

## **Dublin City Council**

, Comhairle Cathrach Bhaile Átha Cliath

# **Environment and Engineering Department**

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25th January 2008

Ms. Ann Keogh EPA Headquarters PO Box 3000 Johnstown Castle Estate Co. Wexford

RE: Waste Licence Register No. W0232-01

Environmental Protection Agency Licensing Received

2 8 JAN 2008

Initials

Dear Madam,

Please find enclosed submission on behalf of the applicant, Dublin City Council, in respect of the Proposed Decision for Waste Licence Register No. W6232-01 issued by you on 21st November 2007.

Yours sincerely,

M. Twomey

Assistant City Manager

An Roinn Comhshaoil agus Innealtóireachta

Bloc 1,Urlár 4Oifigí na Cathrach Sráid Sheamlas an Éisc Baile Átha Cliath 8

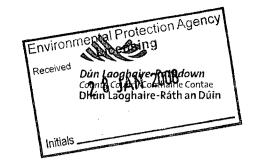
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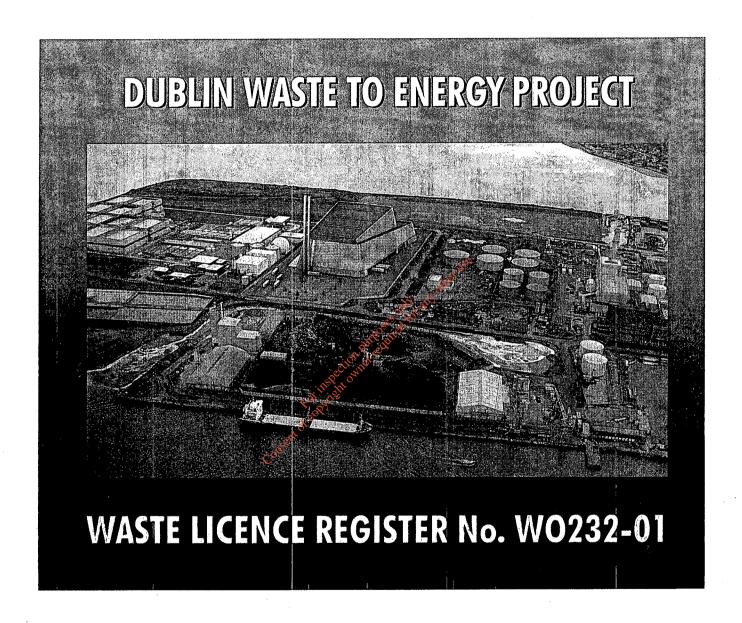
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Response Submission to Objections in accordance with Article 23(2) of the Waste Management Licencing Regulations 2004

January 2008



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## WASTE LICENCE FOR A NON-HAZARDOUS WASTE INCINERATOR/WASTE TO ENERGY FACILITY W0232-01

APPLICANT: DUBLIN CITY COUNCIL, CIVIC OFFICES, WOOD QUAY, DUBLIN 8

(28 JANUARY 2008)

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SUBMISSION TO EPA UNDER ARTICLE 23(2) OF THE WASTE MANAGEMENT (LICENSING) REGULATIONS 2004 IN RESPONSE TO OBJECTIONS TO WASTE LICENCE PROPOSED DECISION W0232-01 UNDER SECTION 42 OF THE WASTE **MANAGEMENT ACTS, 1996 TO 2007** 

#### PURPOSE OF SUBMISSION

The Environmental Protection Agency (EPA) in its correspondence dated 20 December 2007 , invited a further submission from the applicant in accordance with Article 23(2) of the Waste Management (Licensing) Regulations 2004 in respect of the Proposed Decision for Waste Licence Register No. W0232-01 (the "Proposed Licence") issued by the EPA on 21 November 2007. Dublin City Council (DCC), on behalf of the four Dublin Local Authorities, makes this further submission to the EPA by way of response to the following issues raised in objections made under Section 42 of the Waste Management Acts, 1996 to 2007 (WMA) to the draft conditions of the Proposed Licence:

- 1. Responsibility for the Facility
- 2. Residual Waste and Requirements For Pre-Treatment

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#### 1 RESPONSIBILITY FOR THE FACILITY

In this part of the submission, DCC seeks to demonstrate to the EPA and to the public that the strategy and contractual arrangements put in place by DCC in relation to the Dublin Waste to Energy Project (the "Project") enable it to ensure that those persons appointed by it have the technical and financial competence to design, construct and operate the Dublin Waste to Energy Facility (the "Facility"), and that the terms and conditions of the waste licence are fully complied with in a timely manner. It should be noted that DCC will be the licensee under the waste licence for the Facility, and is by definition a fit and proper person within the meaning of the WMA to hold a waste licence (see section C below).

