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Reg No. W0104-03  
Advanced Environmental Solutions  
Article 14(2)(b)(ii) Reply 1  
Rec'd 30/08/2013  
Original

Administration,  
Environmental Licensing Programme,  
Office of Climate, Licensing & Resource Use,  
Environmental Protection Agency,  
Headquarters P.O. Box 3000,  
Johnstown Castle Estate,  
County Wexford

29<sup>th</sup> August 2013

RE: Application for Waste Licence Ref. No. W0104-03.

Dear Sir/Madam,

On behalf of Advanced Environmental Services, I enclose one original and one hard copy of the response to the Notice issued under Article 14(2)(b)(ii) on the 21<sup>st</sup> June 2013 in relation to the application for a Waste Licence W0104-03. I also enclose 2 electronic copies on CD-ROM in searchable pdf format. The content of the electronic files is a true copy of the original.

If you have any queries, please call me.

Yours sincerely,

  
Jim O'Callaghan



1316705/JOC/KC  
Encs..

email: info@ocallaghanmoran.com Website: www.ocallaghanmoran.com

O'Callaghan Moran & Associates. Registration No. 8272844U

**Article 14(2)(b)(ii) Further Information**  
**Particulars and Evidence For**  
**Advanced Environmental Services (Ireland) Ltd**  
**Waste Licence Review No. W0104-03**

**Article 12 Compliance**

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**Prepared For: -**

AES (Ireland) Ltd,  
Cappancur Industrial Estate,  
Tullamore,  
Co. Offaly

**Prepared By: -**

O' Callaghan Moran & Associates,  
Granary House,  
Rutland Street,  
Cork.

**29<sup>th</sup> August 2013**

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# 1. INTRODUCTION

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This is the response by Advanced Environmental Services (Ireland) Ltd (AES) to the Notice issued under Article 14(2)(b)(ii) of the Waste Management Licensing Regulations, dated 21<sup>st</sup> June 2013, in relation to Application Register No. W0140-03 for the Materials Recovery Facility at Cappancur Industrial Estate, Cappancur, Tullamore, County Offaly.

Section 2 contains the responses to the Agency's requests. For ease of interpretation, each of the requests are presented in italics followed by AES's response. The Non-Technical Summary is in Section 3.

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## 2. ARTICLE 12 COMPLIANCE REQUIREMENTS

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1. *Please clarify the correct form of spelling of the facility address, which differs between the application and existing licence*

The correct spelling of the townland in which the facility is located is Cappancur. This is confirmed in the notification of grant of planning permission referred to in the response to request No.2 below.

2. *Section B.2 of the application form states that planning permission has been applied for. There are other indications that planning has been granted. Please clarify the current status.*

Planning permission (12/269) for the changes that are subject to the Licence review application was granted on the 1<sup>st</sup> February 2013. A copy of the planning permission is in Attachment B3b of the review application, and is enclosed in Appendix 1.

3. *Complete Table B.7.1 of the Application*

Table B .7.1 is in Appendix 2.

4. *State whether hazardous waste has been accepted at the facility and whether the 200 tonne allowance for hazardous waste acceptance is still a requirement for authorisation. Provide the information, specifically relating to the activity of Accepting and handling hazardous waste, required by sub articles 12 (1)(g), (h), (i), (k), (l), (p) of the regulations. Illustrate on a site drawing the location of locations for storage and processing of hazardous waste and describe the storage facilities and treatment processes. It is noted that the duty capacity report prepared for the licensee in 2012 does not address the capacity requirements for hazardous waste storage and processing, Clarify whether this report needs to be amended to make such allowances.*

While the current Licence allows the acceptance of 200 tonnes/year of hazardous waste, hazardous wastes have not been accepted at the facility. It is one of the objectives of the review to remove the authorisation to accept hazardous waste. As hazardous wastes are not and will not be accepted at the facility, information on the proposed method of accepting, handling such wastes has not been provided and it is not necessary to amend the 2012 duty capacity report.

5. *In relation to the drainage ditch to which SW1 discharges state whether there is evidence to demonstrate that the discharge from SW1 reaches the Tullamore River or is likely to discharge to ground through the drainage ditch and provide any such evidence. Taking the evidence into account, it may be appropriate to consider assessing the potential impact of the SW1 discharge on groundwater and providing such an assessment in your response to this notice.*

An inspection of the drain on the 10<sup>th</sup> July 2013, which was carried out after a sustained dry period confirmed a continuous flow in the channel. The soils to the north of and in the vicinity of the site are described as basic mineral draining (BminDW). These are underlain by limestone tills, which typically have a low permeability and are not water bearing to any significant extent. The soils south of the site, moving towards the Tullamore River, are described as alluvium marls (AlluvMRL) and are underlain by marl, which is a clay rich mudstone that has a low permeability.

