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Environmental Protection Agency  
P.O. Box 3000  
Johnstown Castle Estate  
County Wexford

10<sup>th</sup> of December 2013

**Re: Waste Licence Application for a Mechanical Biological Treatment (MBT) Facility in the townlands of Coolcarrigan and Drummond, Carbury, County Kildare (Waste Licence Register No: W0283-01)**

Dear Sir/Madam,

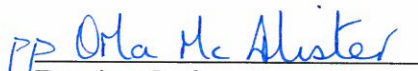
On behalf of our client Bord na Móna Plc, Main Street, Newbridge, County Kildare, please find attached an objection to the Proposed Decision issued by the Agency on the 14<sup>th</sup> of November 2013 in relation to the Drehid Mechanical Biological Treatment (MBT) Facility in the townlands of Coolcarrigan and Drummond, Carbury, County Kildare.

This objection addresses separately each condition or schedule of the Proposed Decision to which the objection relates. In certain instances the purpose of the objection is to provide for clarification of the condition or schedule.

The condition or schedule to which the objection relates is stated in the attached document. The grounds of the objection are also stated in full, including the reasons, considerations and arguments on which they are based.

We have also included a cheque for €500 in respect of the objection fee.

Yours sincerely,

  
\_\_\_\_\_  
Damien Grehan  
TOBIN Consulting Engineers

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**OBJECTION TO THE PROPOSED DECISION**  
**ISSUED IN RESPECT OF THE**  
**WASTE LICENCE APPLICATION**  
**FOR THE**  
**DREHID MBT FACILITY**  
**(WASTE LICENCE REGISTER NO. W0283-01)**

December 2013  
Revision: A

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# REPORT

**PROJECT:** **Drehid MBT Facility**

**CLIENT:** **Bord na Móna plc**  
Main Street  
Newbridge  
Co Kildare

**COMPANY:** **TOBIN Consulting Engineers**  
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**DOCUMENT AMENDMENT RECORD**

<b>Client:</b>	<b>Bord na Móna Plc</b>
<b>Project:</b>	<b>Drehid MBT Facility</b>
<b>Title:</b>	<b>Objection to the Proposed Decision issued in respect of the Waste Licence Application for the Drehid MBT Facility</b>

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PROJECT NUMBER: 6301				DOCUMENT REF: 6301-05-01			
Revision	Description & Rationale	Originated	Date	Checked	Date	Authorised	Date
A	Final Report	OMcA	29.11.13	DG	10.12.13	DG	10.12.13
<b>TOBIN Consulting Engineers</b>							

## 1 INTRODUCTION

This objection is made by Bord na Móna Plc, the applicant, and addresses separately each condition or schedule of the Proposed Decision to which the objection relates. In certain instances the purpose of the objection is to provide for clarification of the condition or schedule.

As set out below, the condition or schedule to which the objection relates is stated. The grounds of the objection are stated in full including the reasons, considerations and arguments on which they are based.

## 2 CONDITIONS/SCHEDULES AND OTHER AREAS TO WHICH OBJECTION RELATES

### Cover Page

Location of Facility:	Drehid Mechanical Biological Treatment Facility, Coolcarrigan, Drummond and Carbury, County Kildare.
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### Grounds for Objection

It is submitted that the 'Location of Facility' should read:

*"Drehid Mechanical Biological Treatment Facility,  
in the townlands of Coolcarrigan and Drummond, Carbury,  
County Kildare."*

### Introduction

This introduction is not part of the licence and does not purport to be a legal interpretation of the licence.

This licence is for the operation of a Mechanical Biological Treatment (MBT) facility at Coolcarrigan, Drummond and Carbury, County Kildare.

The integrated facility will carry out the following activities.....

### Grounds for Objection

It is submitted that the second sentence of the Introduction should read:

*"This licence is for the operation of a Mechanical Biological Treatment (MBT) facility in the townlands of Coolcarrigan and Drummond, Carbury, County Kildare."*

### Part 1 Schedule of Activities Licensed

In pursuance of the powers conferred on it by the Waste Management Act 1996: as amended, the Environmental Protection Agency (the Agency) proposes, under Section 40(1) of the said Act, to grant this Waste Licence to Bord na Mona Plc., Leabeg, Tullamore, County Offaly, CRO 297717, to carry on the waste activities listed below at the Drehid Mechanical Biological Treatment Facility at Coolcarrigan, Drummond and Carbury, County Kildare, subject to conditions, with the reasons therefor and the associated schedules attached thereto set out in the licence. ’

#### Grounds for Objection

It is submitted that this first paragraph should read:

*“In pursuance of the powers conferred on it by the Waste Management Act 1996: as amended, the Environmental Protection Agency (the Agency) proposes, under Section 40(1) of the said Act, to grant this Waste Licence to Bord na Mona Plc., Leabeg, Tullamore, County Offaly, CRO 297717, to carry on the waste activities listed below at the Drehid Mechanical Biological Treatment Facility in the townlands of Coolcarrigan and Drummond, Carbury, County Kildare, subject to conditions, with the reasons therefor and the associated schedules attached thereto set out in the licence.”*

### Part 1 Schedule of Activities Licensed

**Class D 14** Repackaging prior to submission to any of the operations numbered D 1 and D 13.

#### Grounds for Objection

It is submitted that the description of Class D14 should read:

*“Repackaging prior to submission to any of the operations numbered D 1 to D 13.”*

#### Glossary of Terms

**Biological Treatment** Composting, anaerobic digestion, mechanical-biological treatment or any other biological treatment process for stabilising and sanitising biodegradable waste, including pre-treatment processes.

#### Grounds for Objection

It is unclear as to what precisely is meant by ‘sanitising’ in the context of this definition. Depending on the extent of stabilised material produced for application to land (i.e. CLO – Compost Like Output), it is envisaged that some or all of the stabilised solid output from the biological treatment stage will be disposed of to landfill. This stabilised material may not undergo ‘sanitising’ to a defined standard as approved by the Department of Agriculture, Food and the Marine. This subject is currently being considered at National and EU level. In order to provide for a situation where stabilised material (for disposal to landfill) does not require ‘sanitising’ to a defined standard, it is considered that the definition of Biological Treatment should not refer to ‘sanitising’. Besides, Condition 1.9 (as per the Applicant’s proposed amendment to Condition 1.9) provides for the obtaining of any necessary written consent of the Department of Agriculture, Food and the Marine to treat animal by-products at the facility.

In addition, the definition of Biological Treatment should not refer to ‘mechanical-biological treatment’ or ‘biological treatment’ - as to do so would constitute a circular definition.

It is suggested that the definition of Biological Treatment is reworded to:

*“Anaerobic digestion and/or composting for stabilising biodegradable waste, including pre-treatment processes”.*

## Glossary of Terms

<b>Digestate</b>	The treated output, sanitised and free from offensive odours, from anaerobic digestion of biodegradable waste including, whether combined or separated, the solid/fibrous and liquid/liquor fractions.
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## Grounds for Objection

In the context of this waste licence, the digestate produced in the dry anaerobic digestion process may not be 'free from offensive odours'. It is envisaged that the solid digestate will undergo a subsequent composting stage in order to reach stabilisation (the reduction of the decomposition properties of the waste to such an extent that offensive odours are minimised and that the respiration activity after four days is <math><10\text{mg O}\_2/\text{g DM}</math> until 1 January 2016 and <math><7\text{mg O}\_2/\text{g DM}</math> thereafter).

In the event of application of the stabilised output to land, 'sanitising' to a defined standard as approved by the Department of Agriculture, Food and the Marine will take place in the aforementioned subsequent composting stage.