## A Contractual Arrangement

The licensee under the Proposed Licence for the Facility is Dublin City Council (DCC) and DCC is the entity that would be primarily liable and financially responsible for compliance with the waste licence for the Facility.

DCC entered into a PPP arrangement under a Project Agreement with Dublin Waste to Energy Limited, which is jointly owned by Danish Oil and Natural Gas (DNG) and Covanta Energy Corporation (Covanta) ("PPP Co") for the design, construction, operation, maintenance and financing of the Project.

Through the contractual mechanisms by which SCC and PPP Co are bound, DCC's own capacities as a local authority are supplemented by DEG and Covanta's unparalleled qualifications and experience in the field of waste to energy, as well as the financial capacity to meet any commitments and liabilities arising through the operation of the Facility. DEG is a major European energy company with a large and highly rated financial capacity. It controls substantive energy assets in Europe, and possesses a portfolio of waste to energy projects with amongst the best operational and environmental records in Europe. Covanta is the largest single operator of waste to energy projects in the world, possessing a portfolio of waste to energy and waste management assets that are on a par with European best practice, and having a substantive and highly experienced in-house development and operations staff capable of projecting itself around the globe.

#### **Procurement Process**

DCC commenced the procurement of the project in 2002 under the EU Works Directive. Interested parties were invited to submit a Request for Qualification in July 2002 which provided a basic outline of the Project and requested a detailed description of the qualifications of the applicants, including: [items deleted where detail not provided in Covanta submission]

- Structure, activities and resources of applicant
- Minimum turnover
- Details of key personnel who would undertake roles of Project Manager, Contractor,
  Operator, Process Designer and Legal Advisor
- Details of parent or holding companies and guarantees

- Statement as to eligibility under EC Directive 93/36/EEC (as amended by Directive 97/52/EC) regarding the award of public supply contracts
- Details of Quality Assurance Procedures and Quality Plans
- [Details of any certification or project failures and health and safety / environmental prosecutions]
- Financial information (including accounts, credit ratings), parent company support and project finance experience of each shareholder in the applicant
- Details about the Process Designer, Financial Advisor, Legal Advisor (including turnover, staffing, relevant project experience)
- Details of waste to energy plants designed, constructed and operated by applicant
- Health and safety awards and policy of applicant
- Details about the Contractor (including turnover, staffing, relevant project experience, resources, health & safety procedures, industrial relations, financial information, recruitment and training)
- Details about the Operator (including recruitment and training, experience of residue recycling and residue disposal, environmental management, regulatory experience)

DCC also established the following minimum financial requirements for pre-qualification:

- combined minimum turnover of shareholders in the applicant of €150 million in each of previous three financial years
- combined minimum turnover of members of the applicant responsible for process design services, construction services and thermal technology of €150 million in each of previous three financial years
- minimum turnover in the waste to energy sector of member of the applicant responsible for operation of the facility of €50 million in each of previous three financial years

A total of thirteen proposals were received, of which four were invited to participate in the final tender process. Three tenders were received. Following a detailed clarification process DCC deemed the offer submitted by Elsam A/S of Denmark to be the most economically advantageous offer received, and entered into detailed contract negotiations in late 2003.

During the negotiations process Elsam A/S was acquired by DEG as part of a transaction involving several major companies active in the northern European electricity market, and which resulted in a series of asset and business line acquisitions and disposals.

Following the Elsam acquisition DEG decided following negotiations with DCC that it would take on a project partner with strong interest and experience in the waste to energy sector. DEG proposed to DCC that it invite the US firm Covanta into its project group as a partner. After a detailed examination of Covanta's qualifications, re-conducting the pre-qualification evaluation process (including technical and financial evaluation as described above) for the proposed DEG-Covanta project group in April 2007, DCC agreed to enter a contract for the project with the combined DEG-Covanta entity.

#### **Project Agreement**

The Project Agreement between DCC and PPP Co is in line with modern European principles and Department of Finance Guidelines for structuring Public Private Partnerships to ensure

their technical and financial success. Appendix 1 provides a general description of the relevant key provisions of the Project Agreement between PPP Co and DCC that will enable DCC to ensure that PPP Co designs, constructs and operates the Facility as prescribed in the Project Agreement and in accordance with the planning approval and the waste licence for the Facility. This information is provided in order to satisfy the EPA in relation to DCC's power to "police" activities at the Facility.

