



OFFICIAL

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 Signed: Stoarey Date: 06/02/14

**REPORT OF THE TECHNICAL COMMITTEE
 ON OBJECTIONS TO LICENCE CONDITIONS**

TO:	Directors
FROM:	Technical Committee - Environmental Licensing Programme
DATE:	6 February 2014
RE:	Objection to a Proposed Decision (PD) issued to Bord na Móna Plc, Leabeg, Tullamore, County Offaly, Licence Register W0283-01.

Application Details	
Type of facility:	Mechanical biological treatment (MBT) facility.
Classes of Activity (P = principal activity):	3 rd Schedule: D8, D13, D 14, D15. 4 th Schedule: R3 (P), R4, R5, R12, R13.
Quantity of waste managed per annum:	250,000 tonnes.
Classes of Waste:	Non-hazardous mixed solid residual household, commercial and industrial waste.
Location of facility:	Drehid Mechanical Biological Treatment Facility, in the townlands of Coolcarrigan and Drummond, Carbury, County Kildare.
Licence application received:	27 June 2012.
PD issued:	14 November 2013.

1. Company and background to this report

Bord na Móna Plc (CRO No. 297717) propose to operate a mechanical biological treatment (MBT) facility. Planning Permission for the facility was granted by An Bord Pleanála on the 15 March 2013.

This report relates to one valid first party objection received by the Agency in relation to the Proposed Decision (PD).

2. Consideration of the objections

The issues raised in the objection are summarised under the headings below. The original objection should be referred to at all times for greater detail and expansion of particular points.

Objector's Name	Date Received
Damien Grehan, TOBIN Consulting Engineers on behalf of Bord na Móna Plc	11 December 2013

The Technical Committee (TC), comprising of Ewa Babiarczyk (Chair) and Caroline Murphy, has considered all of the issues raised in the objection and this report details the Committee's comments. Each issue raised in the objection is outlined in turn below. The proposed amendments to the existing conditions and schedules are highlighted with a bold font in the TC's Recommendations.

Objection 1. Location of the facility

The applicant requests to amend the text of the facility location which reads "Drehid Mechanical Biological Treatment Facility, Coolcarrigan, Drummond and Carbury, County Kildare" to "*Drehid Mechanical Biological Treatment Facility, in the townlands of Coolcarrigan and Drummond, Carbury, County Kildare*".

Technical Committee's Evaluation

The Technical Committee recommends that the address is amended as requested.

Recommendation:

Amend the *Location of Facility* on the cover page of the PD to read as follows:

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

Amend the second paragraph of *Introduction* of the PD to read as follows:

"This licence is for the operation of ... facility **in the townlands of** Coolcarrigan **and** Drummond, Carbury, County Kildare".

Amend *Part I Schedule of Activities Licensed* of the PD to read as follows:

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

Objection 2. Class of activity D 14 in Part I Schedule of Activities Licensed

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

The applicant proposes to amend the description for Class D 14 to read "*Repackaging prior to submission to any of the operations numbered D 1 to D 13.*"

Technical Committee's Evaluation

The proposed wording for this Class D 14 is in accordance with the Waste Management Act 1996, as amended. The Technical Committee recommends amendment as requested by the applicant.

Recommendation:

Amend the description of Class D 14 in *Part I Schedule of Activities Licensed* to read as follows:

Repackaging prior to submission to any of the operations numbered D1 **to** D13.

Objection 3. Definition for Biological Treatment

Biological Treatment

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

The applicant states that depending on the extent of stabilised material produced for application to land, it is envisaged that some or all of the stabilised solid output from the biological treatment stage will be disposed of to landfill. The applicant continues that this stabilised material may not undergo 'sanitising' and in order to provide for a situation where stabilised material (for disposal to landfill) does not require 'sanitising', it is considered that the definition for Biological Treatment should not refer to such a process.

The applicant further adds that the definition should not refer to 'mechanical-biological treatment' or 'biological treatment' as to do so it would constitute a circular definition and suggests the following amendment:

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

Technical Committee's Evaluation

The Technical Committee accepts the point and recommends amendment to the definition.

Recommendation:

Amend definition for Biological Treatment in *Glossary of Terms* as follows:

Anaerobic digestion **and/or** composting for stabilising biodegradable waste, **whether to a treatment standard or otherwise**, including pre-treatment processes.