The aquifer vulnerability rating assigned by the Geological Survey of Ireland (GSI) for the site and the lands to the south and between it and the Tullamore River is Moderate, which indicates a subsoil thickness of between 5 and 10m. Boreholes installed at the site confirmed the presence of between 7 and 9 m of subsoils and did not encounter bedrock.

Given the low permeability and thickness of the subsoils, both at and to the south of the site, it is considered unlikely that the water in the drain discharges to ground as it moves southwards from the site to the confluence with the Tullamore River. Therefore, an assessment of potential impact of SW1 discharge on groundwater is not required.

6. *With reference to the BAT Guidance Note for the Waste Sector, Waste Transfer and Material Recovery, published by the Agency, state whether it is proposed to maintain the waste process building under negative pressure. If no, provide reasons why this is not necessary. If yes:*

- i. state by what means air will be extracted.*
- ii. state what treatment system, if any, will be used at air extraction points*
- iii. specify what emission limit values, if any, are proposed for air emission points*

It is understood that the information request relates to the odour control measures at the facility. At present the waste process building is not maintained under negative pressure and it is not proposed to provide such a system. The grounds for this position are described below.

In preparing this response regard was had to the Final Draft Guidance Note on Best Available Techniques for the Waste Sector: Waste Transfer and Materials Recovery published by the Agency in December 2012.

Best Available Techniques (BAT) is defined in Section 5 of the Environmental Protection Agency Acts, 1992 to 2007, and Section 5(2) of the Waste Management Acts 1996 to 2010, as the “most effective and advanced stage in the development of an activity and its methods of operation, which indicate the practical suitability of particular techniques for providing, in principle, the basis for emission limit values designed to prevent or eliminate or, where that is not practicable, generally to reduce an emission and its impact on the environment as a whole”.

So, the underlying objective of BAT is to prevent, eliminate, or reduce emissions from processes and the associated environmental impacts. Emissions, and hence environmental pollution, can be prevented, eliminated or reduced by:

- proper design of the facility;
- effective management of the facility; and
- the selection of appropriate processes, technologies and facility operations.

The range of BAT associated emission levels specified in Section 6 of the Agency's Guidance Note indicate those that are achievable through the use of a combination of the process techniques and abatement technologies specified as BAT in Section 5 of the Guidance Note.

In the case of emissions to air the Agency has not defined specific Emission Limit Values (ELVs). The Guidance Note does state that establishing ELVs within a licence for discharges to air must ensure that the quality of the receiving environment is not impaired and that the current Air Quality Standards (AQS) are not exceeded. Furthermore, in the case of odour emissions it is BAT (Section 6.3.3 of the Guidance Note) to ensure that activities at an installation are carried out in a manner such that emissions of odours do not result in significant impairment of, and/or significant interference with amenities or the environment beyond the installation boundary.

The measures for the prevention and minimisation of odour emissions involve both management and control techniques (Section 4.3.2.1 of the Guidance note), which include:

#### *Management Techniques*

- The location of the facility with regard to off-site receptors;
- At the design stage consideration should be given to the requirement for the capture, containment and treatment of odorous air;
- The operational procedures, having regard to the waste types being accepted and the waste processing activities at the facility, should seek to minimise the risk of odours. All biodegradable/putrescible wastes should be removed from the premises as soon as practicable and, in any case, within 48 hours of arrival or within 72 hours at public holiday weekends;
- Appropriate procedures should be developed for dealing with malodorous waste, and
- Vehicles delivering and removing waste should be enclosed or covered.

#### *Control Techniques*

- Restrict acceptance of wastes known to be malodorous;
- Any handling or treatment of malodorous waste should be carried out in an enclosed area suitable for the capture, containment and treatment of odours;

- Use of appropriate odour abatement equipment;
- Conduct regular inspections, monitoring and maintenance of waste handling areas and abatement equipment, and
- Use of odour neutralizing sprays and additives to be considered where odours cannot be prevented.