Some of the mechanisms available to DCC under the Project Agreement to ensure compliance by PPP Co with the waste licence include:

- Rigorous review and certification rights over various elements of design and construction
- Approval rights and certain other restrictions on change in ownership of PPP Co
- · Collateral warranties provided by key subcontractors
- · Price deductions for failure to meet acceptance testing performance requirements
- Payments to DCC to offset additional disposal costs for failure of PPP Co to accept required waste streams
- · Payment deductions for failure to meet certain operating performance criteria
- Parent company guarantees during construction and operation

#### **B** Corporate Structure of PPP Co

PPP Co is a wholly owned subsidiary of Dublin Wasterto Energy Holdings Limited ("Hold Co"). Hold Co is jointly owned by Covanta Energy Trefand Limited, an indirect wholly owned subsidiary of Covanta Energy Corporation, and DEG.

This corporate structure will ensure that the Project has the benefit of the collective experience of two major international companies involved in the energy and waste to energy industries. Covanta and DEG are world leaders in the waste to energy field. The corporate and contractual structures outlined above will ensure that the Facility is of the highest quality and is designed, constructed and operated according to all applicable Irish and EU standards.

## C "Fit and proper person" within meaning of WMA

Before granting a waste licence, the EPA is generally required under Section 40(4)(d) WMA to be satisfied that the applicant is a "fit and proper person" to hold a waste licence. However, this requirement does not apply where the applicant is a local authority. There is a presumption that a local authority applicant is a fit and proper person to hold a waste licence. Therefore, DCC is by definition a fit and proper person within the meaning of the WMA to hold a waste licence for the Facility.

This does not mean that DCC itself possesses all of the skills necessary to design, construct, operate or maintain a waste to energy project. From the commencement of planning for this project the Council has been cognisant of the fact that a waste to energy facility is technologically complex and that its successful development and operation would require a suitably skilled and properly motivated partner. These needs underlay the decision to utilise the PPP contractual structure, and drove the procurement process itself. DCC will also be commencing a procurement process to appoint technical advisers to assist DCC in

supervising and monitoring the performance of PPP Co and to ensure the enforcement of DCC's rights under the Project Agreement.

Although it is not a pre-condition to obtaining a waste licence for the Facility, DCC wishes to demonstrate that those parties with which it has entered contractual arrangements for the design, construction and operation of the Facility, would also constitute "fit and proper persons" within the meaning of the WMA.

A person shall be regarded as a "fit and proper person" within the meaning of the WMA if it satisfies the following three tests (Section 40(7) WMA):

- (i) No convictions under the WMA, the Environmental Protection Agency Act 1992, the Local Government (Water Pollution) Acts 1977 and 1990, or the Air Pollution Act 1987;
- (ii) Requisite technical knowledge or qualifications to carry on the activity in accordance with the waste licence and the WMA; and
- (iii) Ability to meet the financial commitments or liabilities that may be incurred involved in carrying on the activity in accordance with the waste licence or in ceasing to carry on that activity.

### (i) No relevant convictions

PPP Co, its principal subcontractors, and any of the referred to in Section 40(7) WMA.

## Environmental, Health and Safety Programme

Covanta and DEG are committed to providing the Facility with a strong environmental, health and safety (EHS) programme and maintaining high EHS standards in accordance with the Environmental Impact Statement (EIS) prepared for the Project, the Proposed Licence and the design and performance requirements defined by those and other documents.

The design basis provided with the EIS was developed by DEG. DEG has significant experience in designing facilities to meet the stringent EU standards, and these were applied when developing the EHS System for the Facility. WTE facilities in the United States are designed and equipped with air pollution control systems and equipment that are similar to those used in the EU and in fact, are often supplied by the same equipment suppliers. Therefore, Covanta's U.S. and international experience in the power plant and WTE industry provides the company with a substantial knowledge base to select processes and equipment that are best for the site specific requirements.

Covanta's experience in owning and/or operating 37 facilities over a 20 year period has allowed it to optimise its operational approach, especially in the area of environmental compliance. This experience has been incorporated into an Environmental Management System (EMS) that will be combined with DEG's experience and applied to the Facility. Covanta's EMS includes customised operating plans and procedures that are designed for continuous compliance with all environmental requirements.

Dublin Waste to Energy EPA Ref. W0232-01

Covanta has a very strong compliance record in the U.S. and Europe. Annual emissions at Covanta facilities are a small percentage of the amount allowed by the facility permits. 16 of Covanta's 34 facilities in the United States have received membership in USEPA's Performance Track programme. This programme is comparable to the ISO 14001 certification which Covanta has also secured at several facilities and will be securing for the Dublin WTE Facility.

Covanta has a corporate health and safety program to protect and maintain the health and welfare of employees at all its facilities. Twenty three of Covanta's WTE facilities in the United States have been awarded the Voluntary Protection Program (VPP) Star Award (the highest award available from the US OHSA) with all of its WTE facilities on track to be VPP facilities by 2009.