Objection 4. Definition for Digestate

Digestate

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.

The applicant states that the digestate produced in the dry anaerobic digestion process may not be 'free from offensive odours' and that it is envisaged that the solid digestate will undergo a subsequent composting stage in order to reach stabilisation. The applicant suggests to reword the definition as follows:

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

Technical Committee's Evaluation

The Technical Committee recommends the following amendment.

Recommendation:

Amend the definition for Digestate in *Glossary of Terms* as follows:

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

Objection 5. Definition for Mechanical-biological treatment

**Mechanical
-biological
treatment** 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.

The applicant states that as the mechanical biological treatment at the facility will involve composting (Configuration A) and anaerobic digestion & composting (Configuration B), the following amendment to the definition is proposed:

"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."

Technical Committee's Evaluation

The Technical Committee accepts the point and recommends amendment to the definition.

Recommendation:

Amend definition for Mechanical-biological treatment in *Glossary of Terms* to read as follows:

The treatment of **residual municipal waste using a combination of mechanical processing and biological treatment** in order to stabilise and reduce the volume of the waste.

Objection 6. Condition 1.5.3

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).

The applicant states that given that the solid recovered fuel (SRF) drying process is reliant on operations in both the Solid Recovered Fuel Building and the Mechanical Treatment Building, Condition 1.5 should refer to the processes as opposed to buildings. Accordingly, the applicant suggests to reword Condition 1.5.3 as follows: "The Solid Recovered Fuel drying process and the biological treatment process may be operated on continuous basis (24 hours per day, 7 days per week).

Technical Committee's Evaluation

The Committee accepts the point and recommends amendment to the condition.

Recommendation:

Amend Condition 1.5.3 to read as follows:

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).

Objection 7. Condition 1.9

- 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.

The applicant suggests amendment to this condition which would provide for a situation where the facility is being developed in a number of phases, and particularly where the first development phase would be the mechanical treatment process in the absence of the biological treatment process. The proposed wording reads as follows:

*"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..."*

Technical Committee's Evaluation

Condition 1.9 requires evidence of compliance with the Animal By-Products Regulation (EC Regulation No 1069/2009) prior to commencement of any operations involving animal by-products.

Recommendation:

No change.

Objection 8. Condition 2.2.2.3

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. It shall include:

- designation of responsibility for targets;
- the means by which they may be achieved;
- the time within which they may be achieved.

The EMP shall be reviewed annually and amendments thereto notified to the Agency for agreement as part of the Annual Environmental Report (AER).

A report on the programme, including the success in meeting agreed targets, shall be prepared and submitted to the Agency as part of the AER. Such reports shall be retained on-site for a period of not less than seven years and shall be available for inspection by authorised persons of the Agency.

The applicant suggests that an Environmental Management Programme (EMP) can only be prepared following the completion of the detailed design of the facility and argues that given the relative uncertainty of the time frames involved in the procurement of the design and construction of the facility, the setting of the time frame "from the date of grant of this licence" is considered inappropriate. The applicant suggests that the time frame should relate to the commencement of waste acceptance.

Technical Committee's Evaluation

The Technical Committee recommends amendment to the condition.

Recommendation:

Amend Condition 2.2.2.3 to read as follows:

Environmental Management Programme (EMP)

The licensee shall, **prior to commencement of waste activities**, 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. It shall include...

Objection 9. Condition 3.3.1

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.

The applicant states that the erection of a Facility Notice Board prior to commencement of waste acceptance at the facility would be misleading to the public. The applicant requests setting the time frame which will relate to commencement of waste acceptance at the facility.

Technical Committee's Evaluation

The Technical Committee considers it appropriate to simply ensure the notice board is erected prior to waste acceptance.

Recommendation:

Amend condition 3.3.1 to read:

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.

Objection 10. Condition 3.4.2

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.

The applicant states that it would be impracticable to retain CCTV recordings on site on an indefinite basis and that this condition should include a provision for agreeing on a retention period for digital recordings.