### **Selection of Appropriate Techniques**

The management and control techniques referenced in Section 4.3.2.1 are not mandatory and the Guidance Note acknowledges that at facility level the most appropriate techniques will depend on local factors and that the choice may be justified on the basis of:

- the technical characteristics of the facility/installation;
- the geographical location of the facility/installation;
- local environmental considerations;
- the economic and technical viability of upgrading the existing installation/facility.

Notwithstanding the above, the Guidance Note also states that the obligation to ensure a high level of environmental protection, including the minimisation of long-distance or transboundary pollution, implies that the most appropriate techniques cannot be set on the basis of purely local considerations

### **Techniques Applied at the AES Facility**

The following techniques are currently implemented at the site to minimise odour emissions to air:

- The waste types accepted are predominantly mixed dry recyclables;
- All unloading, processing and loading of wastes occur within the Processing Building;
- Regular inspection and cleaning of waste handling areas;
- All putrescible waste for disposal is removed from site within forty-eight hours of its arrival;
- A misting system is used within the Processing Building that has a dual function of controlling dust and odour emissions arising from the loading and sorting/processing of waste loads;
- Provision of dust curtains on the three main entrances to the Processing Building;
- Provision of an active extraction system over the picking lines and treatment in a bag filter;



- All open yards are paved and are routinely cleaned using a road sweeper and damped down with water in extended periods of dry weather;
- A 20km/h speed limit on all vehicle movements within the site boundary;
- Vehicles delivering materials to site with the potential to cause dust or odour emissions are either covered, or enclosed.

The effectiveness of the techniques applied at the facility is demonstrated by the lack of complaints relating to odour, which is the yard stick against which odour nuisance at a waste management facility is measured.

In the past five years the facility has not received any complaints from neighbours concerning odours. Furthermore, compliance inspections conducted by the OEE has never identified any concerns that odours from facility activities could give rise to any nuisance or impairment outside the facility boundaries.

The existing buildings, plant and equipment have the capacity to process the additional wastes in a manner that will not compromise the effectiveness of the odour control techniques already in place. These techniques are proven to provide a high level of environmental protection and therefore additional odour abatement measures are not considered necessary.

7. *Update attachment I.4 to provide groundwater monitoring results for 2012. For 2011, provide any outstanding monitoring results for parameters listed in Schedule C. of the existing Licence.*

An updated Attachment I 4 is included in Appendix 3. Results of the dust deposition monitoring conducted in 2011 are provided in Appendix 3.

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### 3. NON TECHNICAL SUMMARY

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#### Introduction

Advanced Environmental Solutions (Ireland) Ltd. (AES) is applying to the Environmental Protection Agency (Agency) for a review of the current Waste Licence (Reg. No. W0104-02) for its waste processing facility at Cappancur, Tullamore, County Offaly. The objectives of the review are: -

- To amend Schedule A of the Licence to increase the amount of waste that can be accepted at the facility from 50,000 to 60,000 tonnes annually and remove the authorisation to accept 200 tonnes of hazardous waste;
- To facilitate the future connection of treated effluent from the on-site sanitary wastewater treatment plant and wash water and rainwater run-off from operational areas to the municipal foul sewer.

#### **Nature of the Facility**

While authorised to accept small amounts (200 tonnes/year) of hazardous waste, the facility only accepts non-hazardous wastes, which are processed to recover wastes that are suitable for recycling and to reduce the volume sent to landfill.

#### **Classes of Activity**

It is not proposed to change the type of waste activities, as defined in Third and Fourth Schedules of the Waste Management Acts 1996 – 2011, that are carried out. These are:-

#### **Third Schedule – Waste Disposal Activities**

- D 13: Blending or mixing prior to submission to any of the operations numbered from D 1 to D 12 (if there is no other D code appropriate, this can include preliminary operations prior to disposal including pre-processing such as, amongst others, sorting, crushing, compacting, pelletising, drying, shredding, conditioning or separating prior to submission to any of the operations numbered D 1 to D 12)
- D 14 Repackaging prior to submission to any of the operations numbered D 1 to D 13
- D 15 Storage pending any of the operations numbered D 1 to D 14 (excluding temporary storage (being preliminary storage according to the definition of ‘collection’ in section 5(1)), pending collection, on the site where the waste is produced).