DEG has been operating WTE facilities in Denmark for the last 25-30 years and has been working closely with the relevant Danish authorities on developing the regulatory framework for the industry. The EU Waste Incineration Directive has been transposed into Danish law and all DEG's facilities operate under licences issued by the Danish EPA. Emissions are substantially lower than the licence limits and the compliance record is very strong. DEG's environmental and health and safety systems are certified under ISO 14001 and ISO 18001, respectively. DEG's corporate environmental policies are solidly enshrined in the organisation and forms part of the corporate values.

## (ii) Requisite technical knowledge or qualifications

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#### Covanta's capabilities and experience

Covanta provides a wide variety of waste management and energy-related services to its domestic and international client base. Through its subsidiary companies, Covanta provides state-of-the-art waste management and/or energy generation services utilizing a variety of fuels for the production of steam and/or electricity.

Covanta's primary strength lies in its substantial human resource talent base. In addition to approximately 2,500 employees working in its facilities, Covanta maintains a total corporate staff of nearly 250 in its Fairfield, NJ headquarters. Through the office locations listed below, the company is able to support and maintain local oversight on its substantial operations domestically and around the world.

#### **Domestic Offices**

- Fairfield, NJ (headquarters)
- Union County, NJ
- Haverhill, MA
- Fairfax County, VA
- Pasco County, FL
- Stanislaus County, CA

### International Offices

- Bangkok, Thailand
- Chennai, India
- Chongging, China
- Birmingham, UK
- Milan, Italy

Covanta's corporate staff includes professionals in a number of disciplines including business development, engineering, construction management, operations, maintenance, environmental compliance, health and safety, asset management, human resources, management information systems, accounting, finance, and legal. A significant number of these individuals have over ten years of experience in the WTE industry and many have over twenty years of experience.

Covanta's principal business units are Domestic and International Energy. The company owns or operates 57 power and/or steam generation facilities, 46 of which are in the United States and 11 of which are located in Europe, Asia and Central America. Covanta's generation facilities use a variety of fuels, including municipal solid waste (MSW), water (hydroelectric), natural gas, coal, wood waste, landfill gas and heavy fuel oil. In the generation of electricity these facilities employ a number of diverse technologies including pulverized coal, mass burn WTE, refuse derived fuel (RDF), hydroelectric, diesel engine, stoker fired wood burning and fluidized bed coal burners.

Covanta is a leading global provider of safe, reliable and environmentally superior WTE facilities. Covanta owns and/or operates 37 modern WTE facilities processing MSW into renewable energy; all under long term contracts with rigorous provisions for environmental, processing and energy recovery performance and cost guarantees. Most of these contracts are with local government authorities similar to the arrangement with DCC. These WTE facilities collectively process almost 15 million tonnes of MSW per year, serving the solid waste disposal and energy generation needs of more than 17 million citizens around the world. Through these facilities Covanta has substantial experience in operating a wide range of WTE thermal and air pollution control technologies including eight different stoker technologies. A majority of these projects were constructed by Covanta under design and construction contracts.

Covanta WTE facilities range in permitted processing capacity from 75,000 tonnes per year (TPY) to 1 million TPY. Combined, these facilities are comprised of over 90 boiler trains that have a total combined processing design capacity of approximately 45,000 tonnes of MSW per day. In total, the boilers have a steam generation capacity of nearly 6,000 tonnes of steam per hour representing a gross generator output in excess of 1,300 megawatts (MW).

#### DEG's capabilities and experience

DEG has been involved in the WTE industry in Denmark for over 25 years; indeed DEG played an active role in developing the industry in Denmark and worked closely with the relevant authorities when the environmental framework for the industry was being developed.

DEG is owned partly by the Danish State and partly by regional electricity distribution companies and local government throughout Denmark. This unique ownership structure has provided for a close cooperation between DEG and local governments and environmental authorities.

DEG is involved in oil and gas exploration and production, gas and electricity distribution, gas and electricity supply and trading and in the generation of electricity from both thermal and renewable sources.

DEG operates mainly in the Northern European market. DEG owns and operates six WTE facilities in Denmark, and is providing consultancy services to a number of additional facilities in Denmark and abroad.

DEG's WTE facilities in Denmark are as follows:

- Odense CHP plant
- Horsens CHP plant
- Haderslev CHP plant
- Vejen CHP plant
- Frederikshavn CHP plant
- Maabjerg CHP plant

Consultancy services have been provided in relation to the Vestforbrænding waste fired CHP plant in Copenhagen, Denmark and the Jonkoping CHP plant in Jonkoping, Sweden.