Technical Committee’s Evaluation

The TC considers it reasonable to amend the wording to enable clarity with respect to the timeframe for retention of CCTV recordings, although it is not possible to provide a definitive timeframe because an investigation might commence at any time that requires older records (perhaps years old). While the cost of storing digital files is unknown to the TC, it is unlikely to be large and is facilitated in the recommended re-wording of the condition.

In regard to the above, the TC recommends rewording the condition to enable the licensee to seek the OEE’s approval to destroy older records. In this way the OEE can assess the request in the light of timely knowledge of the activities at the facility.

Recommendation:

Amend Condition 3.4.2 to read:

The licensee shall **install and** maintain a CCTV 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. **Unless otherwise agreed by the Agency,** copies of recordings shall be kept on site **or stored electronically at a secure off-site location** and made available to the Agency on request.

Objection 11. Condition 3.6

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.

The applicant states that it may not be possible to comply with the requirements of this condition as it may not be practical and/or technically feasible to install such equipment as may be required by the Agency. The applicant suggests that the condition should include a provision for mutually agreeing the equipment required.

Technical Committee’s Evaluation

The Agency will take into account the practicalities and technical feasibilities of installing equipment prior to requiring it. Accordingly, the TC does not recommend an amendment of the condition.

Recommendation:

No change.

Objection 12. Condition 3.8.3

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

The applicant states that in order to minimise the quantities of waste water being transported off-site, Condition 3.8.3 should allow the use of vehicle wash water in the MBT process.

Technical Committee's Evaluation

The Technical Committee proposes amendment as follows:

Recommendation:

Amend Condition 3.8.3 to read as follows:

Vehicle wash water in the interceptor sump shall be reused for vehicle washing, sent off-site for disposal, **or otherwise reused at the facility.**

Objection 13. Conditions 3.11.4 and 3.11.5

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.

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.

Regarding Condition 3.11.4, the applicant suggests that the use of acid scrubbers should not be mandatory on all airstreams, especially in circumstances where the emission limit value for ammonia of 50 mg/m³ can be achieved without the use of acid scrubbers.

Regarding Condition 3.11.5, the applicant proposes to remove this condition. The applicant explains that BAT have been applied in the design of the facility including the odour abatement system and that biofilters will be compartmentalised to facilitate maintenance and replacement of media. The applicant adds that each biofilter will comprise of two sections such that treatment is provided by one of the sections while the other section is being maintained.

Technical Committee's Evaluation

Condition 3.11.4 already allows for alternative treatment to acid scrubbers for air extracted from the waste treatment buildings, however the following amendment is proposed to specifically provide for acid scrubbers if they are required.

In respect of the objection on Condition 3.11.5, the Technical Committee accepts the point made by the applicant and is of the opinion that the proposed system is sufficient. Accordingly the Technical Committee recommends that Condition 3.11.5 is removed.

Recommendation:

Amend condition 3.11.4 to read as follows:

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

Remove Condition 3.11.5.

Objection 14. Condition 3.17

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:

- (i) Silt traps to ensure that all storm water discharges, other than from roofs, from the facility pass through a silt trap in advance of discharge;
- (ii) An oil separator on the storm water discharge from yard areas. The separator shall be a Class I full retention separator.

The silt traps and separator shall be in accordance with I.S. EN-858-2: 2003 (separator systems for light liquids) for Class I full retention.

The applicant suggests that that time frame for installation silt traps should relate to the commencement of waste acceptance.

Technical Committee's Evaluation

The licence has an effect from commencement of waste acceptance at the facility. Accordingly, the Technical Committee proposes amendment to Condition 3.17.

Recommendation:

Amend Condition 3.17 to read as follows:

3.17 Silt Traps and Oil Separators

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

Objection 15. Conditions 3.19.1 and 3.19.3

3.19 Fire-water Retention

- 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.
- 3.19.2 In the event that a significant risk exists for the release of contaminated fire-water, the licensee shall, based on the findings of the risk assessment, prepare and implement, with the agreement of the Agency, a suitable risk management programme. The risk management programme shall be fully implemented within three months of date of notification by the Agency.
- 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.
- 3.19.4 The licensee shall have regard to the Environmental Protection Agency Draft Guidance Note to Industry on the Requirements for Fire-Water Retention Facilities when implementing Conditions 3.19.1, 3.19.2 and 3.19.3 above.