It is suggested that the definition of Digestate is reworded to:

*"The treated output from anaerobic digestion of biodegradable waste including, whether combined or separated, the solid/fibrous and liquid/liquor fractions".*

## Glossary of Terms

<b>Mechanical-biological treatment</b>	The treatment of residual municipal waste, unsorted waste or any other waste unfit for composting or anaerobic digestion in order to stabilise and reduce the volume of the waste.
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## Grounds for Objection

Given that Mechanical Biological Treatment at the Drehid MBT Facility will involve 'composting' or 'anaerobic digestion and composting', it is submitted that this definition needs to be amended.

It is suggested that the definition of Mechanical Biological Treatment is reworded to:

*"The treatment of residual municipal waste through a combination of mechanical processing and biological treatment in order to stabilise and reduce the mass of waste that requires disposal."*

## Condition

- |       |  |
|-------|--|
| 1.5   | Waste Acceptance Hours and Hours of Operation  |
| 1.5.1 | Waste shall be accepted at, or dispatched from, the facility only between the hours of 0730 and 1815 Monday to Saturday inclusive, unless otherwise agreed by the Agency.                              |
| 1.5.2 | Unless otherwise agreed by the Agency, or as may be necessary in an emergency, the mechanical treatment process shall be operated only during the hours of 0800 and 0200 Monday to Saturday inclusive. |
| 1.5.3 | The Solid Recovered Fuel Building and the biological treatment process may be operated on a continuous basis (24 hours per day, 7 days per week).  |

## Grounds for Objection

Given that the SRF drying process is reliant on operations in both the Solid Recovered Fuel Building and the Mechanical Treatment Building, it is considered that this Condition should refer to the processes concerned as opposed to buildings – as is already mainly the case (with the exception of the reference to the "Solid Recovered Fuel Building") in this Condition.

It is suggested that Condition 1.5.3 is reworded to:

*“The Solid Recovered Fuel drying process and the biological treatment process may be operated on a continuous basis (24 hours per day, 7 days per week).”*

### Condition

1.9	Prior to commencing waste activities the licensee must satisfy the Agency that it has obtained the written consent of the Department of Agriculture, Food and the Marine to treat animal by-products at the facility. A copy of the consent shall be submitted to the Agency one month before waste activities commence and a copy shall be made available for inspection by authorised persons of the Agency.
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### Grounds for Objection

In order to provide for a situation where the Applicant might develop the facility in a number of phases, and particularly where the first development phase would constitute the mechanical treatment process in the absence of the biological treatment process, it is suggested that Condition 1.9 is reworded to:

*“Prior to commencing waste activities the licensee must satisfy the Agency that it has obtained any necessary written consent of the Department of Agriculture, Food and the Marine to treat animal by-products at the facility. A copy of the consent (where necessary) shall be submitted to the Agency one month before waste activities commence and a copy shall be made available for inspection by authorised persons of the Agency.”*

### Condition

2.2.2.3	Environmental Management Programme (EMP). The licensee shall, not later than six months from the date of grant of this licence, submit to the Agency for agreement an EMP, including a time schedule, for achieving the Environmental Objectives and Targets prepared under Condition 2.2.2.2. Once agreed the EMP shall be established by the licensee.....
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### Grounds for Objection

It is submitted that an Environmental Management Programme (EMP) can only be prepared following the completion of the detailed design of the facility. Given the relative uncertainty of the time lines involved in the procurement of the detailed design and construction of this facility (or indeed any infrastructural development), the setting of time lines “from the date of grant of this licence” is considered inappropriate. As is the case in other Conditions, it is submitted that time lines should more appropriately relate “to commencement of waste acceptance at the facility”.

It is suggested that Condition 2.2.2.3 is reworded to:

*“Environmental Management Programme (EMP).*

*The licensee shall, prior to commencement of waste acceptance at the facility, submit to the Agency for agreement an EMP, including a time schedule, for achieving the Environmental Objectives and Targets prepared under Condition 2.2.2.2. Once agreed the EMP shall be established by the licensee.....”*

### Condition

3.3.1	The licensee shall, within one month of the date of grant of this licence, provide a Facility Notice Board on the facility so that it is legible to persons outside the main entrance to the facility. The minimum dimensions of the board shall be 1200 mm by 750 mm. The notice board shall be maintained thereafter.
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### Grounds for Objection

It is submitted that the erection of a Facility Notice Board (containing information such as normal hours of opening and operation, and instructions on where environmental information can be obtained) prior to commencement of waste acceptance at the facility would be misleading to the public. Given the relative uncertainty of the time lines involved in the procurement of the detailed design and construction of this facility (or indeed any infrastructural development), the setting of time lines “from the date of grant of this licence” is considered inappropriate. As is the case in other Conditions, it is submitted that time lines should more appropriately relate “to commencement of waste acceptance at the facility”.

It is suggested that Condition 3.3.1 is reworded to:

*“The licensee shall, prior to commencement of waste acceptance at the facility, provide a Facility Notice Board on the facility so that it is legible to persons outside the main entrance to the facility. The minimum dimensions of the board shall be 1200 mm by 750 mm. The notice board shall be maintained thereafter.*

### Condition

3.4.2 The licensee shall maintain a CCTV monitoring system which records all waste vehicle movements into and out of the facility. The CCTV system shall be operated at all times with digital date stamping. Copies of recordings shall be kept on site and made available to the Agency on request.

### Grounds for Objection

It is submitted that it would be impracticable to retain CCTV recordings on site on an indefinite basis. Hence, it is considered that Condition 3.4.2 should include a provision for agreeing on a retention period for digital recordings.

It is suggested that Condition 3.4.2 is reworded to:

*“The licensee shall maintain a CCTV monitoring system which records all waste vehicle movements into and out of the facility. The CCTV system shall be operated at all times with digital date stamping. Copies of recordings shall be kept on site for a period to be agreed with the Agency. Copies of stored recordings shall be made available to the Agency on request”.*

### Condition

3.6 The licensee shall install on all emission points such sampling points or equipment, including any data-logging or other electronic communication equipment, as may be required by the Agency. All such equipment shall be consistent with the safe operation of all sampling and monitoring systems.

### Grounds for Objection

It may not be possible to fully comply with such a condition in its current form as it may not be practical and/or technically feasible to install such equipment as may be required by the Agency. Hence, it is considered that Condition 3.6 should include a provision for mutually agreeing the equipment required, as is the case with other conditions.

It is suggested that Condition 3.6 is reworded to:

*“The licensee shall install on all emission points such sampling points or equipment, including any data-logging or other electronic communication equipment, as may be agreed with the Agency. All such equipment shall be consistent with the safe operation of all sampling and monitoring systems”.*

### Condition

3.8.3 Vehicle wash water in the interceptor sump shall be reused for vehicle washing or sent off-site for disposal.

### Grounds for Objection

In order to minimise the quantities of waste water being transported off site it is submitted that Condition 3.8.3 should provide for the use of vehicle wash water in the MBT process

It is suggested that Condition 3.8.3 is reworded to:

*“Vehicle wash water in the interceptor sump shall be reused for vehicle washing, used in the MBT process or sent off-site for disposal.”*

### Condition

3.11.4 Air extracted from waste treatment buildings shall be vented through acid scrubbers and biofilters or alternative treatment facilities as may be agreed by the Agency.

### Grounds for Objection

In circumstances where the emission limit value for ammonia ( $50 \text{ mg/m}^3$  – as set out in Schedule B of the proposed decision) can be achieved without the use of acid scrubbers, it is reasonable to suggest that the use of acid scrubbers should not be mandatory on all airstreams. Indeed, this approach is considered good environmental practice, as it will reduce the volumes of chemicals (i.e. sulphuric acid) that would need to be stored on site.

As noted in Section 1.2 of Appendix 2.1 of Volume IV of the EIS that accompanied the Waste Licence Application:

“While all odourous airstreams will be processed through biofilters, only specific airstreams with a potential for high ammonia levels will be processed through acid scrubbers. Air streams with a potential for high ammonia levels include:

- Process air exhausted from the composting tunnels
- Process air exhausted from the dry AD tunnels (during the aerobic stage)
- Air pulled through the trapezoidal windrows (by means of negative aeration)

Essentially, exhausted process air from the biological treatment process as opposed to building ventilation air will be processed through acid scrubbers.”