DEG's corporate staff includes professionals in a number of disciplines including business development, engineering, construction management, operations, maintenance, environmental compliance, health and safety, asset management, human resources, management information systems, accounting, finance, and legal. A significant number of these individuals have over ten years of experience in the WTE industry and many have over twenty years of experience.

## (iii) Ability to meet financial commitments and liabilities

PPP Co is supported by robust parent company guarantees, a letter of credit, collateral warranties, insurances and wide ranging indemnities.

#### **Covanta Financial information**

Coupled with the company's technical strengths, Covanta's corporate financial strength is best exemplified by the demonstrated ability to successfully develop many of the projects it has interests in, both domestically and internationally using municipal solid waste, hydroelectric, biomass, biogas and fossil fuels. For the majority of these transactions, Covanta played an integral role in arranging the financing including revenue bond and project financing. The company's financial metrics continue to demonstrate its long-standing ability to not only develop world class facilities but also stand behind the stringent guarantees required to give lenders assurance of quality performance throughout the life of the contracts.

Financial results for all of the Covanta family of companies are filed as part of a consolidated statement under the ultimate parent company, Covanta Holding Corporation; listed as CVA on the New York Stock Exchange. As of the writing of this paper, CVA's market capitalization was approximately \$3.9 billion.

Covanta's 2006 10-K report and other financial information are located on its website at www.covantaholding.com under the headings Investor Information and SEC Filings.

## **DEG Financial Information**

In 2006 the DEG group of companies reported a turnover of €4.8 billion, a result after tax of €660 million and held fixed assets valued at €6.3 billion.

DEG's Annual Report for 2006 is available on its web-site, www.dongenergy.com.

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#### 2 RESIDUAL WASTE AND REQUIREMENTS FOR PRE-TREATMENT

A number of objectors have sought clarification of the definition of "Residual Waste" in the Proposed Licence and the requirements that will apply with regard to pre-treatment of waste to be processed at the Facility.

Residual Waste is defined in the Proposed Licence as follows:

"Residual Waste" in the context of intake to an incinerator/WtE plant, is waste that has been subjected to pre-treatment (including inter alia<sup>1</sup>, pre-segregation, sorting, mechanical-biological treatment) to extract to the maximum, practical and available extent having regard to BAT, the recyclable/reusable components".

Condition 1.6 provides that "Only residual wastes shall be incinerated at the facility."

In DCC's view, the requirements of the Proposed Decision in relation to residual waste do not require clarification. It is clear that only waste that has been subjected to a method of pretreatment (including any, and not necessarily all, of the methods mentioned in the definition) may be incinerated at the Facility. Such pre-treatment must extract the recyclable / reusable components to the maximum <u>practical and available</u> extent having regard to Best Available Techniques. This requirement is in line with current Government and local authority practice and policy of pre-segregating and sorting waste through the three-bin system.

The EPA Inspector's Report notes (at paragraph 7, page 13) that "the proposal complies with the objectives of the EU waste hierarchy by recovering energy from waste and reducing the amount of waste sent for final – and the least preferred option – disposal to landfill... The proposal does not conflict with Government policy or waste management."

A comprehensive framework for Ireland's approach to waste management was put in place in the 1998 policy document "Waste Management" Changing our Ways". The policy is based on "integrated waste management", and the internationally adopted hierarchy of options which places greatest emphasis on waste prevention, followed by minimisation, re-use, recycling, energy recovery and, finally, the environmentally sustainable disposal of residual waste.

The significance of source (pre-) segregated collection systems is reiterated throughout the following Government policy documents.

- Changing Our Ways, 1998
- Delivering Change, 2002
- Taking Stock and Moving Forward, 2004
- National Biodegradable Municipal Waste Strategy, 2004

Local authorities have developed regional waste management strategies and waste management plans which give effect to the policy of "integrated waste management".

The Dublin Regional Waste Management Strategy (the "Strategy"), adopted in 1997, aimed to deliver on European and national policy targets through a combination of integrated waste management solutions and best environmental practice.

The Strategy examined in detail four possible scenarios for the management of Dublin's future waste arisings in order to identify the "Best Practicable Environmental Option" to deliver EU and National Policy targets for the Region. Each of the scenarios was modelled and compared taking into account the possible environmental, technical and financial implications of each option.

<sup>&</sup>lt;sup>1</sup> The latin term "inter alia" means "among other things".

The Strategy identifies the recovery of dry recyclables and organic material through source segregation employing a three-bin system as an integral part of implementing the Best Practical Environmental Option for the Region. The three-bin system is considered to be BAT (Best Available Techniques) for pre-treating waste and extracting recyclable/reusable components.