Regarding Condition 3.19.1, the applicant suggests that a time frame for fire water risk assessment should relate to the commencement of waste acceptance at the facility.

In respect of Condition 3.19.3, the applicant states that contaminated storm water will be contained within surface water lagoons which will act as containment ponds. The applicant proposes amendment to the condition so it reflects that storm water will be held in the lagoons and includes the requirement for examination of the provision of automatic isolation of these lagoons.

Technical Committee's Evaluation

The Technical Committee accepts the points raised by the applicant and recommends the following amendment. It may be however that the risk assessment required under condition 3.19.1 will indicate deficiencies in any proposal to use the surface water lagoons, in which case it is appropriate to allow for alternative solutions should the need arise.

Recommendation:

Amend Condition 3.19.1 to read as follows:

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 six months **prior to the commencement of waste acceptance.**

Amend Condition 3.19.3 to read as follows:

In the event of a fire or a spillage to storm water, the site storm water shall be diverted to the **surface water lagoons or alternative water retention facility as may be identified in the risk assessment required under condition 3.19.1.** The licensee shall examine, as part of the response programme in Condition 3.19.2 above, the provision of automatic **isolation** of the **surface water lagoons or the alternative water retention facility.**

Objection 16. Condition 3.20

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.

The applicant suggests that the timeframe for the requirements of this condition shall relate to commencement of waste acceptance.

Technical Committee's Evaluation

The Technical Committee recommends amendment to the condition.

Recommendation:

Amend Condition 3.20 to read as follows:

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.**

Objection 17. Condition 3.23

- 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.

The applicant suggests that the timeframe for the requirements of this condition should relate to commencement of waste acceptance.

Technical Committee's Evaluation

The Technical Committee recommends amendment to the condition.

Recommendation:

Amend Condition 3.23 to read as follows:

The licensee shall, **prior to commencement of waste acceptance**, 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.

Objection 18. Condition 4.4

- 4.4 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).

The applicant states that 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. The applicant suggests that this condition should refer to noise sensitive locations and not the boundary of the facility.

Technical Committee's Evaluation

Due to the remoteness of the site's location, it is the view of the Technical Committee the condition should refer to noise sensitive locations rather than the site boundary. Accordingly, the Technical Committee recommends an amendment to the condition.

Recommendation:

Amend Condition 4.4 to read as follows:

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).

Objection 19. Condition 5.3

- 5.3 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: 0.14 mg/l (as N)
- (iii) BOD: 2.6 mg/l

The applicant requests that the trigger levels be amended to be the same as trigger levels set out in a waste licence for the Drehid Landfill (Licence Reg. No. W201-03) and which are less stringent for total ammonia and BOD.

Technical Committee's Evaluation

The information submitted in the objection does not demonstrate that storm water discharge at higher levels would not cause environmental pollution. Also it is noted that the values in waste licence register number W0201-03 are emission limit values. The trigger levels are not emission limit values, nor do they indicate levels at which environmental pollution will occur. They are levels at which an investigation into the potential for storm water on site to be contaminated and cause pollution should be carried out. The TC considers the trigger levels in the PD to be appropriate for a waste facility of this type. While it may be challenging to meet the trigger levels, they should be achievable as waste activities take place indoors. In addition, the condition, as written, allows for variation in the trigger levels should the Agency agree it is appropriate.

Recommendation:

No change.

Objection 20. Condition 5.6

5.6 There shall be no direct discharge to surface water or groundwater.

The applicant states that are areas within the activity boundary that are reserved for landscaping and maintaining buffers, and where waste activities will not be undertaken. The applicant continues that "clearly, there will be direct discharges from these landscaping/buffer areas to surface and groundwater" and proposes to amend the condition so it specifically requires that there shall be no direct discharge from operational areas of the facility and includes an explanation that operational areas mean areas on which there is waste processing, storage or movement.

Technical Committee's Evaluation

Condition 5.6 does not relate to indirect storm water discharge which might occur naturally in any area of the site. Accordingly, no change to this condition is recommended.

Recommendation:

No change.

Objection 21. Condition 6.6

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.

The applicant states that requirement that the equipment should be to the Agency specifications could result in a "prohibitively onerous" requirement on the applicant. The applicant states that the requirement to provide "fit for purpose" equipment is in itself sufficient and proposes to remove the requirement that the equipment shall be to Agency specifications.

