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Director of Services – Environment Department Limerick City Council City Hall Merchant's Quay Limerick

02/07/2012

Reg No: W0281-01 Bord Gais Eireann

Dear Sir/Madam,

I am to advise you that the Agency has received an application for a Waste Licence from Bord Gais Eireann, for a facility located at Bord Gais Eireann, Limerick Gasworks, Dock Road, Limerick.

The applicant proposes, as part of this application, to provide for the discharge of process effluent to a sewer, which the applicant has stated is vested in, or controlled by, your Council. Process effluent includes trade effluent or other matter (other than domestic sewage or storm water). I enclose copy extracts from the application form, which detail proposed discharges.

The provisions of Section 52 of the Waste Management Acts, 1996 to 2011, provides that the Agency shall obtain the consent of the sanitary authority to the proposed discharge from an activity which involves the discharge of trade effluent or other matter (other than domestic sewage or storm water), to a sewer vested in or controlled by a sanitary authority.

In order to expedite the Agency's consideration of this waste licence application, I am to request your authority's consent to the proposed discharge/s. It should be noted that, your authority's consent may be subject to such conditions as your authority considers appropriate as provided for in Section 52 of the Waste Management Acts, 1996 to 2011 and Section 99E(3) of the Environmental Protection Agency Acts, 1992 and 2007. Your attention is drawn to paragraphs (3) and (4) of the attached copy of the relevant section of the Act. For your convenience please find attached a reply form including a list of draft conditions compiled by the Agency.

In accordance with paragraph (2) of this section of the Act, you are requested to forward your response within 12 weeks of the date of this letter. Please note that any decision given after the expiry period shall be invalid and in those circumstances the Agency may proceed to determine the application concerned as if consent was obtained. Brian Meaney is dealing with this matter and can be contacted at the Environment Licensing Programme, Office of Climate, Licensing & Resource Use, Environmental Protection Agency, PO Box 3000, Johnstown Castle Estate, Wexford (Tel. No. 053 9160600), if you have any queries.

Your co-operation in this matter is appreciated.

Yours sincerely,

Mai Maj Sonja Smith

Sonja Smith Programme Officer

ELP

Office of Climate, Licensing & Resource Use

Section 99E (3) & (4) of the Environmental Protection Agency Acts, 1992 and 2007

- (3) Subject to subsection (4), a consent under subsection (1) may be granted subject to or without conditions and if it is granted subject to conditions the Agency shall include in the licence or revised licence concerned conditions corresponding to them or, as the Agency may think appropriate, conditions more strict than them.
- (4) The conditions that may be attached to a consent by a sanitary authority under this section are the following and no other conditions, namely conditions-
 - (a) relating to-
 - (i) the nature, composition, temperature, volume, level, rate, and location of the discharge concerned and the period during which the discharge may, or may not, be made,
 - (ii) the provision, operation, maintenance and supervision of meters, gauges, manholes, inspection chambers and other apparatus and other means for monitoring the nature, extent and effect of emissions,
 - (iii) the taking and analysis of samples, the keeping of records and furnishing of information to the sanitary authority,
 - (b) providing for the payment by the licensee to the sanitary authority concerned of such amount or amounts as may be determined by the sanitary authority having regard to the expenditure incurred or to be incurred by it in monitoring, treating and disposing of discharges of trade effluent, sewage effluent and other matter to sewers in its functional area or a specified part of its functional area,
 - (c) specifying a date not later than which any conditions attached under this section shall be complied with,
 - (d) relating to, providing for or specifying such other matter as may be prescribed.

SANITARY AUTHORITY RESPONSE re: SECTION 52 OF THE WASTE MANAGEMENT ACTS, 1996 to 2011

Name & Address of Sanitary Authority: Limerick City Council, City Hall, Merchant's Quay,

Limerick

Waste Reg. No.

W0281-01

Waste Facility:

Bord Gais Eireann, Limerick Gasworks, Dock Road,

Limerick,

Waste Licence Applicant:

Bord Gais Eireann

Consent:

Indicate Yes to one of the following statements:

| Consent granted subject to the consent | |
|--|--|
| conditions outlined below | |
| Consent granted without conditions | |
| Consent refused Note 1 | |

Note 1 Where it is proposed to refuse permission the reasons for the refusal should be clearly outlined in the response.