It is suggested that Condition 3.11.4 is reworded to:

*“Air extracted from waste treatment buildings shall be vented through biofilters or alternative treatment facilities as may be agreed by the Agency. Airstreams with a potential for high ammonia levels shall be processed through acid scrubbers or alternative treatment facilities as may be agreed by the Agency”*

### Condition

3.11.5 Air handling and odour abatement equipment including bio-filter volume/capacity and odour equipment shall be provided on the basis of 100% standby capacity.

### Grounds for Objection

The provision of air handling and odour abatement equipment on the basis of 100% standby capacity is considered impracticable and indeed unnecessary to prevent an impairment of, or an interference with amenities or the environment beyond the facility boundary. The extent of the additional infrastructure associated with the provision of 100% standby capacity (which would go beyond that provided for in the

granted planning permission) and the carbon emissions associated with its development would not constitute sustainable development and would likely render the project commercially unviable.

Prior to the lodging of the Waste Licence Application, Bord na Móna visited numerous MBT facilities in Germany, Spain, Italy and the UK, and is not aware of any existing MBT facility that would satisfy this requirement.

BAT (Best Available Techniques) have been applied in the design of all aspects of the Drehid MBT Facility including the odour abatement system. The application of BAT for odour abatement does not entail the provision of 100% standby capacity.

As apparent in Appendix 2.1 of Volume IV of the EIS, the overall odour abatement system for the Drehid MBT Facility consists of a number of subsystems. For example, the odour abatement system includes three separate biofilters (each of which consists of two sections), three humidifiers, two acid scrubbers, numerous fans and ductwork networks. The failure of any single component of the odour abatement system will not result in an impairment of, or an interference with amenities or the environment beyond the facility boundary.

The proposed biofilters have been conservatively sized to achieve the emission limit values (as set out in Schedule B of the proposed decision) and to avoid the generation of nuisance odours at sensitive receptors. The sizing of the biofilters facilitates maintenance and replacement of media without having to shut down the odour abatement system.

As noted in Section 1.3 of Appendix 2.1 of Volume IV of the EIS that accompanied the Waste Licence Application:

“Biofilters will be compartmentalised to facilitate maintenance and replacement of media. Each biofilter will comprise of two sections such that treatment is provided by one of the sections while the other section is being maintained”

It is suggested that Condition 3.11.5 is removed/deleted.

### Condition

<p>3.17 Silt Traps and Oil Separators The licensee shall, within six months of date of grant of this licence, install and maintain silt traps and oil separators at the facility.....</p>
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### Grounds for Objection

Given the relative uncertainty of the time lines involved in the procurement of the detailed design and construction of this facility (or indeed any infrastructural development), the setting of time lines for the installation of infrastructure “from the date of grant of this licence” is considered inappropriate. As is the case in other Conditions, it is submitted that time lines should more appropriately relate “to commencement of waste acceptance at the facility”.

It is suggested that Condition 3.17 is reworded to:

*“Silt Traps and Oil Separators*

*The licensee shall, prior to commencement of waste acceptance at the facility, install and maintain silt traps and oil separators at the facility.....”.*

### Condition

3.19.1 The licensee shall carry out a risk assessment to determine if the activity should have a fire-water retention facility. The licensee shall submit the assessment and a report to the Agency on the findings and recommendations of the assessment within six months of the date of grant of this licence.

### Grounds for Objection

It is submitted that a fire water risk assessment can only be prepared following the completion of the detailed design of the facility. Given the relative uncertainty of the time lines involved in the procurement of the detailed design and construction of this facility (or indeed any infrastructural development), the setting of time lines for the installation of infrastructure from “the date of grant of this licence” is considered inappropriate. As is the case in other Conditions, it is submitted that time lines should more appropriately relate “to commencement of waste acceptance at the facility”.

It is suggested that Condition 3.19.1 is reworded to:

*“The licensee shall carry out a risk assessment to determine if the activity should have a fire-water retention facility. The licensee shall submit the assessment and a report to the Agency on the findings and recommendations of the assessment prior to commencement of waste acceptance at the facility”.*

### Condition

3.19.3 In the event of a fire or a spillage to storm water, the site storm water shall be diverted to the containment pond. The licensee shall examine, as part of the response programme in Condition 3.19.2 above, the provision of automatic diversion of storm water to the containment pond.

### Grounds for Objection

As noted in Section 6.4.1 of Volume II of the EIS that accompanied the Waste Licence Application, continuous monitoring will take place at the inlet and outlet of the surface water lagoons. Instrumentation linked to a SCADA system will continuously monitor the following parameters:

- Dissolved Oxygen
- pH
- Electrical Conductivity
- Flow Rate

An actuated valve at the surface water lagoon outlets will be controlled by the SCADA system. This valve will be programmed to close should any of the above parameters fall outside permitted levels. The volume of surface water discharged to the surrounding environment will also be controlled through the same actuated valve and SCADA system.

The design of the control system for the surface water lagoons is such that contaminated water (“In the event of a fire or a spillage to storm water”) will be contained within the surface water lagoons which will act as containment ponds.

It is suggested that Condition 3.19.3 is reworded to:

*“In the event of a fire or a spillage to storm water, the site storm water shall be contained in the surface water lagoons. The licensee shall examine, as part of the response programme in Condition 3.19.2 above, the provision of automatic isolation of surface water lagoons”.*

### Condition

3.20 All pump sumps, storage tanks or other treatment plant chambers from which spillage of environmentally significant materials might occur in such quantities as are likely to breach local or remote containment or separators, shall be fitted with high liquid level alarms (or oil detectors as appropriate) within six months from the date of grant of this licence.

### Grounds for Objection

Given the relative uncertainty of the time lines involved in the procurement of the detailed design and construction of this facility (or indeed any infrastructural development), the setting of time lines for the installation of infrastructure from “the date of grant of this licence” is considered inappropriate. As is the case in other Conditions, it is submitted that time lines should more appropriately relate “to commencement of waste acceptance at the facility”.

It is suggested that Condition 3.20 is reworded to:

*“All pump sumps, storage tanks or other treatment plant chambers from which spillage of environmentally significant materials might occur in such quantities as are likely to breach local or remote containment or separators, shall be fitted with high liquid level alarms (or oil detectors as appropriate) prior to commencement of waste acceptance at the facility.”*

### Condition

3.23 The licensee shall, within three months of the date of grant of this licence, install in a prominent location on the facility a wind sock, or other wind direction indicator, which shall be visible from the public roadway outside the site.

### Grounds for Objection

Given the relative uncertainty of the time lines involved in the procurement of the detailed design and construction of this facility (or indeed any infrastructural development), the setting of time lines for the installation of infrastructure from “the date of grant of this licence” is considered inappropriate. As is the case in other Conditions, it is submitted that time lines should more appropriately relate “to commencement of waste acceptance at the facility”.

It is suggested that Condition 3.23 is reworded to:

*“The licensee shall, prior to commencement of waste acceptance at the facility, install in a prominent location on the facility a wind sock, or other wind direction indicator, which shall be visible from the public roadway outside the site.”*

### Condition

4.4 Noise  
 Noise from the facility shall not give rise to sound pressure levels ( $L_{Aeq,T}$ ) measured at the boundary of the facility which exceed the limit value(s).

### Grounds for Objection

Noise from the facility should be characterised by quantification of the specific noise impact at noise sensitive locations as referenced in Condition 5.7. The boundary of the facility is located approximately 1km from the nearest sensitive receptor, and as such, is not considered to be an appropriate noise monitoring location.