Technical Committee's Evaluation

The Technical Committee is of an opinion that provision for agreeing the equipment with the Agency is an appropriate approach and proposes to amend the condition accordingly.

Recommendation:

Amend Condition 6.6 to read as follows:

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 **agreed by the Agency**.

Objection 22. Condition 6.10

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.

The applicant suggests that the timeframe for the requirements of this condition should relate to the commencement of waste acceptance and proposes to remove the requirement for testing within three months of the date of grant of this licence.

Technical Committee's Evaluation

The Technical Committee accepts the point.

Recommendation:

Amend Condition 6.10 to read as follows:

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.

Objection 23. Condition 6.14

6.14 Storm Water

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

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.

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.

In respect of Condition 6.14.1, the applicant states that 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. The applicant states that, therefore, daily visual inspections of the storm water discharges are not required and proposes a weekly frequency for visual examination.

In relation to Condition 6.14.2 the applicant states that the setting of the timeframe for the development of a response programme from the date of grant of this licence is considered inappropriate and suggests that the timeframe should relate to commencement of waste acceptance.

In respect of Condition 6.14.3 the applicant states that given that it would not be practicable to retain water samples on site indefinitely, Condition 6.14.3 should include a time limit for the retention of samples on site.

Technical Committee's Evaluation

Condition 6.8 allows for change to the monitoring frequency following evaluation of test results. The Technical Committee notes that the monitored parameters listed by the applicant do not include i.e. suspended solids that would contribute to i.e. change of colour in the receiving water. Accordingly, no amendment to Condition 6.14.1 is proposed.

In respect of Condition 6.14.2, the Technical Committee agrees that the timeframe related to the commencement of waste acceptance is appropriate.

In respect of Condition 6.14.3, the applicant's request is reasonable. Mr Peter Webster of the Office of Environmental Assessment advised that a sample is of no analytical use to the Agency after a maximum period of 48 hours.

Recommendation:

No change to Condition 6.14.1.

Amend Condition 6.14.2 to read as follows:

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, asset 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.

Amend Condition 6.14.3 to read as follows:

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 period of 48 hours** for EPA use.

Objection 24. Condition 6.19

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.

The applicant proposes to amend the timeframe to relate to commencement of waste acceptance at the facility.

Technical Committee's Evaluation

The Technical Committee agrees that the time frame relating to the commencement of waste acceptance is appropriate.

Recommendation:

Amend Condition 6.19 to read as follows:

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.

Objection 25. Condition 7.1

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.

The applicant proposes to amend the timeframe to read "within one year of commencement of waste acceptance at the facility".

Technical Committee's Evaluation

The Technical Committee considers the proposal appropriate.

Recommendation:

Amend Condition 7.1 to read as follows:

The licensee shall carry out an audit of the energy efficiency of the facility within one year of the **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.

Objection 26. Condition 8.3

8.3 No hazardous waste or liquid waste shall be accepted at the facility.

The applicant proposes to reword this condition so it includes provision for hazardous liquid. The applicant explains that 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. The applicant adds that, for example, the moisture content of the material in the composting process would be maintained at optimum levels by addition of landfill leachate from the adjacent Drehid Landfill (Licence Reg. No. W0201-03).

Technical Committee's Evaluation

The applicant did not submit sufficient information on the proposal to accept the landfill leachate. The assessment of a detailed technical proposal which would examine quantity, quality, impact on microbiological processes etc. would be required from the applicant before the Agency could consider such a proposal. Accordingly, no amendment to Condition 8.3 is recommended.

Recommendation:

No change.

Objection 27. Condition 8.5.6, 8.5.7 and 8.5.9

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.

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.

8.5.8 ...

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

In respect of Condition 8.5.6, the applicant states that baled and plastic wrapped Solid Recovered Fuel (SRF) will be stored in an outdoor storage area and that this storage area will comprise of a bunded concrete area. The applicant adds that the logistics associated with the shipping of SRF overseas will necessitate the storage of SRF for periods far in excess of the time periods required under Condition 8.5.6.

In respect of Condition 8.5.7, the applicant requests this condition to be removed. The applicant explains that 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 unnecessary given that the waste reception pit will be in a fully enclosed building with a functioning odour abatement system.