| | GENERAL CONSENT CONDITIONS | Condition to be included (Yes/No) |
|----|--|-----------------------------------|
| 1. | No specified emission from the installation shall exceed the emission limit value set out in <i>Schedule B: Emissions Limits to Sewer</i> . There shall be no other emission to sewer of environmental significance. | |
| 2. | The licensee shall carry out such sampling, analyses, measurements, examinations, maintenance and calibrations as out in <i>Schedule C</i> . | |
| 3. | Monitoring and analytical equipment shall be operated and maintained as necessary so that monitoring accurately reflects the discharge or emission. | |
| 4. | The licensee shall permit authorised persons of the Agency and the Sanitary Authority to inspect, examine and test, at all reasonable times, any works and apparatus installed, in connection with the process effluent, and to take samples of the process effluent. | |
| 5. | All automatic monitors and samplers shall be functioning at all times (except during maintenance and calibration) when the activity is being carried on unless alternative sampling or monitoring has been agreed in writing by the Agency for a limited period. In the event of the malfunction of any continuous monitor, the licensee shall contact the Agency as soon as practicable, and alternative sampling and monitoring facilities shall be put in place. Prior written agreement for the use of alternative equipment, other than in emergency situations, shall be obtained from the Agency. | |
| 6. | The licensee shall record all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence. | |
| 7. | The licensee shall provide safe and permanent access to all on-site sampling and monitoring points and to off-site points as required by the Agency. | |
| 8. | The licensee shall at no time discharge or permit to be discharged into the sewer any liquid matter or thing which is or may be liable to set or congeal at average sewer temperature or is capable of giving off any inflammable or explosive gas or any acid, alkali or other substance in sufficient concentration to cause corrosion to sewer pipes, penstock and sewer fittings or the general integrity of the sewer. | |
| 9. | In the event of any incident which relates to discharges to sewer, having taken place, the licensee shall notify the Agency, Local Authority and Sanitary Authority as soon as practicable after the incident. | |

| ADDITIONAL GENERAL CONSENT CONDITIONS in respect of discharges or emissions to sewers, in accordance with Section 52 of the Waste Management Acts, 1996 to 2011 (specify, if required) | | |
|--|--|--|
| | | |
| | | |
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| | | |
| | | |

Limit Values for Process Effluent to Sewer

Schedule B: Emission Limits

Waste licence application Register No. <u>W0281-01</u>

| Emission Point Reference No: | |
|---|----------------|
| Emission to (sewer description): | |
| Volume to be emitted: Maximum in any one day: | m^3 |
| Maximum rate per hour: | m ³ |

| Parameter (delete parameters which are not applicable) | Emission Limit Value | | |
|--|------------------------------------|--------------------------------|--|
| фристоссу | Daily Mean Concentration (mg/l) | Daily Mean Loading (kg/day) | |
| BOD | | | |
| COD | | | |
| Suspended Solids | | | |
| PH | | | |
| Temperature | | | |
| ADDITIONAL PARAMETERS (if required) | | | |
| | | | |
| | | | |
| | | | |
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Frequency of Monitoring Process Effluent to Sewer

Schedule C

Waste Licence application Register No. $\underline{W0281-01}$



B.4 Sanitary Authority

In the case of a discharge of any trade effluent or other matter (other than domestic sewage or storm water) to a sewer of a sanitary authority or other body, give the name of the sanitary authority in which the sewer is vested or by which it is controlled and the waste water treatment plant (if any) to which the sewer discharges.

| Name: | Limerick City Council |
|----------|------------------------|
| Address: | Environment Department |
| | City Hall |
| | Limerick |
| Tel: | +353 (61) 407 190 |
| Fax: | +353 (61) 407 255 |

The applicant must enclose, as **Attachment B.4**, a copy of any effluent discharge licence and/or agreement between the applicant and the body with responsibility for the sewer.

B.5 Other Authorities

The applicant should tick the appropriate box below to identify whether the activity is located within the Shannon Free Airport Development Company (SFADCo.) area.

| Within SF | ADCo. Area Yes No No |
|-------------|---|
| The applica | nt should indicate the Health Board Region where the activity is or will be located. |
| Name: | HSE West |
| Address: | Merlin Park |
| | Galway |
| Tel: | 091 775262 |
| Fax: | 091 771318 |

B.6 Notices and Advertisements

Articles 6 and 7 of the Waste Management (Licensing) Regulations 2004 requires all applicants to advertise the application in a newspaper and by way of a site notice. See *Guidance Note*.

Attachment B.6 should contain a copy of the site notice and an appropriately scaled drawing (\leq A3) showing its location on site. The original application must include the complete newspaper in which the advertisement was placed. The relevant page of the newspaper containing the advertisement should be included with the original and three copies of the application.



Attachment B.2 - Location of Activity

The Site Plan. Drawing No. 1021927/WL/OD/002.

The Location Map. Drawing No 1021927/WL/OD/003.

The Services Plan. Drawing No 1021927/WL/OD/004.

Attachment B.3 - Planning Authority

A copy of the Environmental Impact Statement (report ref 102197/R/07) is attached.

