, naturally-occurring material.

#### regards

Bernard Nolan
Foreshore Unit
Planning Policy and Legislation
Department of the Environment, Community and Local Government
Newtown Road
Wexford

#### 053 9117367

From: Daniel Garvey [mailto:daniel.garvey@arup.com]

Sent: 03 June 2011 12:11

To: Bernard Nolan

Subject: RE: RE: MS51/6/333 Foreshore Licence Application Great Island Gas pipeline

#### Hello Bernard.

What is the current status of the MS51/6/333 application?

#### Thanks

#### Dan

From: Bernard Nolan [mailto:Bernard.Nolan@environ.ie]

Sent: 29 April 2011 15:40

To: Daniel Garvey

Subject: RE: RE: MS51/6/333 Foreshore Licence Application Great Island Gas pipeline & 333(a) geotechnical survey

#### Thanks Dan,

I have forwarded onto SPFA for comment, hopefully this will suffice!

# regards

Bernard Nolan
Foreshore Unit
Planning Policy and Legislation
Department of the Environment Heritage and Local Government
Newtown Road
Wexford

#### 053 9117367

From: Daniel Garvey [mailto:daniel.garvey@arup.com]

Sent: 06 April 2011 14:43 To: Bernard Nolan

Cc: Matthew McLoughlin

Subject: RE: RE: MS51/6/333 Foreshore Licence Application Great Island Gas pipeline & 333(a) geotechnical survey

#### Hello Bernard and Matthew

In relation to the concerns expressed by the Sea Fisheries Protection Authority, we can confirm the following:

- 1 Bentonite is an inert, naturally-occurring material.
- 2 The Designated Shellfish Area downstream of the proposed site is two kilometres distant at the closest point (Designated Shellfish Area No. 35, Waterford Harbour). The location map for the Designated Shellfish Area is included below.
- 3 Although no release of bentonite to the Estuary is envisaged, the maximum possible volume of accidental discharge is 20 to 30 cubic metres.
- 4 A risk assessment of the potential for accidental release of bentonite has been completed this is summarised in the table below. The risk is considered to be low.
- 5 At this location in the Estuary, there is a very large volume of dilution available.
- 6 Estuarine environments tend to have natural levels of suspended solids arising from re-suspension of mud particles, and mixing of fresh and salt water.
- 7 Shellfish are relatively well adapted to these typical estuarine environments.
- 8 In the unlikely event of a bentonite release, allowing for natural mixing, dispersion, dilution and settlement over the two kilometres between the pipeline crossing location and the closest point of the Designated Shellfish Area, no significant effects on the commercial mussel farming activities are predicted either direct effects on the mussels as an animal, or in the form of accumulations in the mussels which could render the animal unsafe to eat.

We confirm that the pipeline crossing depth will be a minimum of 10 metres.

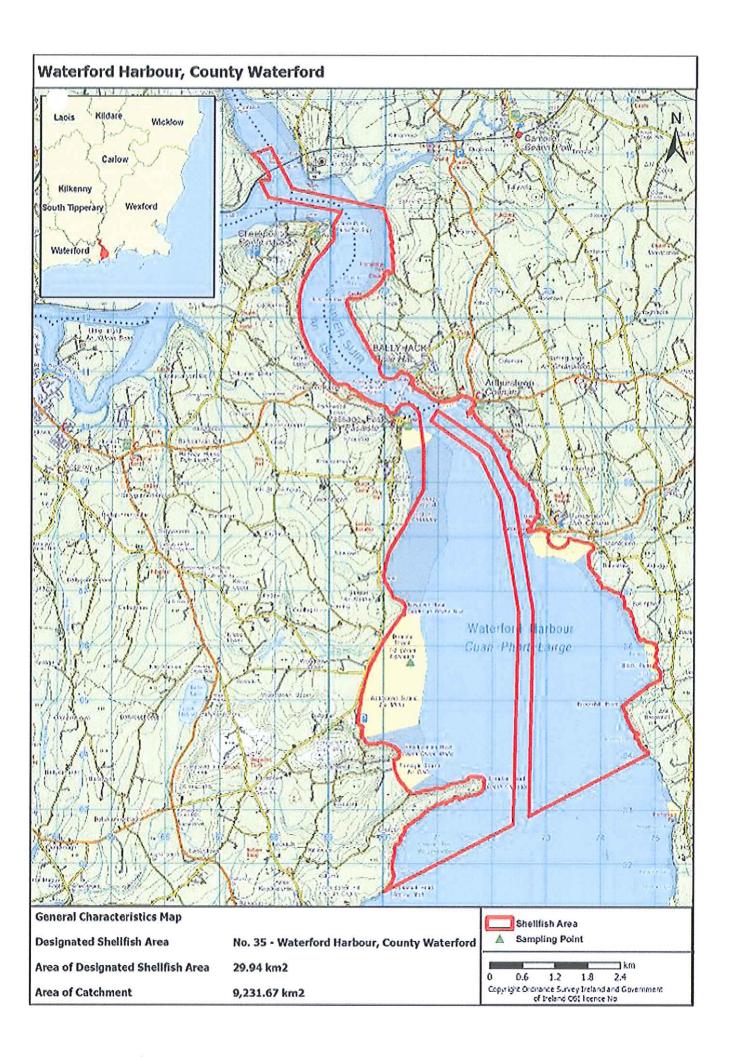
If you have any further queries, or require any further clarification, please do not hesitate to contact me.