#### Fourth Schedule – Waste Recovery Activities

- R 3: ‘Recycling /reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes), which includes gasification and pyrolysis using the components as chemicals’. (P)
- R 4: ‘Recycling or reclamation of metals and metal compounds’.
- R 5: ‘Recycling or reclamation of other inorganic materials, which includes soil cleaning resulting in recovery of the soil and recycling of inorganic construction materials’
- R 12: ‘Exchange of waste for submission to any of the operations numbered R 1 to R 11 (if there is no other R code appropriate, this can include preliminary operations prior to recovery including pre-processing such as, amongst others, dismantling, sorting, crushing, compacting, pelletising, drying, shredding, conditioning, repackaging, separating, blending or mixing prior to submission to any of the operations numbered R1 to R11).’
- R 13: ‘Storage of waste pending any of the operations numbered R 1 to R 12 (excluding temporary storage (being preliminary storage according to the definition of 'collection' in section 5(1)), pending collection, on the site where the waste is produced).’

A copy of this application for a Waste Licence as well such further information relating to the application as may be furnished to the Agency in the course of the Agency’s consideration of the application will, as soon as is practicable after receipt by the Agency, be available for inspection or purchase at the headquarters of the Agency at P.O. Box 3000, Johnstown Castle, County Wexford.

#### Quantity and Nature of the Waste to be Recovered or Disposed

There will be no change to the types of non-hazardous waste that are accepted at the site. While the current Licence allows the acceptance of 200 tonnes/year of hazardous waste, hazardous waste are not and will not be accepted. The types and quantities of waste that are and will be accepted are shown in Table 1. The total amount of waste accepted at the facility will increase to 60,000 tonnes/year

Table 1

Waste Type	Tonnes/Annum Existing*	Tonnes/Annum Proposed*
Household	14,000	27,200
Commercial	26,000	28,000
Construction & Demolition	9,800	4,800
<b>Industrial Non-Hazardous</b>	<b>49,800</b>	<b>60,000</b>
Hazardous	200	0
<b>Total</b>	<b>50,000</b>	<b>60,000</b>

\*Subject to Market Conditions, the actual amounts of different waste types may vary but the total will not be exceeded. The Household waste will comprise 20,000 tonnes of DMR and 7,200 tonnes of MSW.

## **Raw and Ancillary Materials, Substances, Preparations used on the Site**

Diesel, lubricating oil and hydraulic oil are required to service the waste processing equipment. Electricity is used to power some of the processing equipment and also in the offices and yard lighting. Drinking water is taken from the Ballinagar Group Water Scheme.

## **Plant, Methods, Processes and Operating Procedures**

Operations at the facility include the receipt of domestic, commercial, industrial and construction waste, which is sorted and segregated for onward recycling / recovery in accordance with the recycling potential. Waste deemed unsuitable for recycling / recovery is segregated and compacted for disposal off-site.

## **Information Related to paragraphs (a) to (g) of Section 40 (4) of the Waste Management Acts 1996 2003.**

The actual and potential emissions associated with the changes include noise, dust and odour, will not breach any applicable legal standard or emission limit. Trade effluent, which includes water from washing down the floors of the buildings, is collected and treated in an on-site treatment plant and then stored in a tank before being taken to the Council's Sewage Treatment Plant for further treatment. It is proposed to connect the on-site treatment plant to the Council's foul sewer in the future.

The proposed site activities take into consideration the Best Available Technique (BAT) Guidance Note for the Waste Sector: Waste Transfer Activities published by the Agency and when carried out in accordance with the new Licence conditions, will not cause environmental pollution. It is not proposed to amend the current management team.

## **Emissions**

### *Surface Water*

Rainwater run-off from the building roofs is collected and piped to the drain that runs along the southern boundary of the site. The drain is a tributary of the Tullamore River.

### *Sanitary Wastewater*

Sanitary and canteen wastewater is collected and treated in an on-site waste water treatment plant. The treated water is stored in a tank before being sent to the Council's sewerage treatment plant for further treatment.

### *Process Wastewater*

Floor washings from the Processing Building and the wheel wash is collected and treated in the onsite wastewater treatment plant that also treats the sanitary waste water.

### *Groundwater*

There are no emissions to ground and/or groundwater.

### *Dust*

The primary source of dust emissions, with the potential to cause a nuisance are vehicle movements over the concrete yards in dry weather. There will be an increase in truck movements to and from the site.

### *Odours*

A number of different household and commercial wastes accepted at the facility contain materials (for example foodstuff) that are a source of strong odours. All odorous wastes are handled inside the buildings and are not handled or stored in open areas.