It is suggested that Condition 4.4 is reworded to:

**“Noise**

*Noise from the facility shall not give rise to sound pressure levels ( $L_{Aeq,T}$ ) measured at noise sensitive locations which exceed the limit value(s).”*

**Condition**

5.3	<p>Storm water</p> <p>Unless otherwise agreed by the Agency in circumstances where it is satisfactorily demonstrated that discharge at a higher level will not cause environmental pollution, the trigger levels for storm water discharges from the facility measured at discharge points SW7 and SW8 are:</p> <p>(i) Suspended Solids: 35mg/l</p> <p>(ii) Total Ammonia: 0.14 mg/l (as N)</p> <p>(iii) BOD: 2.6 mg/l</p>
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**Grounds for Objection**

Extensive monitoring has been undertaken since 2003 at the Bord na Móna landholding and at the existing Drehid Waste Management Facility (W0201-03). The trigger levels proposed in Condition 5.3 above are lower than the naturally occurring background ammonia concentrations in surface water runoff from the peat bog environment at the site. In 2003 (pre-development of the existing Drehid Waste Management Facility), background concentrations of 0.3 mg/l Total Ammonia were monitored at the peatland discharge to the Cushaling River.

Under section B.2 of Schedule B of the Waste Licence (W201-03) for the existing Drehid Waste Management Facility, the emission limit values are as follows:

Parameter	Emission Limit Value (mg/l)
BOD	25
Ammonia (as NH <sub>4</sub> )	0.5
Suspended Solids	35

The proposed trigger levels in Condition 5.3 above are lower than the ELV's for W201-03. It is submitted that the trigger values should be consistent with the ELVs for W201-03. The ELVs as prescribed in W201-03 are deemed protective of the surface water environment.

It is suggested that Condition 5.3 is reworded to:

**“Storm water**

*Unless otherwise agreed by the Agency in circumstances where it is satisfactorily demonstrated that discharge at a higher level will not cause environmental pollution, the trigger levels for storm water discharges from the facility measured at discharge points SW7 and SW8 are:*

- (i) Suspended Solids: 35mg/l*
- (ii) Total Ammonia: 0.5 mg/l (as N)*
- (iii) BOD: 25 mg/l”*

**Condition**

5.6	There shall be no direct discharge to surface water or groundwater.
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## Grounds for Objection

The following Table 2-1 has been taken from Section 2.1 of Volume II of the EIS which accompanied the Waste Licence Application. As is evident from this table, there are areas within the activity boundary (Red Line Boundary) that are reserved for landscaping and maintaining buffers. Waste activities will not be undertaken on these areas. Clearly, there will be direct discharges from these landscaping/buffer areas to surface water and groundwater.

**Table 2-1 Outline of Site Areas**

Item	Area hectares (ha)
Bord na Móna Ownership Boundary ('Blue Line Boundary') (South Bog – 1,745 ha and North Bog – 799 ha)	2,544ha
Drehid MBT Facility Site/Activity Boundary ('Red Line Boundary')	29ha
Area within the Activity Boundary reserved for landscaping and maintaining buffers	14.5ha

It is suggested that Condition 5.6 is reworded to:

*"There shall be no direct discharge from operational areas of the facility to surface water or groundwater. In the context of this Condition, operational areas shall mean areas of the facility on which waste processing, waste storage, or waste movement is undertaken."*

### Condition

6.6 The licensee shall ensure that groundwater monitoring well sampling equipment is available/installed on-site and is fit for purpose at all times. The sampling equipment shall be to Agency specifications.

## Grounds for Objection

It is agreed that the equipment that is used on site needs to be fit for purpose but requiring it to be to Agency specifications could result in a prohibitively onerous requirement on the Applicant. It is submitted that the requirement to provide 'fit for purpose' equipment is in itself sufficient.

It is suggested that Condition 6.6 is reworded to:

*"The licensee shall ensure that groundwater monitoring well sampling equipment is available/installed on-site and is fit for purpose at all times."*

### Condition

6.10 The integrity and water tightness of all underground pipes, tanks, bunding structures and containers and their resistance to penetration by water or other materials carried or stored therein shall be tested and demonstrated by the licensee prior to use and within three months of the date of grant of this licence. This testing shall be carried out by the licensee at least once every three years thereafter and reported to the Agency on each occasion. This testing shall be carried out in accordance with any guidance published by the Agency. A written record of all integrity tests and any maintenance or remedial work arising from them shall be maintained by the licensee.

### Grounds for Objection

Given the relative uncertainty of the time lines involved in the procurement of the detailed design and construction of this facility (or indeed any infrastructural development), the setting of time lines for the installation/testing of infrastructure from “the date of grant of this licence” is considered inappropriate. As is the case in other Conditions, it is submitted that time lines should more appropriately relate “to commencement of waste acceptance at the facility”.

It is suggested that Condition 6.10 is reworded to:

*“The integrity and water tightness of all underground pipes, tanks, bunding structures and containers and their resistance to penetration by water or other materials carried or stored therein shall be tested and demonstrated by the licensee prior to use. This testing shall be carried out by the licensee at least once every three years thereafter and reported to the Agency on each occasion. This testing shall be carried out in accordance with any guidance published by the Agency. A written record of all integrity tests and any maintenance or remedial work arising from them shall be maintained by the licensee.”*

### Condition

6.14.1 A visual examination of the storm water discharges shall be carried out daily. A log of such inspections shall be maintained.

### Grounds for Objection

As noted in Section 2.2.8.5 of Volume II of the EIS that accompanied the Waste Licence Application, the discharge from the surface water settlement ponds to the existing surface water drainage system and eventually the Cushaling River will be monitored continuously in respect of electrical conductivity, pH, dissolved oxygen and flow rate. It is therefore submitted that daily visual inspections of the storm water discharges are not required. As the discharge is linked to rainfall there will be days when no discharge occurs. It is therefore submitted that weekly visual examination intervals are more appropriate.

It is suggested that Condition 6.14.1 is reworded to:

*“A visual examination of the storm water discharges shall be carried out weekly. A log of such inspections shall be maintained.”*

### Condition

6.14.2 The licensee shall, within three months of the date of grant of this licence, develop and maintain to the satisfaction of the Agency a response programme to address instances where the trigger level values, as set in Condition 5.3 of this licence, are achieved or exceeded. This response programme shall include actions designed to ensure that there will be no storm water discharges of environmental significance.

### Grounds for Objection

It is submitted that a response programme can only be prepared following the completion of the detailed design of the facility. Given the relative uncertainty of the time lines involved in the procurement of the detailed design and construction of this facility (or indeed any infrastructural development), the setting of time lines for the development of a response programme from “the date of grant of this licence” is considered inappropriate. As is the case in other Conditions, it is submitted that time lines should more appropriately relate “to commencement of waste acceptance at the facility”.

It is suggested that Condition 6.14.2 is reworded to:



*“The licensee shall, prior to the commencement of waste acceptance at the facility, develop and maintain to the satisfaction of the Agency a response programme to address instances where the trigger level values, as set in Condition 5.3 of this licence, are achieved or exceeded. This response programme shall include actions designed to ensure that there will be no storm water discharges of environmental significance.”*

### Condition

6.14.3 In the case of composite sampling of storm water discharges from the facility, a separate composite sample or homogeneous sub-sample (of sufficient volume as advised) shall be retained as required for EPA use.
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### Grounds for Objection

Given that it would not be practicable to retain water samples on site indefinitely, it is submitted that Condition 6.14.3 should include a time line for the retention of samples on site.