Thank you.

#### Dan

Hazard		Risk	Risk Level	DECISIONS / CONTROL MEASURES TO ELIMINATE / REDUCE RISK	Residua
			H/M/L		H/M/L
1	Mud return pipeline mechanical failure	Line leaks during service	L	<ul> <li>Pipeline will be fabricated from high grade materials</li> <li>Pipeline sections will be fusion buttwelded</li> <li>Pipeline will be tested prior to entry into service</li> <li>Pipeline will operate at atmospheric pressure + slight elevation head</li> </ul>	L
2	Mud return line impacted by passing overhead marine traffic	Line is damaged and leaks	М	<ul> <li>Pipeline will be weighted and settled into the soft silt accumulation on the river bed</li> <li>Pipeline operation will always be under the supervision of experienced personnel</li> </ul>	L

				<ul> <li>Any deterioration in pipeline operation after a ship passes and the pipeline will be shut down</li> <li>Marine traffic is extremely infrequent</li> <li>Close liaison with the New Ross Port Authority will provide advance warning of approaching traffic and the operation of the pipeline will e closely monitored</li> </ul>
3	Mud return line impacted by river marine currents	Line is damaged and leaks	М	<ul> <li>River currents velocities are low in the vicinity of the crossing location therefore careful design of the pipeline weighting elements and positioning on the river bed should ensure adequate anchorage to the river bed</li> <li>Any deviation of the horizontal entry angle of the pipeline entrance alignment into the river will be monitored for indication of underwater movement</li> <li>Close liaison with the New Ross Port Authority will provide advance warning of approaching traffic and the operation of the pipeline will e closely monitored in the event kick-back from the ship propulsion would impact the pipeline</li> </ul>
4	Third party damage	Pipeline leak	L	The HDD works site will be secured if left unattended during night time down time The HDD crossing location is in a rural sparsely populated area
5	Lack of operational experience involving this technique	Operational mishap causing leak	L	The HDD works including the design, construction, installation and operation of the mud return line will be executed to the highest of standards by qualified, experienced personnel specialising in this operation



From: Bernard Nolan [mailto:Bernard.Nolan@environ.ie]

Sent: 30 March 2011 13:25

To iniel Garvey
Cc: Matthew McLoughlin

Subject: RE: RE: MS51/6/333 Foreshore Licence Application Great Island Gas pipeline & 333(a) geotechnical survey

Dan,

The Sea Fisheries Protection Authority is concerned about a possible release of bentonite affecting the cultivated mussels downstream of the proposed site. Could you please confirm that any such release will not directly affect the mussels as an animal and will not accumulate in the mussel and render the animal unsafe to eat?

Am I correct in my understanding that you won't be able to provide information on the depth of the crossing pending the results of a geotechnical survey currently undergoing the foreshore consent process 6/333(a)?

If this is the case we will do what we can to expedite the other process. I will need to consult with my colleague on the case, however I believe we may be able to proceed with the public notice element of 333(a) shortly.

The proposed site investigation licence would be subject to a standard charge of €950.

#### regards

Bernard Nolan
Foreshore Unit
Planning Policy and Legislation
Department of the Environment Heritage and Local Government
Newtown Road
Wexford

### 053 9117367

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Is faoi rún agus chun úsáide an té nó an aonán atá luaite leis, a sheoltar an ríomhphost seo agus aon comhad atá nasctha leis. Má bhfuair tú an ríomhphost seo trí earráid, déan teagmháil le bhainisteoir an chórais.

Deimhnítear leis an bhfo-nóta seo freisin go bhfuil an teachtaireacht ríomhphoist seo scuabtha le bogearraí frithvíorais chun víorais ríomhaire a aimsiú.

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 Marine Survey Office, Abbey View House, Ballyshannon, Co.Donegal Ireland. Tel: 071-9822400

Dept. of Environment, Heritage
8: Local Government
0 1 OCT 2010

Wexford

Fax:

Memorandum to	EHLG
Attention	Roibeard O'Duill
Fax No	
From	Nick Cantwell
No of Pages	1
Date	30 September 2010
Reference	MS51/6/332 777
CC	Gas main across River Barrow
	Co Waterford

- This office has no objections from a navigational viewpoint to the above application.
- In order for charts and nautical publications to be updated the applicant is required to inform the British Admiralty Hydrographic Office at Taunton, UK, of the location and nature of the proposed works.
   (Fax: 0044 1823 284077, email: <a href="mailto:hdc@hdc.hydro.gov.uk">hdc@hdc.hydro.gov.uk</a>)
- The applicant is required to arrange the publication of a local marine notice. This local marine notice should give a general description of operations and approximate dates of commencement and completion. An advertisement in a locally read newspaper will suffice. In addition a Port Marine Notice should also be issued by the Waterford Harbour Authority to advise shipping of the development.

- The applicant is to make adequate provision for signage to indicate the existence of the Pipe.
- The views of the divisional engineer should be sought.
- The Waterford harbour master should be advised prior to each stage of the development.

Yours faithfully

N.W.Cantwell (Capt.) Nautical Surveyor

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