### *Noise*

The existing noise environment is heavily influenced by traffic along the Daingean Road and the N52 By-Pass. There will be no additional plant or equipment required to manage the increases in the amount of wastes accepted.

## **Assessment of the Effects of the Emissions**

### *Surface Water*

The proposed changes will not result in any new emissions from the site or any change to the volume and quality of the run-off to the drain and therefore will not have any impact.

### *Sanitary Wastewater*

There will be no new sources of sanitary wastewater or any increase in the amounts of wastewater produced. The future connection to the Council sewer will have a beneficial environmental impact, as it will reduce the number of road tankers entering and leaving the site.

### *Process Wastewater*

The proposed increase in the amounts of waste accepted will not result in any changes to the quality or amount of process wastewater produced.

### *Groundwater*

There are no direct emissions to groundwater and the proposed changes will not result in any new discharge points.

### *Dust*

The open yard areas are and will continue to be dampened down during dry weather. The dust monitoring carried out at the site has confirmed that current operations are not a source of dust nuisance.

### *Odours*

Odours are not a problem at the site, and the proposed changes will not give rise to any new sources of odours.

### *Noise*

Noise monitoring at the facility has consistently shown that the noise emissions from the facility are not a cause of concern. The proposed changes do not require the installation or operation of new plant and equipment. It will result in an increase in traffic, but this will not cause any increase in noise emissions.

### *Nuisances*

Birds can be attracted to sites where there is available foodstuff. The waste accepted at the site include some foodstuff. All waste that have the potential to contain food stuff are and will be processed and stored inside the building. This has already been found to eliminate bird attraction.

## **Monitoring and Sampling Points**

The proposed changes will not require the provision of new monitoring or sampling points.

## **Prevention and Recovery of Waste**

The aim of the Licence Review is to increase AES's recycling rates and reduce the amount of waste sent to landfill.

## **Off-site Treatment or Disposal of Solid or Liquid Wastes**

The new waste activities will not result in any changes to either the types and methods of treatment, or the disposal of solid and liquid wastes.

## **Emergency Procedures to Prevent Unexpected Emissions**

AES has prepared an Emergency Response Procedure for the facility, which sets out the actions to be taken in an emergency.

## **Closure, Restoration and Aftercare of the Site**

The proposed changes to the current Licence will not affect the measures for the closure, remediation and aftercare of the facility.

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Comhairle Chontae Uíbh Fhailí

Tel: 057 9346800 • Fax: 057 9346868

Website: www.offaly.ie

email: secretar@offalycoco.ie

## Offaly County Council

Áras an Chontae,  
Charleville Road,  
Tullamore,  
Co. Offaly.



RECEIVED 05 FEB 2013

ADVANCED ENVIRONMENTAL SERVICES (IRELAND) LTD.,  
O'CALLAGHAN MORAN & ASSOCIATES  
GRANARY HOUSE  
RUTLAND STREET  
CORK

04/02/2013

Re: PL2/12/269

Dear Sir/Madam,

I enclose herewith, Grant of Planning Permission in the above

For your information, the following leaflets are also enclosed, the contents of which should be strictly adhered to.

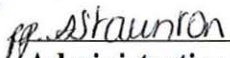
1. Safety and Health on Construction Projects - The Role of Clients.
2. Guide to Building Control.
3. Commencement Notice.
4. Copy of Chief Fire Officer's report (where applicable).

Please note:-

- (a) All **Development Contributions must be paid before development commences**, otherwise development will be unauthorised.
- (b) A Waste Permit may be required for certain developments. Further information in relation to this is available from the Environment Section, Offaly County Council on (057) 9346895.

Please remove site notice erected in respect of the above planning application.

Yours sincerely,

  
Administrative Officer (Planning)



**OFFALY COUNTY COUNCIL**

**PLANNING AND DEVELOPMENT ACTS 2000 - 2011**  
**PLANNING AND DEVELOPMENT REGULATIONS 2001 - 2012**

**NOTIFICATION OF GRANT**

Planning Section  
Áras an Chontae  
Charleville Road  
Tullamore  
Co. Offaly

**TO:** ADVANCED ENVIRONMENTAL SERVICES (IRELAND) LTD.,  
O'CALLAGHAN MORAN & ASSOCIATES  
GRANARY HOUSE  
RUTLAND STREET  
CORK

**Planning Register Number:** 12/269  
**Application Receipt Date:** 30/10/2012  
**Further Information Received Date:**

Notice is hereby given that in pursuance of the powers conferred upon them by the above-mentioned Acts, Offaly County Council has by order dated 20/12/2012 GRANTED PERMISSION to the above named, for the development of land, in accordance with the documents lodged, namely:-