The Waste Management Plan for the Dublin Region 2005-2010 (the "Plan") sets out specific policy objectives for both household and commercial/industrial wastes, including the provision and continual expansion of source segregated (three-bin) systems for the separate collection of both dry recyclables and organic wastes. The provisions of the Plan for a three bin source-segregated collection system are consistent with the definition of residual waste and requirements in relation to pre-treatment as set out in the Proposed Licence. These provisions are implemented and are enforceable through local authority bye-law.

The Dublin local authority waste bye-laws for the storage, presentation and collection of waste implement the objectives of the Plan, including the three-bin system and the separate collection of dry recyclables and organic waste for recycling. The bye-laws of the Dublin local authorities, in accordance with national policy and the Dublin Waste Management Plan, associates the term "residual waste" with waste remaining following pre-treatment by methods such as source separation.

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#### Appendix 1

This Appendix summarises the relevant key provisions of the Project Agreement ('the Agreement') between Dublin Waste to Energy Limited ('PPP Co') and Dublin City Council ('the Authority').

#### 1. Parent Company Guarantees and Letter of Credit

A Pre-Termination Guarantee and a Termination Guarantee in fixed amounts must be entered into by Covanta Energy Corporation in favour of the Authority as security for the discharge by PPP Co of its obligations under the Agreement. PPP Co must procure that a Letter of Credit is issued to the Authority in a fixed amount by a credit institution having a credit rating of 'A' or better. This must remain in effect at all times until PPP Co demonstrates to the satisfaction of the Authority that the value of the works constructed equals or exceeds the amount of the Letter of Credit.

#### 2. Substantive Assets

PPP Co must maintain cash or cash equivalents in the amount of €12.5 million.

#### 3. Insurances

PPP Co is required to take out specified insurances from an approved insurer, to be maintained during the development, construction and operational periods. Such insurances must contain only approved terms and conditions and minimum limits are required for professional indemnity insurance, third party liability insurance, environmental impairment insurance and employer's liability insurance.

#### 4. PPP Co Warranties

PPP Co must provide extensive warranties to the Authority relating to the obtaining of necessary consents, no legal actions pending, and liabilities incurred, no PPP Co default, PPP Co tax compliance, PPP Co accounts and financial condition of PPP Co, the incorporation and corporate powers and authorities of PPP Co, the truth and accuracy of all written information furnished by PPP Co, no material facts or circumstances which might materially adversely affect the decision to enter the Agreement, and PPP Co satisfaction as to the nature and general conditions of the site.

#### 5. Principal Sub-Contractor's Deed of Collateral Warranty

Each of the principal sub-contractors and any substitute principal sub-contractors must enter into a Deed of Collateral Warranty in favour of the Authority under which the principal sub-contractors warrant and undertake to the Authority that they will comply with all the terms and obligations under the sub-contract.

#### 6. Standard of Performance

 PPP Co must undertake to perform the Project in a manner that is not likely to be injurious to health or cause damage to property and in compliance with good industry practice, all applicable laws, legal requirements and relevant standards and guidelines, which include the requirements of the waste licence and the planning approval for the Project.

### 7. General Obligations

PPP Co must assist and facilitate the Authority in carrying out and complying with its duties under law. PPP Co must also ensure that the necessary consents obtained (which include the planning approval and the waste licence) remain in full force and effect and that the terms and requirements of each of the necessary consents are complied with.

#### 8. Avoidance of Interference

PPP Co is required to not interfere unnecessarily or improperly with the convenience of the public or the access to and use or occupation of roads, footpaths etc whether they are in public possession or that of the Authority's or others. PPP Co is required to all reasonable steps to prevent harm to the environment both on or off the site and to limit damage and nuisance to people and property resulting from pollution, noise and other effects from construction works and operation of the Facility.

#### 9. Performance Demonstration Certificates

PPP Co is required to carry out performance demonstration tests to ensure that all works have been constructed in conformity with the design, relevant standards and consents.

#### 10. Operations and Maintenance

PPP Co is responsible for the operation and maintenance of the Facility in accordance with the Agreement. The Authority is entitled to access the site at all reasonable times or any other workshop where materials are being manufactured or staff are being trained to inspect the Facility

## 11. Annual Operations Report and Annual Operations Plan

PPP Co is required to submit on an annual basis an Operations Report for the preceding year, and an Operations Plan for the upcoming year. PPP Co must liaise with the Authority in this regard. These plans and reports must consider current and proposed legislation, the Waste Management Plan, the Project history and previous reports, the plan for the relevant period, the changing expectations of the parties, the users and the public, and PPP Co's accountability to users and local communities that the Facility serves. If the Operations Report reveals that the Facility is in a worse condition than that required by the Operations Plan, PPP Co, with Authority agreement, must rectify the conditions and bring the Facility to the level specified in the Operations Plan.