Regarding Condition 8.5.9, the applicant states that all biodegradable and odour-forming waste stored overnight at the facility will be stored within fully enclosed buildings with a functioning odour abatement system. The applicant further adds that 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.

Technical Committee's Evaluation

The Technical Committee accepts the points raised by the applicant and recommends the following amendment.

Recommendation:

Amend Condition 8.5.6 to read as follows:

All biodegradable or odour-forming waste shall be treated within 24 hours or, **with exception of solid recovered fuel**, 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.

Amend Condition 8.5.7 to read as follows:

The floor and surfaces of the waste reception pit shall be cleaned from waste debris **as required**.

Amend Condition 8.5.9 to read as follows:

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

Objection 28. Condition 8.12.1

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

The applicant requests that this condition is removed. In support of this request the applicant states that this condition is unnecessarily restrictive to the operation of the facility. The applicant claims that they 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.

Technical Committee's Evaluation

The condition in the PD reflects the applicant's stated intention to develop a highly-specified waste facility and develop treatment options to reduce the environmental impact of mixed municipal waste by treating it to a high standard. It is best practice that such a waste treatment facility should produce material that is treated to the highest possible standard.

National targets regarding reduced landfilling of biodegradable municipal waste would mitigate against agreeing to the objection. It is noted that condition 8.12.2 provides a treatment standard for bio-stabilised residual waste. Condition 8.12.3 states that the bio-stabilised residual waste and compost-like output generated at the facility can only be deposited in landfill unless otherwise agreed by the Agency. Condition 8.12.4 provides for the agreement of an alternative protocol to the treatment standard expressed in condition 8.12.2 should this be appropriate. All in all, the PD requires that organic fines are treated and, at all times, to a specified standard. The PD does not intend that organic fines should be allowed leave the site untreated or only partially treated. This approach reflects national policy, including the waste hierarchy. In implementing the waste hierarchy the Agency has responsibility to encourage options that deliver the best overall environmental outcome. Whilst the separation and treatment of organic fines and the use of bio-stabilised residual waste as landfill cover (or indeed the disposal of excess in the landfill void) is not as high up the waste hierarchy as separate collection of biowaste for composting and/or anaerobic digestion, it is preferable to direct landfilling of mixed waste or untreated or partially treated organic fines. The Technical Committee considers that no erosion of this facility's position on the waste hierarchy should be authorised.

Recommendation:

No change.

Objection 29. Condition 8.13.1, 8.13.2 and 8.13.5

8.13 Standards Regarding the Supply of Refuse Derived Fuel or Solid Recovered Fuel

- 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.
- 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.
- 8.13.3 No solid recovered fuel classified as waste shall be supplied for combustion in any facility or installation that has not been granted a licence or permit under the Waste Incineration Directive or Industrial Emissions Directive.
- 8.13.4 The technical specification referred to in Condition 8.13.1 shall set out the criteria to be met in order that combustion of the refuse derived fuel or solid recovered fuel will not lead to failure to comply with the conditions of a licence or permit as may be applicable at the destination incineration or co-incineration facility.
- 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.

Regarding Condition 8.13.1, the applicant states that I.S. EN 15359:2011 should read "EN 15359:2011".

Regarding Condition 8.13.2, the applicant objects again to the name of the standard and states that in order that this condition would have its desired intention, it is considered that the text "and/or" should be inserted before the "agreed between...".

Regarding Condition 8.13.5, the applicant states that, 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. The applicant states that Condition 8.13.3 is encompassing and sufficient in itself to require that refuse derived fuel or solid recovered fuel is supplied to legitimate facilities for combustion and suggests that Condition 8.13.5 be removed.

Technical Committee's Evaluation

I.S. EN 15359:2011 Solid Recovered Fuels – Specifications and Classes is an Irish Standard based on the CEN standard and published by National Standard Authority of Ireland (NSAI) on 17 November 2011. No change to condition 8.13.1 is recommended.

The Technical Committee considers that the text of condition 8.13.2 should be amended for clarification purposes.