DEVELOPMENT WHICH WILL CONSIST OF AN INCREASE IN THE AMOUNT OF WASTE ACCEPTED ANNUALLY FROM 50,000 TONNES TO 60,000 TONNES. THE DEVELOPMENT WILL REQUIRE A REVISION OF THE WASTE LICENCE GRANTED BY THE ENVIRONMENTAL PROTECTION AGENCY. THE PROPOSED INCREASE DOES NOT REQUIRE THE CONSTRUCTION/PROVISION OF ANY NEW BUILDINGS/STRUCTURES OR ANY ALTERATIONS TO THE CURRENT SITE LAYOUT AND OPERATIONS AT CAPPANCUR, TULLAMORE, CO. OFFALY

**Subject to the 2 conditions set out in the Schedule attached.**

In deciding the planning application, the Planning Authority had regard to submissions or observations received in accordance with the Regulations.

Signed on behalf of said Council

**Date:** 1/2/2013

*P. O'Leary*  
ADMINISTRATIVE OFFICER

**OUTLINE PERMISSION** is subject to the permission consequent on the grant of outline permission of the Planning Authority. Until such permission has been obtained to the detailed plans, the proposed development is not authorised.

**NOTE:** The permission herein granted shall, on the expiration of the period of **FIVE YEARS** beginning on the date of the granting of permission, cease to have effect as regards:-

- 1 In case of the development to which the permission relates is not commenced during the period, the entire development
- and
- 2 In case such development is so commenced, so much thereof as is not completed within that period.

**File Reference:** PL2/12/269

Application for permission for development which will consist of an increase in the amount of waste accepted annually from 50,000 tonnes to 60,000 tonnes. The development will require a revision of the Waste Licence granted by the Environmental Protection Agency. The proposed increase does not require the construction/provision of any new buildings/structures or any alterations to the current site layout and operations at Cappancur, Tullamore, Co. Offaly. - Advanced Environmental Services (Ireland) Ltd.

**FIRST SCHEDULE**

Having regard to the nature and scale and intended use of the development, the issues raised in the planning assessment, referral reports, site inspection, existing pattern of development in the vicinity, and the current Development Plan, it is considered that, subject to the conditions in the Second Schedule, that the development would not seriously injure the amenities of the area or of property in the vicinity, would not be prejudicial to public health and would otherwise accord with the proper planning and sustainable development of the area.

**SECOND SCHEDULE**

1. The development shall be carried out and retained in accordance with plans and particulars submitted to the Planning Authority on the 30/10/2012 except where altered or amended by conditions in this permission.

**Reason:** To define the scope of permission, in the interest of orderly development.

2. The developer shall submit for the written agreement of the Planning Authority a copy of the maintenance records for the existing wastewater treatment unit and a copy of the records to date for removal of the wastewater off site for further treatment.

**Reason:** In the interests of public health and orderly development.

\*\*\*\*\*



Central Fire Station  
Tullamore

Tel: 0506 - 21441  
Fax: 0506 - 51524

**Our Ref:** dc/NICK SMYTH.

01/11/2012

The Planning Officer,  
Offaly County Council,  
Áras an Chontae,  
Charleville Road,  
Tullamore.

**RE:** 12/269 - PERMISSION FOR DEVELOPMENT WHICH WILL CONSIST OF INCREASE IN AMOUNT OF WASTE ACCEPTED ANNUALLY FROM 50,000 TONNES ETC.,

**AT:** BOGTOWN, CAPPANCUR, TULLAMORE,,

**APPLICANT:** ADV . ENVIRONMENTAL SERV (IRE) LTD

A Chara,

With reference to yours received on the 31/10/2012 concerning the above, I have no objections to the GRANTING of planning permission to this development.

Please let me have a copy of the Councils final decision.

  
**Eoin O'Ceilleachair**  
**CHIEF FIRE OFFICER**

cc. Administrative Officer, Building Control, Roads Section.