An application for Planning Permission will be submitted to Limerick City Council in due course. The reference number will be forwarded to you, when received, together with a copy of all conditions.

Attachment B.6 contains a copy of the written notification to the Planning Authority, informing them that an application for a Waste Licence is being submitted to the Environmental Protection Agency.

Attachment B.4 – Sanitary Authority

The need for a discharge consent is considered likely and depends upon the remediation methodology proposed by the Contractor(s).

It shall be the responsibility of the Contractor(s) when appointed, to apply for discharge consent and confirmation of the agreement shall be forwarded once received. (See attachment F.4)

Attachment B.6 - Notices and Advertisement

A copy of the Site Notice is attached. The locations at which it has been displayed from the 3rd May 2012 are identified on Drawing 1029127/WL/OD/003.

Complete copies of the Irish Examiner dated Thursday 26th April 2012 (advertisement on Page 35) and the Limerick Leader dated Saturday 28th April 2012 (advertisement on page 17 of Leader 2) are included in enclosure B.6..

A copy of the written notification to the Planning Authority is attached, informing them that an application for a Waste Licence is being submitted to the Environmental Protection Agency



REFER TO ATTACHMENT F.4

TABLE E.3(i): EMISSIONS TO SEWER(One page for each emission)

| 17 | • | | - | | |
|-----|-----|----------|------|-----|----|
| HIT | 211 | CIA | n P | oin | • |
| | 113 | σ | 11 1 | OIL | ι. |

| Emission Point Ref. Nº: | |
|----------------------------------|--|
| Location of connection to sewer: | |
| Grid Ref. (10 digit, 5E,5N): | |
| Name of sewage undertaker: | |

Emission Details:

| (i) Volume to be emitted | | | |
|--------------------------|----------------|-------------|-------|
| Normal/day | m ³ | Maximum/day | m^3 |
| Maximum rate/hour | m ³ | | |

(ii) Period or periods during which emissions are made, or are to be made, including daily or seasonal variations (*start-up /shutdown to be included*):

| | | | i |
|---------------------------|--------|--------|--------|
| Periods of Emission (avg) | min/hr | hr/day | day/yr |
| fi | | | |

REFER TO ATTACHMENT F.4

TABLE E.3(ii): EMISSIONS TO SEWER - C

EMISSIONS TO SEWER - Characteristics of the emission (1 table per emission point)

Emission point reference number:

| % Efficiency | | |
|--------------------|--|--|
| | kg/year | |
| | kg/day | |
| As discharged | Max. daily average (mg/l) | |
| | Max. hourly average Max. daily average kg/day kg/year (mg/l) | |
| Prior to treatment | kg/year | |
| | kg/day | |
| | Max. daily average (mg/l) | |
| | Max. hourlyMax. dailykg/dayaverageaverage(mg/l)(mg/l) | |
| Parameter | | |



Attachment E.3 - Emissions to Sewer

The Contractor(s) shall agree a discharge consent with Limerick City Council and a copy shall be forwarded to the EPA as soon as approval is granted. See also attachment F.4.

Attachment E.4 - Emissions to Groundwater.

During Phase 1 works, treated water may be reinjected back in to the ground depending on the contractors selected methodology although this is part of the process and is therefore not waste. Alternatively, the contractor may opt to discharge treated water into the drainage system. Treated water will meet, as a minimum, criteria agreed for discharge info the drainage system (see Attachment F.4). In any case, water is recycled within a limited vicinity (i.e. within tanks) and monitoring of groundwater is undertaken across the site to verity that groundwater quality is not adversely affected beyond the treatment area.

Attachment E.5 - Noise Emissions

The precise plant and equipment that the Contractor(s) will utilise on site is not currently known. However it is likely to include; drill rig (possibly sonic or rotary type), ground water / scavenger pumps, generator, tracked excavators, dumpers, dozers, crusher and stabilisation/solidification plant. All the likely plant will not be on site for the entire duration and will not all be on site and operating at the same time.

The Contractor(s) shall comply with relevant guidance and legislation regarding noise emissions. This will include silenced groundwater/scavenger pumps and soundproofed cabins housing generators.

All on site machinery such as excavators and dumpers shall have silenced exhausts.

The Specification requires the Contractor(s) to control noise emissions (Specification Clause A810) and monitor noise emissions (clause A820) on a regular basis. Specification Clause A280 requires the Contractor(s) to report the results of this monitoring on a regular basis.

The Contractor(s) is required to monitor vibration during the works in accordance with Specification Clause A830 and also to control vibration in accordance with Specification Clause A810.