It is suggested that Condition 6.14.3 is reworded to:

*“In the case of composite sampling of storm water discharges from the facility, a separate composite sample or homogeneous sub-sample (of sufficient volume as advised) shall be retained, for a minimum period of two months, for EPA use.”*

### Condition

6.19 The licensee shall, within six months of the date of grant of this licence, develop and establish a Data Management System for collation, archiving, assessing and graphically presenting the monitoring data generated as a result of this licence.
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### Grounds for Objection

It is submitted that a Data Management System can only be established following the completion of the detailed design of the facility. Given the relative uncertainty of the time lines involved in the procurement of the detailed design and construction of this facility (or indeed any infrastructural development), the setting of time lines for the development of a Data Management System from “the date of grant of this licence” is considered inappropriate. As is the case in other Conditions, it is submitted that time lines should more appropriately relate “to commencement of waste acceptance at the facility”.

It is suggested that Condition 6.19 is reworded to:

*“The licensee shall, prior to commencement of waste acceptance at the facility, develop and establish a Data Management System for collation, archiving, assessing and graphically presenting the monitoring data generated as a result of this licence.”*

### Condition

7.1 The licensee shall carry out an audit of the energy efficiency of the facility within one year of the date of grant of this licence. The audit shall be carried out in accordance with the guidance published by the Agency, “Guidance Note on Energy Efficiency Auditing”. The energy efficiency audit shall be repeated at intervals as required by the Agency.
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### Grounds for Objection

Given the relative uncertainty of the time lines involved in the procurement of the detailed design and construction of this facility (or indeed any infrastructural development), the setting of time lines for the carrying out of an audit of energy efficiency from “the date of grant of this licence” is considered inappropriate. As is the case in other Conditions, it is submitted that time lines should more appropriately relate “to commencement of waste acceptance at the facility”.

It is suggested that Condition 7.1 is reworded to:

*“The licensee shall carry out an audit of the energy efficiency of the facility within one year of commencement of waste acceptance at the facility. The audit shall be carried out in accordance with the guidance published by the Agency, “Guidance Note on Energy Efficiency Auditing”. The energy efficiency audit shall be repeated at intervals as required by the Agency.”*

### Condition

8.3 No hazardous waste or liquid waste shall be accepted at the facility.
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### Grounds for Objection

In order to conserve fresh water consumption, from the on site borehole water supply, for irrigation of the composting process, it is considered that the acceptance of liquid wastes should be permitted at the facility. For example, the moisture content of the material in the composting process would readily be maintained at optimum levels by addition of landfill leachate from the adjacent Drehid Waste Management Facility. Such liquid waste would be received directly into process water tanks at the MBT Facility.

It is suggested that Condition 8.3 is reworded to:

*“No hazardous waste shall be accepted at the facility”.*

### Condition

8.5.6 All biodegradable or odour-forming waste shall be treated within 24 hours or removed from the facility within 48 hours, except, in the case of waste to be removed from the facility, at Public Holiday weekends. At Public Holiday weekends, such waste shall be removed within 72 hours of its arrival or generation on site.
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### Grounds for Objection

As noted in Section 2.2.10 of the EIS that accompanied the Waste Licence Application, baled and plastic wrapped Solid Recovered Fuel (SRF) will be stored in an outdoor storage area. This storage area will comprise of a bunded concrete area and the SRF will be stored in wrapped bales approximately 1m<sup>3</sup> in size and four bales high. The logistics associated with the shipping of SRF overseas will necessitate the storage of SRF for periods far in excess of 48 hours or 72 hours.

It is suggested that Condition 8.5.6 is reworded to:

*“All biodegradable or odour-forming waste (with the exception of Solid Recovered Fuel) shall be treated within 24 hours or removed from the facility within 48 hours, except, in the case of waste to be removed from the facility, at Public Holiday weekends. At Public Holiday weekends, such waste shall be removed within 72 hours of its arrival or generation on site.”*

**Condition**

8.5.7 At the end of each day all waste debris shall be cleaned from the floor and surfaces of the waste reception pit.

**Grounds for Objection**

While the cleaning of waste debris from the floor and surfaces of the waste reception pit will be undertaken on a regular basis, the requirement for daily cleaning is considered impracticable and indeed unnecessary given that the waste reception pit will be in a fully enclosed building with a functioning odour abatement system.

In order to avoid the inclusion of a Condition that the licensee can not realistically satisfy, it is suggested that Condition 8.5.7 be removed/deleted.

**Condition**

8.5.9 All biodegradable and odour-forming waste stored overnight at the facility shall be stored in suitably covered and enclosed containers.

**Grounds for Objection**

All biodegradable and odour-forming waste stored overnight at the facility will be stored within fully enclosed buildings with a functioning odour abatement system thereby preventing an impairment of, or an interference with amenities or the environment beyond the facility boundary. The storage of biodegradable and odour-forming waste in covered and enclosed containers would result in anaerobic conditions within the containers thereby introducing subsequent processing issues and the generation of more pronounced odours during the removal of this waste from containers.

It is suggested that Condition 8.5.9 is reworded to:

*“All biodegradable and odour-forming waste stored overnight at the facility shall be stored within fully enclosed buildings.”*

**Condition**

8.12.1 Organic fines shall only be used to make bio-stabilised residual waste and compost like output.

**Grounds for Objection**

It is submitted that Condition 8.12.1 is unnecessarily restrictive to the operation of the Drehid MBT Facility. It is submitted that the Applicant should be afforded the latitude to provide treatment to organic fines that is in compliance with legal requirements - other than to make bio-stabilised residual waste and compost like output.

It is suggested that Condition 8.12.1 be removed/deleted.

**Condition**

8.13.1 Refuse derived fuel or solid recovered fuel produced at the facility shall be classified and specified in accordance with I.S. EN 15359:2011 *Solid recovered fuels – Specifications and classes* unless otherwise agreed by the Agency.

### Grounds for Objection

It is submitted that “I.S. EN 15359:2011” should read “EN 15359:2011”.

It is suggested that Condition 8.13.1 is reworded to:

*“Refuse derived fuel or solid recovered fuel produced at the facility shall be classified and specified in accordance with EN 15359:2011 Solid recovered fuels – Specifications and classes unless otherwise agreed by the Agency.”*

### Condition

8.13.2 No refuse derived fuel or solid recovered fuel shall be supplied to a person or organisation for combustion except where there is in place a technical specification, prepared in accordance with I.S. EN 15359:2011 *Solid recovered fuels – Specifications and classes* unless otherwise agreed by the Agency, agreed between the licensee and the person or organisation.

### Grounds for Objection

It is submitted that “I.S. EN 15359:2011” should read “EN 15359:2011”.

In order that this Condition would have its desired intention, it is considered that the word ‘and/or’ should be inserted after the word ‘Agency’.

It is suggested that Condition 8.13.2 is reworded to:

*“No refuse derived fuel or solid recovered fuel shall be supplied to a person or organisation for combustion except where there is in place a technical specification, prepared in accordance with EN 15359:2011 Solid recovered fuels – Specifications and classes unless otherwise agreed by the Agency, and/or agreed between the licensee and the person or organisation.”*

### Condition

8.13.5 The licensee shall annually, or at a greater frequency if so instructed by the Agency, demonstrate, using a method agreed or specified by the Agency, that the treatment process for the manufacture of refuse derived fuel or solid recovered fuel results in a materially significant net increase in calorific value over the mixed waste introduced to the treatment process.

### Grounds for Objection

Given that individual combustion facilities have differing requirements and specifications for refuse derived fuel or solid recovered fuel in terms of its calorific value, it is considered that this Condition would have undesirable implications on available markets for this fuel. For example, cement kilns typically do not require refuse derived fuel or solid recovered fuel (for use in the pre-calciner or pre-heating stage) to have a materially/significantly increased calorific value over its parent waste.

It is submitted that Condition 8.13.3 is all encompassing and sufficient in itself to require that refuse derived fuel or solid recovered fuel is supplied to legitimate facilities for combustion.

It is suggested that Condition 8.13.5 be removed/deleted.

### Condition

8.16 Unless agreed by the Agency the licensee shall not dispose of any waste that has been accepted at the facility for the purpose of a recovery activity.