## 12. Authority Waste and Third Party Waste

PPP Co. is responsible for ensuring that all waste placed in the bunker is acceptable waste (i.e. subject to the conditions of the waste licence, household waste, commercial waste and non-hazardous industrial waste). Once Authority waste is received in the bunker, it is in the ownership of PPP Co. If PPP Co considers that part of the waste that is not acceptable waste cannot be readily segregated, the whole of the load must be considered as unacceptable waste. The Authority is responsible for removing any Authority waste deemed unacceptable waste.

### 13. Handback Requirements

PPP Co. is required to comply with handback requirements, including the requirement that the Facility is transferred to the Authority in a safe and serviceable condition. Handback inspections must be conducted by PPP Co and the Authority, with PPP Co bearing the cost of such inspections. Any works of renewal, construction, repair or reinstatement required in order to ensure that the Facility will satisfy the handback requirements must be carried out. The Authority may refuse to issue the handback certificate if the renewal works are not completed, or if the Facility does not comply with the handback requirements.

#### 14. Surveys of the Site and Ancillary Sites

PPP Co must appoint an environmental consultant (subject to the Authority's approval) to prepare a report on the condition of the site and ancillary sites and the level of contamination existing prior to the commencement of the works, which will then form the basis of the baseline condition of the site and ancillary sites prior to commencement of works. Further surveys of the site and ancillary sites must be carried out to assess their condition during the course of construction. If any of these further surveys show the contamination or the site to be in a worse condition than that established in the baseline condition, PPP Co must carry out remediation work to restore the condition of the ancillary sites and site to the baseline condition or revised baseline condition.

#### 15. Contaminated Soil and Groundwater

PPP Co is required to take responsibility for the excavation and on-site disposal of all contaminated soil excavated to facilitate construction of the Facility of PP Co is responsible for disposing of extracted groundwater, whether contaminated or uncontaminated.

## 16. Monitoring of Performance

PPP Co must grant the Authority unrestricted access to the Facility at all reasonable times to allow continuous monitoring of the operations and compliance by PPP Co with its obligations under the Agreement. PPP Co must also monitor and accurately record its performance of the operations and its compliance with its obligations under the Agreement.

#### 17. Performance Deductions

PPP Co. is required to notify the Authority immediately of any performance failure. If a performance failure occurs, the Authority is entitled to make performance deductions from PPP Co. If such performance deductions exceed a defined level, the Authority can increase monitoring of PPP Co's performance until PPP Co. demonstrates that it will perform and is capable of performing its obligations and attaining the required levels of performance under the Agreement. If performance deductions exceed a further defined level, the Authority may issue a warning notice to PPP Co. Within 14 days of the warning notice, PPP Co. must submit an acceptable warning remedy plan, proposing actions to avoid repetition of the warning notice in question. If PPP Co. fails to implement the plan within the time periods proposed in the warning remedy plan, such failure constitutes a further Performance Failure.

#### 18. Step-In Rights, Suspension and Termination

DCC's remedies for breaches of the Agreement by PPP Co include the step-in, suspension or termination, depending on the type and scale of the breach.

If PPP Co fails to remedy a breach of its obligations or a failure to perform within the remedy period specified in a performance default notice, or where the Authority considers there is an immediate and serious threat to public safety or that it is necessary in the interests of the environment, the Authority can itself take any necessary steps to remedy such breach or failure.

In cases of persistent breach of the Agreement, the Authority may serve a series of notices on PPP Co, and ultimately may terminate the Agreement. The parties must continue to perform their obligations under the Agreement until the termination becomes final and the Authority can require PPP Co to continue to operate the Facility until such time as the Authority reasonably requests.

The Authority also has the right to suspend PPP Co performance of part of the operations in certain circumstances until PPP Co presents an acceptable remedial programme. The Authority or a third party can perform the suspended part of the operations for as long as necessary.

#### 19. Specific Obligations with regard to Environmental Performance

During all stages of the works and operations, PPP Co must ensure the risk of adverse effects on the environment, on private and public property, on human, animal and plant health and on the amenities enjoyed by the owners and occupiers of adjacent areas and to staff and users is minimised, and any negative effects are prevented or limited according to relevant licences and consents. PPP Co must take all necessary actions to ensure emergencies are responded to as quickly as possible and the adverse effect of any emergencies is minimised. It is PPP Co's responsibility to co-ordinate the environmental work within the Project, including working environment and safety, and PPP Co must notify the Authority if there is a suspicion of significant environmental effects.

PPP Co must have regard to Best Available Techniques when designing, building and operating the Facility, in order to achieve prevention and control of environmental pollution. All operational environmental management procedures must comply with the conditions of the waste licence and planning approval, and the Facility must be designed, built and operated in accordance with recommendations of the European Commission Integrated Pollution Prevention and Control (IPPC) relevant BREF document.