**Table B.7.1 Third and Fourth Schedules of the Waste Management Act 1996, as amended. Waste Management Act 1996, as amended.**

Third Schedule Waste Disposal Operations		Y/N	Fourth Schedule Waste Recovery Operations		Y/N
D 1	Deposit into or on to land (e.g. including landfill, etc.).	N	R 1	<p>Use principally as a fuel or other means to generate energy: This includes incineration facilities dedicated to the processing of municipal solid waste only where their energy efficiency is equal to or above:</p> <ul style="list-style-type: none"> <li>- 0.60 for installations in operation and permitted in accordance with applicable Community acts before 1 January 2009,</li> <li>- 0.65 for installations permitted after 31 December 2008,</li> </ul> <p>using the following formula, applied in accordance with the reference document on Best Available Techniques for Waste Incineration:                      Energy efficiency = <math>(E_p - (E_f + E_i)) / (0.97 \times (E_w + E_f))</math>                      where—</p> <p>‘Ep’ means annual energy produced as heat or electricity and is calculated with energy in the form of electricity being multiplied by 2.6 and heat produced for commercial use multiplied by 1.1(GJ/year),</p> <p>‘Ef’ means annual energy input to the system from fuels contributing to the production of steam (GJ/year),</p> <p>‘Ew’ means annual energy contained in the treated waste calculated using the net calorific value of the waste (GJ/year),</p> <p>‘Ei’ means annual energy imported excluding Ew and Ef(GJ/year),</p> <p>‘0.97’ is a factor accounting for energy losses due to bottom ash and radiation.</p>	N
D 2	Land treatment (e.g. biodegradation of liquid or sludgy discards in soils, etc.).	N	R 2	Solvent reclamation/regeneration.	
D 3	Deep injection (e.g. injection of pumpable discards into wells, salt domes or naturally occurring repositories, etc.).	N	R 3	Recycling /reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes), which includes gasification and pyrolysis using the components as chemicals.	Yes <b>P</b>
D 4	Surface impoundment (e.g. placement of liquid or sludgy discards into pits, ponds or lagoons, etc.).	N	R 4	Recycling/reclamation of metals and metal compounds.	Y
D 5	Specially engineered landfill (e.g. placement into lined discrete cells which are capped and isolated from one another and the environment, etc.).	N	R 5	Recycling/reclamation of other inorganic materials, which includes soil cleaning resulting in recovery of the soil and recycling of inorganic construction materials.	Y
D 6	Release into a water body except seas/oceans.	N	R 6	Regeneration of acids or bases.	N
D 7	Release to seas/oceans including sea-bed insertion.	N	R 7	Recovery of components used for pollution abatement.	N
D 8	Biological treatment not specified elsewhere in this Schedule which results in final compounds or mixtures which are discarded by means of any of the operations numbered D 1 to D 12.	N	R 8	Recovery of components from catalysts.	N
D 9	Physico-chemical treatment not specified	N	R 9	Oil re-refining or other reuses of oil.	N

	elsewhere in this Schedule which results in final compounds or mixtures which are discarded by means of any of the operations numbered D 1 to D 12 (e.g. evaporation, drying, calcinations, etc.).				
D 10	Incineration on land.	N	R 10	Land treatment resulting in benefit to agriculture or ecological improvement.	N
D 11	Incineration at sea (this operation is prohibited by EU legislation and international conventions).	N	R 11	Use of waste obtained from any of the operations numbered R 1 to R 10.	N
D 12	Permanent storage (e.g. emplacement of containers in a mine, etc).	N	R 12	Exchange of waste for submission to any of the operations numbered R 1 to R 11 (if there is no other R code appropriate, this can include preliminary operations prior to recovery including pre-processing such as, amongst others, dismantling, sorting, crushing, compacting, pelletising, drying, shredding, conditioning, repackaging, separating, blending or mixing prior to submission to any of the operations numbered R1 to R11).	Y
D 13	Blending or mixing prior to submission to any of the operations numbered D 1 to D 12 (if there is no other D code appropriate, this can include preliminary operations prior to disposal including pre-processing such as, amongst others, sorting, crushing, compacting, pelletising, drying, shredding, conditioning or separating prior to submission to any of the operations numbered D1 to D12).	Y	R 13	Storage of waste pending any of the operations numbered R 1 to R 12 (excluding temporary storage (being preliminary storage according to the definition of 'collection' in section 5(1)), pending collection, on the site where the waste is produced).	Y
D 14	Repackaging prior to submission to any of the operations numbered D 1 to D 13.	Y			N
D 15	Storage pending any of the operations numbered D 1 to D 14 (excluding temporary storage (being preliminary storage according to the definition of 'collection' in section 5(1)), pending collection, on the site where the waste is produced).	Y			N

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## Attachment I.4 Assessment of Impact on Ground and Groundwater

The hydrogeological characteristics of the region are strongly influenced by the Variscan fold system along approximate northeast-southwest trends. The principal aquifers (“Regionally Important Aquifers”) of the region are the pure shallow marine Lower Carboniferous (Lower Dinantian) limestones which occupy the synclinal valleys of the region. The permeability of the aquifers depends almost entirely on their fracturing. Within the limestones, the permeability has been further enhanced by enlargement of the fractures by karstification and dolomitisation.