F.4 Sewer Discharge

Monitoring of sewer discharge shall be carried out at the point specified by the local authority/Agency.

| Monitoring Arrangements specified | yes 🖂 | no 🗌 | not applicable |
|-------------------------------------|-------|------|----------------|
| Monitoring points identified, (plus | yes 🖂 | no⊠ | not applicable |
| 12-figure grid references) | · | | |
| Attachment included | yes 🖂 | no 🖂 | not applicable |

F.5 Groundwater

Groundwater monitoring is required at all landfill facilities; and certain other waste facilities depending on waste activities and the underlying aquifer vulnerability.

| Monitoring Arrangements specified | yes 🖂 | no | not applicable |
|-------------------------------------|-------|------|----------------|
| Monitoring points identified, (plus | yes 🖂 | no | not applicable |
| 12-figure grid references) | | | |
| Attachment included | yes 🖂 | no 🗌 | not applicable |

F.6 Noise

| Monitoring Arrangements specified | yes 🖂 | no | not applicable |
|-------------------------------------|-------|-----|----------------|
| Monitoring points identified, (plus | yes 🗌 | no⊠ | not applicable |
| 12-figure grid references) | | | |
| Attachment included | yes 🖂 | no[| not applicable |

F.7 Meteorological Data

| Monitoring Arrangements specified | yes 🖂 | no | not applicable |
|--|-------|----|----------------|
| Monitoring points identified, (plus | yes 🖂 | no | not applicable |
| 12-figure grid references) | • | | |
| Attachment included | yes 🖂 | no | not applicable |

Application for Landfills require the additional Attachments F.7 to F.8, to be completed:

F.8 Leachate

| Monitoring Arrangements specified | yes 🗌 | no | not applicable |
|-------------------------------------|-------|----|----------------|
| Monitoring points identified, (plus | yes 🗌 | no | not applicable |
| 12-figure grid references) | - | | |
| Attachment included | yes 🗌 | no | not applicable |





Section F- Control and Monitoring

Attachment F.1 - Emissions and Abatement

No emission points are present for the works other than the discharge to sewer for treated waters pumped from boreholes (Phase1) and excavations (Phase 2)

Water from the site will be passed through an on-site treatment works. This will include, as a minimum, an oil-water separator, sand filter and an activated carbon unit. After treatment, water would be stored in tanks and tested prior to discharge under licence, to sewer.

Attachment F.2 - Air - to include Dust, Odour

The monitoring of odour and vapour will be carried out by the Contractor(s) in accordance with Specification Clause A870. Monitoring locations will be dependent upon the operations and wind direction.

The monitoring of dust will be carried out in accordance with Specification Clause A850. Dust monitoring locations (at the site boundaries) are identified on Drawing No. 1021927/TENDER/OD/011 presented in the Specification. Grid references for the 4 monitoring locations are:

North east boundary - 156999E 156580N

South east boundary - 156966E 156513N

South west boundary - 156907E 156521N

North west boundary - 156915E 156600N

Clause A280 requires the Contractor(s) to report the regular dust and odour monitoring

Attachment F.3 - Surface Water

Not applicable. There are no emissions to surface waters.

Attachment F.4 – Sewer Discharge

Monitoring of sewer discharge will be carried out in accordance with the local authority discharge licence.

Limerick Gas Works Remediation Waste Licence Application Attachments



A discharge consent will be applied for by the Contractor(s) from the Sanitary Authority (Limerick City Council).

Compliance with the relevant chemical concentration limits will be the responsibility of the Contractor(s). The table below indicates the anticipated likely chemical concentration limits (these are similar to those adopted for Dublin and Waterford gasworks remediation projects which were also undertaken under waste licences 100-1, 108-1 and 190-1). Communication with Limerick City Council indicates that similar levels would be acceptable at this facility. When the discharge consent has been approved, correspondence, including the agreed discharge constraints and compliance testing regime will be forwarded.

| Criteria | Limit |
|---|------------|
| Temperature | <25°C |
| рН | 6-10 |
| BOD | <50 mg/l |
| COD | <300 mg/l |
| Nitrates (as N) | <10 mg/l |
| Sulphates (as SO ₄) | <500 mg/l |
| Phenols (as C ₆ H ₅ OH) | <3 mg/l |
| Arsenic | <0.6 mg/l |
| Mercury | <0.01 mg/l |
| Cadmium | <0.05 mg/l |
| Cyanide (total, free) | <3.0 mg/l |
| Lead | <0.5 mg/l |
| Copper | <5 mg/l |
| Zinc | <10 mg/l |
| Chromium | <0.5 mg/l |
| Polyaromatic Hydrocarbons (PAH) | <0.2 mg/l |
| Mineral Oils | <50 mg/l |
| Toxicity Units (as T.U) | <30 t.u |

It is anticipated that treated water will be discharge into the foul sewer on Dock Road (Grid ref 156876E, 156570N).