PPP Co must ensure that the Project is subject to Quality and Environmental Management Systems which must be complied with by PPP Co staff at all times during the contract period. These Systems must comply with the relevant standards, the technical requirements set out in the Agreement and other provisions of the Agreement. The Systems must be reflected in Quality and Environmental Documentation which must, as a minimum, include the records required in the waste licence.

PPP Co is not permitted to commence any aspect the Project before the part of the Quality and Environmental Documentation concerning that aspect of the Project has been submitted to the Authority for review. The Authority is entitled to audit all Quality and Environmental Documentation and Systems and can carry out periodic monitoring, spot checks and auditing of the Quality and Environmental Management Systems.

The Annual Operations Report must include a section dealing with the environmental performance of the Facility. PPP Co is also required to undertake an ecological survey of the Irishtown Nature Park at intervals of 3 years following the baseline survey undertaken as part of the EIS.

## 20. PPP Co Quality and Environmental Manager

PPP Co. must employ a Quality and Environmental Manager (whose appointment is subject to Authority approval) to establish and maintain PPP Co's Quality and Environmental Management Systems, to ensure compliance with all such Systems and to report on the performance of these Systems.

## 21. Specific Planning, Design and Construction Requirements

PPP Co must adhere to standards specified in the Agreement in relation to off-site cleanliness, noise and vibration control, dust and odours, control of pollution to solids and water including groundwater, handling of site refuse and debris and landscaping.

#### 22. Performance Acceptance Certificate

Performance Acceptance Tests must be carried out to demonstrate that the Facility performs reliably in accordance with the requirements of the Agreement, and PPP Co must furnish the Authority with a notice to that effect, along with a test confirmation certificate.

#### 23. Liaison Procedures

PPP Co is required to submit liaison procedures to the Authority which must be followed whenever PPP Co has to take an action which requires liaison with the Authority or other relevant parties. In addition to any such liaison procedures, PPP Co is entitled, at its own expense, to take any steps necessary in an Emergency for the protection of the public, the environment or the users.

#### 24. Reports

PPP Co is required to submit reports to the Authority, for example the Monthly Operations and Gate Fee Report, which must include monitoring results for water and air, odour and noise impact on the environment, and information on the results of all quality, environmental and other audits.

#### 25. Records

PPP Co must maintain and update certain records which must be kept in a form capable of audit by the Authority. PPP Co must make the records available for inspection by the Authority at all reasonable times.

## 26. Sufficiently Trained and Competent Staff

PPP Co must employs sufficiently trained and competent staff, with the necessary and appropriate qualifications, skills and experience to perform the tasks associated with the Project in accordance with PPP Co's obligations under the Agreement. PPP Co must ensure that all staff involved in the Project have adequate knowledge of and training in respect of all relevant policies of the Authority. PPP Co must provide ongoing training for staff as is required by any law, legal requirement and good industry practice and as is necessary to enable them to perform their tasks with reasonable skill and diligence. PPP Co. must ensure that staff are appropriately managed and supervised at all times, and members

of staff must be nominated to carry out supervision duties on the site and ancillary sites. PPP Co must also provide internal scheduled training programmes on the function of the Facility for a limited number of key nominated employees of the Authority.

#### 27. Public Involvement

PPP Co must develop procedures allowing for public involvement in the Project and PPP Co must liaise with and actively assist the local communications co-ordinator and communications team appointed by the Authority. PPP Co must also provide a suitably qualified person who shall be responsible for public involvement throughout the construction and operational periods. A fund for ongoing environmental research, community gain and community relations must be contributed to by PPP Co. The Authority will establish a community liaison group consisting of members of the local community, PPP Co and other appropriate persons to monitor the construction of the Facility, and PPP Co must ensure appropriate personnel are available for meetings of this group, and that public queries are responded to. PPP Co must dedicate sections in both its quarterly construction report and its annual operations report to public and community involvement, to include a description of how PPP Co has ensured that members of the public have had access to up to date, accurate information about the Project.

## 28. Assignment, Subcontracting and Change of Ownership

Neither PPP Co nor any Sub-Contractor is entitled, without the prior consent of the Authority to assign any part of the Agreement, or any other contract entered into by PPP Co in performing its obligations under the Agreement. PPP Co is not entitled to sub-contract performance of the Project in whole or in part without the Authority's prior approval, save to the principal sub-contractors. The Agreement sets out detailed procedures in relation to the termination of employment of any of the principal sub-contractors, and the appointment of any substitute. PPP Co must inform the Authority as soon as reasonably practicable, and in any event within 10 working days of any change of ownership in any or all of the shares in PPP Co and/or Hold Co.

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