### Grounds for Objection

Given the nature of Mechanical Biological Treatment, it is submitted that this Condition is flawed. The mechanical treatment process will strive to maximise the extraction of recyclables and thereby the recovery of the waste accepted. Ultimately, the recovery of recyclables will be dependent on the quality (e.g. cleanliness, moisture content, etc.) of the waste. Hence, waste that has been accepted at the facility for the purpose of a recovery activity (i.e. extraction of recyclables) may have to be rejected for disposal due to poor quality and unsuitability for production of Solid Recovered Fuel.

It is suggested that Condition 8.16 be removed/deleted.

### Condition

9.4.1 In the event of a breakdown of equipment or any other occurrence which results in the closure of the facility or cessation in waste treatment any waste arriving at, or already collected, at the facility shall be transferred directly to an alternative authorised facility until such time as the facility is returned to a fully operational status. Such a breakdown event will be treated as an emergency and rectified as soon as possible.

### Grounds for Objection

It is submitted that a 'cessation in waste treatment' would be a temporary cessation in waste treatment that would occasionally occur at any waste management facility. It is considered that the transfer of such waste to an alternative facility is not a reasonable and balanced reaction to a cessation in waste treatment in circumstance where waste is stored in fully enclosed buildings with functioning odour abatement systems.

It is suggested that Condition 9.4.1 is reworded to:

*"In the event of a breakdown of equipment or any other occurrence which results in the closure of the facility any waste arriving, or already collected, at the facility shall be transferred directly to an alternative authorised facility until such time as the facility is returned to a fully operational status. Such a breakdown event will be treated as an emergency and rectified as soon as possible."*

### Condition

12.1.1 The licensee shall pay to the Agency an annual contribution of €11,935, or such sum as the Agency from time to time determines, having regard to variations in the extent of reporting, auditing, inspection, sampling and analysis or other functions carried out by the Agency, towards the cost of monitoring the activity as the Agency considers necessary for the performance of its functions under the Waste Management Act 1996, as amended. The first payment shall be a pro-rata amount for the period from the date of commencement of enforcement to the 31<sup>st</sup> day of December, and shall be paid to the Agency within one month from the date of grant of the licence. In subsequent years the licensee shall pay to the Agency such revised annual contribution as the Agency shall from time to time consider necessary to enable performance by the Agency of its relevant functions under the Waste Management Act 1996, as amended and all such payments shall be made within one month of the date upon which demanded by the Agency.

## Grounds for Objection

Given the time required to procure and construct the Drehid MBT Facility for the acceptance of first waste, the “date of commencement of enforcement” is uncertain. As such, it is submitted that the wording of Condition 12.1.1 should be amended in line with the wording of this condition in other waste licences.

It is suggested that Condition 12.1.1 is reworded to:

*“The licensee shall pay to the Agency an annual contribution of €11,935, or such sum as the Agency from time to time determines, having regard to variations in the extent of reporting, auditing, inspection, sampling and analysis or other functions carried out by the Agency, towards the cost of monitoring the activity as the Agency considers necessary for the performance of its functions under the Waste Management Act 1996, as amended. The first payment shall be a pro-rata amount for the period from the date of commencement of enforcement to the 31<sup>st</sup> day of December, and shall be paid to the Agency within one month from the date of commencement of enforcement. In subsequent years the licensee shall pay to the Agency such revised annual contribution as the Agency shall from time to time consider necessary to enable performance by the Agency of its relevant functions under the Waste Management Act 1996, as amended and all such payments shall be made within one month of the date upon which demanded by the Agency.”*

## Schedule B

B.1	Emission Point Reference No: A2-3, A2-4 (Bio-filter outlet stacks) Location: Bio-filter/odour abatement building No. 2 Volume to be emitted: 32,500 Nm <sup>3</sup> /hr Minimum discharge height: 20m above ground
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## Grounds for Objection

The “Volume to be emitted” figure of 32,500 Nm<sup>3</sup>/hr relates to the emission from the Drehid MBT Facility (at A2-3 and A2-4) where the biological treatment process involves dry anaerobic digestion and composting (MBT Configuration B). In the case where the biological treatment process involves composting alone (MBT Configuration A), the emission from the Drehid MBT Facility (at A2-3 and A2-4) is 47,762 Nm<sup>3</sup>/hr.

The characteristics of the air emissions from MBT Configuration A and MBT Configuration B are set out in the tables provided in Appendix B of the Article 14 response to the request for information, which was submitted to the Agency in August 2013.

It is suggested that this text in Schedule B is reworded to:

*“Emission Point Reference No: A2-3, A2-4 (Bio-filter outlet stacks)  
Location: Bio-filter/odour abatement building No. 2  
Volume to be emitted: 47,762 Nm<sup>3</sup>/hr  
Minimum discharge height: 20m above ground”*

## Schedule B

B.1	Emission Point Reference No: A2-5, A2-6 (Bio-filter outlet stacks) Location: Bio-filter/odour abatement building No. 3 Volume to be emitted: 85,500 Nm <sup>3</sup> /hr Minimum discharge height: 20m above ground
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## Grounds for Objection

The “Volume to be emitted” figure of 85,500 Nm<sup>3</sup>/hr relates to the emission from the Drehid MBT Facility (at A2-5 and A2-6) where the biological treatment process involves dry anaerobic digestion and composting (MBT Configuration B). In the case where the biological treatment process involves composting alone (MBT Configuration A), the emission from the Drehid MBT Facility (at A2-5 and A2-6) is 93,766 Nm<sup>3</sup>/hr.

The characteristics of the air emissions from MBT Configuration A and MBT Configuration B are set out in the tables provided in Appendix B of the Article 14 response to the request for information, which was submitted to the Agency in August 2013.

It is suggested that this text in Schedule B is reworded to:

*“Emission Point Reference No: A2-5, A2-6 (Bio-filter outlet stacks)  
Location: Bio-filter/odour abatement building No. 3  
Volume to be emitted: 93,766 Nm<sup>3</sup>/hr  
Minimum discharge height: 20m above ground”*

## Schedule C

C.1.1	Emission Point Reference No: A2-1, A2-2 A2-3, A2-4 A2-5, A2-6 (Bio-filter outlet stacks)
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Description of Treatment:	Acid scrubbing Humidification Bio-filtration
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## Grounds for Objection

This objection is in line with the objection presented earlier to Condition 3.11.4.

In circumstances where the emission limit value for ammonia (50 mg/m<sup>3</sup> – as set out in Schedule B of the proposed decision) can be achieved without the use of acid scrubbers, it is reasonable to suggest that the use of acid scrubbers should not be mandatory on all airstreams. Indeed, this approach is considered good environmental practice, as it will reduce the volumes of chemicals (i.e. sulphuric acid) that would need to be stored on site.

It is suggested that this text in Schedule C is reworded to:

*“Emission Point Reference No: A2-1, A2-2, A2-3, A2-4, A2-5, A2-6  
(Bio-filter outlet stacks)”*

*Description of Treatment: Acid scrubbing (On airstreams with a potential for high ammonia levels)  
Humidification  
Bio-filtration”*

**Condition****SCHEDULE C: Control & Monitoring****C.1.2. Monitoring of Emissions to Air**

**Emission Point Reference No:** A2-1, A2-2, A2-3, A2-4, A2-5, A2-6  
(Bio-filter outlet stacks)

Parameter	Monitoring Frequency	Analysis Method/Technique
Odour	Bi-annual <sup>Note 1</sup>	See Note 1
Ammonia	Monthly (at outlet of Biofilter)	Colorimetric indicator tubes <sup>Note 2</sup>
Hydrogen Sulphide	Monthly (at outlet of Biofilter)	Colorimetric indicator tubes <sup>Note 2</sup>
Mercaptans	Monthly (at outlet of Biofilter)	Colorimetric indicator tubes <sup>Note 2</sup>
Amines	Monthly (at outlet of Biofilter)	Colorimetric indicator tubes <sup>Note 2</sup>

Note 1: Odour measurements shall be by olfactometric measurement and analysis shall be for mercaptans, hydrogen sulphide, ammonia and amines.