Condition 8.13.5 was requested by the Office of Environmental Enforcement (OEE) (although not specifically in relation to this licence application) in order to ensure against the sham recovery of waste. It is intended to ensure that waste derived fuel does in fact have a fuel calorific value and is produced to a high standard. The PD restricts waste acceptance to mixed residual waste. The mechanical removal of the biodegradable and non-combustible fractions such as metals and the drying of the residue would be expected, of themselves, to improve the calorific value of the waste. The Technical Committee considers that after a period of time during which good practice in the manufacture of SRF can be demonstrated at the facility, it should be possible to reduce the frequency of verification. Amendment to the condition is so proposed.

Recommendation:

No change to Condition 8.13.1.

Amend Condition 8.13.2 to read as follows:

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. **The technical specification shall be prepared, unless otherwise agreed by the Agency,** in accordance with *I.S. EN 15359:2011 Solid recovered fuels – Specifications and classes* **and shall be** agreed between the licensee and the **recipient** person or organisation.

Amend Condition 8.13.5 to read as follows:

The licensee shall annually, or at a greater frequency if so instructed by the Agency **and unless otherwise agreed 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.

Objection 30. Condition 8.16

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.

The applicant states that this condition is flawed and proposes to remove it. The applicant states that, ultimately, the recovery of recyclables will be dependent on the quality of the waste. The applicant continues that hence waste that has been accepted at the facility for the purpose of a recovery activity may have to be rejected and sent for disposal due to poor quality and unsuitability for production of Solid Recovered Fuel.

Technical Committee's Evaluation

The Technical Committee acknowledges that some waste accepted for recovery will need to be rejected. The condition however is intended to ensure that such rejection is not the licensee's fault. The condition also allows for the Agency to agree to the disposal of waste accepted for recovery. It is clear that elaboration of the condition will assist the licensee to comply with the condition. An amended condition is proposed.

Recommendation:

Amend condition 8.16 as follows:

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. **This condition shall not apply to non-recyclable waste or waste with limited market value that is rejected for disposal by the licensee from the incoming waste.**

Objection 31. Condition 9.4.1

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.

The applicant proposes to remove the wording referring to the cessation in waste treatment. The applicant explains that the cessation in waste treatment would be a temporary cessation in waste treatment that would occasionally occur. The applicant claims 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.

Technical Committee's Evaluation

The Technical Committee accepts the point and recommends amendment to the condition. It is noted that condition 8.5.6, proposed for amendment in this report, requires the treatment or removal of biodegradable or odour forming waste, other than SRF, within 48 hours and the recommendation below ties in with this requirement.

Recommendation:

Amend condition 9.4.1 to read as follows:

In the event of a breakdown of equipment or any other occurrence which results in the closure of the facility **for more than 48 hours**, any waste arriving at or, **in the case of putrescible waste**, already **accepted** 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. **The breakdown of equipment or any other occurrence which results in the closure of the facility, regardless of duration, shall** be treated as an emergency and rectified as soon as possible.

Objection 32. Condition 12.1.1

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 31st 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.

The applicant states that given the time required to procure and construct the facility for the acceptance of first waste, the "date of commencement of enforcement" is uncertain and as such, the applicant suggests that the wording "from the date of grant of the licence" shall be replaced with text "from the date of commencement of enforcement"

The applicant objects to the requirement to pay the Agency within one month of the date of grant of the licence. The applicant requests that the condition be reworded so that payment is made within one month from the date of commencement of enforcement.

Technical Committee's Evaluation

The Technical Committee considers no enforcement charges are due until after the date of commencement of enforcement. In this regard the Technical Committee considers it reasonable to reword the condition so that payment is made within one month from the date of commencement of enforcement.

Recommendation:

Amend Condition 12.1.1 to read as follows:

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 31st day of December, and shall be paid to the Agency within one month from **that** date. 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.

Objection 33. Schedule B.1 - Emissions to Air A2-3 and A2-4

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 Nm³/hr
Minimum discharge height: 20m above ground

Parameter	Emission Limit Value
Ammonia	50 mg/m ³
Hydrogen sulphide	5 mg/m ³
Mercaptans	5 mg/m ³
Amines	5 mg/m ³

As explained in the Inspector's Report, the licence application outlines two possible operational configurations at the facility:

1. Configuration A comprising MBT and associated composting plant for bio-stabilisation of residual waste; or
2. Configuration B comprising MBT, composting plant *and* anaerobic digestion.