The site is underlain by a “Locally Important Aquifer (LI)” which is “moderately productive in local zones only”. A “Regionally Important Aquifer” is located some 500 m west of the site within the pure limestones of the Lower Dinantian.

Water in limestone aquifers is always hard (usually over 250 mg/l CaCO<sub>3</sub> and often over 300 mg/l CaCO<sub>3</sub>)

The assessment of the impact of the facility on ground and groundwater is based on the results of the groundwater monitoring conducted in 2011 and 2012. The monitoring is carried out three times a year at location (SW-1) specified in the Licence. The results for 2011 and 2012 are shown in Table I 2 1

### GW1 2011

GW1 was not sampled as the well was damaged. A new well was drilled in February 2012.

### GW2 2011

Report Reference	ECS3819	ECS3929	ECS3979	ECS4027
Parameter	Q1 2011	Q2 2011	Q3 2011	Q4 2011
Ph (Ph Units)	7.4	7.42	7.34	7.4
Temperature (C)	11	10.2	11	12.1
Odour	Faint	Faint	none	none
Conductivity	627	646	721	580
Ammonia as N	0.12	0.14	0.11	0.08
DRO	<10	<10	<10	<10
Mineral Oil	-	-	<10	<10

## GW3 2011

Report Reference	ECS3819	ECS3929	ECS3979	ECS4027
Parameter	Q1 2011	Q2 2011	Q3 2011	Q4 2011
Ph (Ph Units)	7.4	7.47	7.37	7.3
Temperature (C)	11.5	11.7	13.8	12
Odour	None	None	none	none
Conductivity	593	543	539	537
Ammonia as N	0.05	0.06	0.03	0.02
DRO	<10	<10	<10	<10
Mineral Oil	-	-	<10	<10

## GW1 2012

Report Reference	ECS4123	ECS4124	ECS4125	ECS4126
Parameter	Q1 2012	Q2 2012	Q3 2012	Q4 2012
Ph (Ph Units)	7.6	7.5	7.26	7.51
Temperature (C)	10.6		12.1	12.1
Odour	No odour	No odour	No Odour	No Odour
Conductivity	572	549	534	534
Ammonia as N	0.06	0.03	0.05	0.04
DRO	<0.01	<0.010	<0.01	<0.01
Mineral Oil	<0.01	<0.01	<0.01	<0.01

## GW2 2012

Report Reference	ECS4123	ECS4124	ECS4125	ECS4126
Parameter	Q1 2012	Q2 2012	Q3 2012	Q4 2012
Ph (Ph Units)	7.4	7.5	7.35	7.63
Temperature (C)	12.1		11.5	12.0
Odour	None	None	Faint stagnant odour	No Odour
Conductivity	562	561	557	556
Ammonia as N	<0.02	0.07	0.06	0.04
DRO	<0.01	<0.010	<0.010	<0.01
Mineral Oil	<0.01	<0.010	<0.010	<0.01

## GW3 2012

Report Reference	ECS4123	ECS4124	ECS4125	ECS4126
Parameter	Q1 2012	Q2 2012	Q3 2012	Q4 2012
Ph (Ph Units)	7.3	7.6	7.35	7.59
Temperature (C)	12		12.3	12.9
Odour	None	None	None	None
Conductivity	540	534	535	539
Ammonia as N	0.06	0.03	0.04	0.03
DRO	<0.01	<0.010	<0.010	<0.01
Mineral Oil	<0.01	<0.010	<0.010	<0.01

## Dust 2012

Monitoring Location	Dust Deposition Limit	Deposition Rate 7 <sup>th</sup> Feb-6 <sup>th</sup> Mar	Deposition Rate 10 <sup>th</sup> May-11 <sup>th</sup> Jun	Deposition Rate 12 <sup>th</sup> Jul-9 <sup>th</sup> Aug
D1	350	197	280	178
D2	350	160	463	191
D3	350	61	226	160
D4	350	43	500	61