Note 2: Or an alternative method agreed by the Agency.

**Grounds for Objection**

It is submitted that the odour monitoring frequency should be reviewed after 12 months of operation. On the basis that the facility is not leading to odour nuisance and that the odour emission concentrations from the biofilters are within specification it is requested that the frequency of monitoring be reduced to once per annum after the first year of operation as outlined below:

**SCHEDULE C: Control & Monitoring****C.1.2 Monitoring of Emissions to Air**

**Emission Point Reference No:** A2-1, A2-2, A2-3, A2-4, A2-5, A2-6  
(Bio-filter outlet stacks)

Parameter	Monitoring Frequency	Analysis Method/Technique
Odour	Bi-annual <sup>Note 1,3</sup>	See Note 1
Ammonia	Monthly (at outlet of Biofilter)	Colorimetric indicator tubes <sup>Note 2</sup>
Hydrogen Sulphide	Monthly (at outlet of Biofilter)	Colorimetric indicator tubes <sup>Note 2</sup>
Mercaptans	Monthly (at outlet of Biofilter)	Colorimetric indicator tubes <sup>Note 2</sup>
Amines	Monthly (at outlet of Biofilter)	Colorimetric indicator tubes <sup>Note 2</sup>

Note 1: Odour measurements shall be by olfactometric measurement and analysis shall be for mercaptans, hydrogen sulphide, ammonia and amines.

Note 2: Or an alternative method agreed by the Agency.

Note 3: Monitoring frequency to be reviewed after 12 months of operation



## Condition

### SCHEDULE C: Control & Monitoring

#### C.1.2. Monitoring of Emissions to Air

Emission Point Reference No: A2-7 (CHP outlet stack)

Parameter	Monitoring Frequency	Analysis Method / Technique
Dust NO <sub>x</sub> SO <sub>2</sub> CO H <sub>2</sub> S HCl HF	Monthly for the first twelve months of operation and quarterly thereafter	To be agreed with the Agency

### Grounds for Objection

Air dispersion modelling of the emissions from the CHP outlet stack was undertaken for NO<sub>x</sub>, PM<sub>10</sub>, SO<sub>2</sub>, CO, H<sub>2</sub>S, HCl and HF as part of the Waste Licence Application process. In relation to SO<sub>2</sub>, CO, HCl and HF emissions were conservatively assumed to be emitted at the emission limits outlined in Council Directive 2010/75/EC (the Industrial Emissions Directive (IED)) for waste incineration. A conservative emission limit of 50 mg/m<sup>3</sup> for H<sub>2</sub>S was assumed in the assessment. In reality, levels over the course of a year are likely to be significantly lower than these levels.

Even under this worst-case assumption, based on emission limits at the IED emission limit values for SO<sub>2</sub>, CO, HCl and HF and conservative H<sub>2</sub>S emission limits, ambient levels of all parameters (SO<sub>2</sub>, CO, H<sub>2</sub>S, HCl and HF) are well below the ambient air quality standards. Based on conservative background concentrations, the predicted environmental concentrations (PECs) of pollutants, arising from the operation of the Drehid MBT Facility, are less than 7% of the relevant ambient air quality standard with process contributions accounting for less than 4% of the relevant ambient air quality standard. Similarly, in relation to PM<sub>10</sub>, using a conservative emission concentration of 50 mg/m<sup>3</sup> leads to an environmental impact, from process emissions, which is less than 2% of the ambient limit value.

In relation to NO<sub>2</sub>, based on conservative emission limits of 500 mg/m<sup>3</sup>, ambient levels are predicted to be approximately 39% of the ambient air quality limit value (SI 271 of 2011).

Given the likely low ambient concentrations of PM<sub>10</sub>, SO<sub>2</sub>, CO, H<sub>2</sub>S, HCl and HF it is considered excessive to condition the facility to undertake monthly monitoring for the first twelve months of operation. It is suggested that the frequency of monitoring be based on an initial monitoring program which will then specify a reasonable and transparent methodology for future monitoring from A2-7.

The approach recommended is that all parameters which are measured at levels 20% or less than the emission limit value (ELV) based on an initial monitoring program would be conditioned to undertake monitoring on an annual basis. Where a parameter is recorded at levels greater than 20% of the ELV based on an initial monitoring program, monitoring would be undertaken on a quarterly basis. It is suggested that the monitoring frequency could be reviewed on an annual basis taking into account the results over the previous 12 month period as outlined below:

**SCHEDULE C: Control & Monitoring**

**C.1.2 Monitoring of Emissions to Air**

**Emission Point Reference No:** A2-7 (CHP outlet stack)

Parameter	Monitoring Frequency Note 1	Analysis Method / Technique
Dust NO <sub>x</sub> SO <sub>2</sub> CO H <sub>2</sub> S HCl HF	<p>Frequency to be based on results of the initial monitoring programme.</p> <p>Parameters detected at levels greater than 20% of the ELV shall be monitored at a frequency of once per quarter.</p> <p>All other parameters to be monitored at a frequency of once per annum</p>	To be agreed with the Agency

Note 1 Monitoring frequency to be re-assessed on an annual basis.

**Schedule C**

C.1.1 Negative pressure across biofilter	Monthly	Air current tubes
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**Grounds for Objection**

In the interests of clarity, it is submitted that “Negative pressure across biofilter” should read “Differential pressure across biofilter”.

It is suggested that this text in Schedule C is reworded to:

*“Differential pressure across biofilter”*

**Schedule C**

**C.1.1**

**Emission Point Reference No:** A2-7 (CHP outlet stack)  
**Description of Treatment:** Biogas combustion

Control Parameter	Monitoring	Key Equipment <sup>Note 1</sup>
Biogas intake flow	Continuous with alarm/call-out	Flow detector
Fuel Loading	Continuous monitoring of biogas levels	Storage tank and level monitor
Continuous Burn	Continuous with alarm/call-out	Flame detector or equivalent approved. Pumps/engines Standby Flare
Pressure in gas system	Continuous with alarm/call-out	Pressure gauge or equivalent approved Standby flare
Internal combustion stability	Continuous stability monitoring	Frequency control system
Stack temperature	Continuous with alarm/call-out	Temperature probe
Stack efflux velocity	Continuous with alarm/call-out	Standard equipment
Maximum emission flow volume	Continuous with alarm/call-out	Standard equipment
Gas engine operation	Continuous with alarm/call-out	Standard equipment
Quality of biogas	Concentration of total halogenated hydrocarbons	Standard sampling and analytical equipment
	Concentration of sulphur compounds	Standard sampling and analytical equipment

Note 1: The licensee shall maintain appropriate access to standby and/or spares to ensure the operation of the abatement system.

**Grounds for Objection**

In the interests of clarity, it submitted that the term “Fuel Loading” needs to be further defined or amended, as the meaning/intention of this term is not intuitively understood.

In the interests of clarity, it submitted that the term “Maximum emission flow volume” needs to be further defined or amended, as the meaning/intention of this term is not intuitively understood.

**Schedule C**

C.4.2

**C.4.2 Dust Deposition and Micro-Organisms**

**Location:** Dust - monitoring stations D2, D5, D8, D9, D10, D11  
 Micro-organisms - at upwind and downwind locations to be agreed by the Agency or at any other locations as may be required by the Agency

Parameter	Monitoring Frequency	Analysis Method/Technique
Dust deposition	Bi-annually <sup>Note 1</sup>	VDI 2119 (Bergerhoff method)
Bacteria	Bi-annually	Grab sample <sup>Note 2</sup>
Aspergillus fumigatus	Bi-annually	Grab sample <sup>Note 2</sup>

**Note 1:** Twice during the period May to September concurrently with all of the above.  
**Note 2:** Enumeration of colonies to be carried out as described in 'Standardised Protocol for the Sampling and Enumeration of Airborne Micro-organisms at Composting Facilities' - The Composting Association (1999) or alternative method and/or frequency as may be agreed by the Agency.



**Grounds for Objection**

In the interests of clarity, it is submitted that Note 1 (“Twice during the period May to September concurrently with all of the above”) needs to be further defined or amended, as the meaning/intention of this note is not understood. This is particularly the case for the latter part of this note (“....concurrently with all of the above”). The term ‘above’ needs to be precisely defined.

**Condition**

C.6 Noise Monitoring

Period	Minimum Survey Duration
Daytime	4 hour survey with a minimum of 3 sampling periods at each noise monitoring location. <sup>Note 2</sup>
Evening-time	2 hours survey with a minimum of 1 sampling period at each noise monitoring location.
Night-time <sup>Note 1</sup>	3 hour survey with a minimum of 2 sampling periods at each noise monitoring location.

**Note 1:** Night-time measurements should be made between 2300hrs and 0400hrs, Sunday to Thursday, with 2300hrs being the preferred start time.  
**Note 2:** Sampling period is to be the time period T stated within the relevant licence. Typically this will be either 15 minutes or 30 minutes in duration. This applies to day, evening and night time periods.

**Grounds for Objection**

It is submitted that the content of the table in Schedule C.6 has been superseded by the Table 5 provided in the EPA response to Q.3 in its FAQs on the 'Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)': For convenience, this Table 5 is provided below.

**Table 5 Recommended Minimum Survey Durations**

Period	Minimum Survey Duration
Daytime (07:00 to 19:00hrs)	A minimum of 3 sampling periods <sup>1</sup> at each noise monitoring location.
Evening (19:00 to 23:00hrs)	A minimum of 1 sampling period at each noise monitoring location.
Night-time <sup>2</sup> (23:00 to 07:00hrs)	A minimum of 2 sampling periods at each noise monitoring location.

- viii. Sampling period is to be the time period T stated within the relevant licence. Typically this will be either 15 minutes or 30 minutes in duration. This applies to day, evening and night time periods.
- ix. Night-time measurements should normally be made between 23:00hrs and 04:00hrs, Sunday to Thursday, with 23:00hrs being the preferred start time.

With the introduction of 'Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)' as published by the Environmental Protection Agency, the likely waste licence sampling periods for noise monitoring locations will be 30 minutes for day and evening, and 15 – 30 minutes for night.

With the requirement in Table 5 for a minimum of 3 sampling periods at each noise monitoring location, using the proposed six noise monitoring locations (N1 to N6 inclusive) for the Drehid MBT Facility, would necessitate nine hours of daytime noise monitoring alone not including travel time between monitoring locations. This would likely take over ten hours in practice.

The above in conjunction with the requirements for evening and night time sampling would result in an excessively long noise monitoring event. A facility of the nature of the Drehid MBT Facility will have a steady state, low level, relatively constant noise emission. With the closest sensitive receptor to the facility located approximately 1km from the boundary, repeated rounds of sampling are considered to be superfluous as these will show little or no variation in regard to noise impact specific to the facility in question.

'Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)' is a guidance note and not a standard. Interpretation of its application in terms of sampling should be on a case by case basis determined by the specifics of the site in question, by a suitably competent person (as referenced in EPA response to Q.10 in the aforementioned FAQs).

In its response to Q.4 of the FAQs the Agency states:

*"... if a particular site is compliant over a number of years, then this annual noise survey requirement could be relaxed or removed with the written agreement of the site inspector, as currently allowed for in the NG4 note"*

The predicted cumulative operational phase noise levels within the EIS (that accompanied the Waste Licence Application for the MBT facility) are comfortably within the Waste Licence emission limit values at the sensitive receptors assessed. The same sensitive receptors pertain to the existing Drehid Waste Management Facility which has been compliant over a number of years. The predicted compliant noise emissions are achieved through the noise mitigating design of the Drehid MBT Facility, by maximising distance separation between noise sources and receptors and also the housing of the majority of noise producing plant inside buildings.

As demonstrated in the EIS which accompanied the Waste Licence Application, the operation of the proposed Drehid MBT Facility will not add any significant noise to the existing noise climate in the area. Validating this would not require the repeat of multiple sampling periods if the facility is shown on the first sampling period to be comfortably in compliance with the prescribed noise emission limit values for

day, evening and night time. With the closest sensitive receptor being approximately 1km from the site boundary this is a highly probable scenario.

Verification of the predicted non-exceedance of emission limit values by a single sampling period during day, evening and night time monitoring will be sufficient to establish the specific noise impact from the Drehid MBT Facility at the nearest sensitive receptors.

It is submitted that the table in Schedule C.6 in the proposed decision for the Drehid MBT Facility should be amended to reflect the content of Table 5 in the EPA response to Q.3 in its FAQs on the 'Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)'

It is also submitted that the Note (beneath the table) that refers to the duration of the sampling period should be amended to avoid the reference to the 'relevant licence'. This Note (rather than being a generic Note) should be specific to this licence.

It is further submitted that an additional Note should be added beneath the amended table, which would read as follows:

*"If it can be demonstrated, on the basis of conducted noise surveys, that the facility is in compliance with its noise limit values the Agency will agree to relax the survey requirements."*

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## Schedule E

Annual Environmental Report Content <sup>Note 1</sup>
<p>Reporting Period.</p> <p>Waste activities carried out at the facility.</p> <p>Quantity and composition of waste received, recovered and disposed of during the reporting period and each previous year (relevant EWC codes to be used).</p> <p>Amount of recyclables, bio-stabilised residual waste, compost-like output and RDF/SRF produced per annum.</p> <p>Amount of bio-gas utilised per annum.</p> <p>Waste management record.</p> <p>Waste recovery report.</p> <p>Emissions from the facility</p> <p>Resource consumption summary.</p> <p>Complaints summary.</p> <p>Schedule of Environmental Objectives and Targets.</p> <p>Environmental management programme – report for previous year.</p> <p>Environmental management programme – proposal for current year.</p> <p>Pollutant Release and Transfer Register – report for previous year.</p> <p>Pollutant Release and transfer Register – proposal for current year.</p> <p>Noise monitoring report summary.</p> <p>Ambient monitoring summary.</p> <p>Tank and pipeline testing and inspection report.</p> <p>Reported incidents summary.</p> <p>Energy efficiency audit report summary.</p> <p>Report on the assessment of the efficiency of use of raw materials in processes and the reduction in waste generated.</p> <p>Report on progress made and proposals being developed to minimise water demand and the volume of trade effluent discharges.</p> <p>Development/Infrastructural works summary (completed in previous year or prepared for current year).</p> <p>Reports on financial provision made under this licence, management and staffing structure of the installation/facility, and a programme for public information.</p> <p>Review of Decommissioning Management Plan.</p> <p>Statement of measures in relation to prevention of environmental damage and remedial actions (Environmental Liabilities).</p> <p>Environmental Liabilities Risk Assessment Review (every three years or more frequently as dictated by relevant on-site change including financial provisions).</p> <p>Any other items specified by the Agency.</p>
<p>Note 1: Content may be revised subject to the agreement of the Agency.</p>

## Grounds for Objection

Schedule E requires the provision of “Quantity and composition of waste received, recovered and disposed of during the reporting period and each previous year (relevant EWC codes to be used)” in the Annual Environmental Report (AER). In the interests of conciseness and given that AERs for previous years will be readily available, it is submitted that the AER for any particular year (with the exception of year 1) should only require waste details for the reporting year and the previous year as opposed to “each previous year”.

It is suggested that this text in Schedule E is reworded to:

*“Quantity and composition of waste received, recovered and disposed of during the reporting period and the previous year (relevant EWC codes to be used)”*

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