The applicant states that volume to be emitted of 32,500 Nm³/hr relates to the emissions from A2-3 and A2-4 under Configuration B. The applicant states that in the case of Configuration A, the emission from A2-3 and A2-4 will be 47,762 Nm³/hr. The applicant suggests changing the maximum volume to be emitted from 32,500 Nm³/hr to 47,762 Nm³/hr.

Technical Committee's Evaluation

The Technical Committee notes the characteristics of the air emissions at Configuration A and Configuration B and notes that both configurations were considered by the inspector for emission points A2-3 and A2-4. Accordingly, the Technical Committee recommends amendment to the schedule as follows.

Recommendation:

Amend Schedule B.1 for emission points A2-3 and A2-4 to read as follows:

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 Nm³/hr (**dry anaerobic digestion and composting**)
or
47,762 Nm³/hr (composting only)
Minimum discharge height: 20m above ground

Parameter	Emission Limit Value
Ammonia	50 mg/m ³
Hydrogen sulphide	5 mg/m ³
Mercaptans	5 mg/m ³
Amines	5 mg/m ³

Objection 34. Schedule B.1 - Emissions to Air A2-5 and A2-6

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 Nm³/hr
Minimum discharge height: 20m above ground

Parameter	Emission Limit Value
Ammonia	50 mg/m ³
Hydrogen sulphide	5 mg/m ³
Mercaptans	5 mg/m ³
Amines	5 mg/m ³

As above, the applicant states that the volume to be emitted of 85,500 Nm³/hr relates to the emission from A2-5 and A2-6 under configuration B and under configuration A the maximum emission is 93,766 Nm³/hr. The applicant suggests changing the volume to be emitted from 85,500 Nm³/hr to 93,766 Nm³/hr.

Technical Committee's Evaluation

The Technical Committee notes the characteristics of the air emissions at Configuration A and Configuration B and notes that both configurations were considered by the inspector for emission points A2-5 and A2-6. Accordingly, the Technical Committee recommends amendment to the schedule as follows.

Recommendation:

Amend Schedule B.1 for emission points A2-5 and A2-6 to read as follows:

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 Nm³/hr (**dry anaerobic digestion and composting**)
or
93,766 Nm³/hr (composting only)
Minimum discharge height: 20m above ground

Parameter	Emission Limit Value
Ammonia	50 mg/m ³
Hydrogen sulphide	5 mg/m ³
Mercaptans	5 mg/m ³
Amines	5 mg/m ³

Objection 35. Schedule C.1.1 Control of Emissions to Air

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
Humidification
Bio-filtration

Control Parameter	Monitoring	Key Equipment ^{Note 1}
Air Management and Treatment		
Air extraction	Continuous with alarm/call-out	Pumps/ engines Pressure gauges
Humidification	Daily visual check of flow	Flow and level meters
Acid scrubbing	Daily visual check of pressure drop	Pressure gauges
Bio-filters		
Ammonia	Monthly (at inlet and outlet)	Colorimetric indicator tubes <small>Note 2</small>
Hydrogen sulphide	Monthly (at inlet and outlet)	Colorimetric indicator tubes <small>Note 2</small>
Mercaptans	Monthly (at inlet and outlet)	Colorimetric indicator tubes <small>Note 2</small>
Amines	Monthly (at inlet and outlet)	Colorimetric indicator tubes <small>Note 2</small>
Bed Media ^{Note 3}		
Odour assessment	Daily	Subjective impression
Condition and depth of bed media	Daily	Visual inspection
Moisture content	Monthly	Agreed method
pH	Bi-annually	Agreed method
Ammonia	Bi-annually	Agreed method
Total viable counts	Bi-annually	Agreed method
General		
Fan	Daily visual check	System is operational
Negative pressure across biofilter	Monthly	Air current tubes

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

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

Note 3: The biofilter shall be examined to ensure that no channelling is evident. Turning, restructuring and the addition of supplementary bed materials or total replacement of bed materials shall be carried out as required subject to bed performance.

The applicant states that in circumstances where the emission limit value for ammonia of 50 mg/m³ 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.

Additionally, the applicant states that in the interests of clarity, the "negative pressure across biofilter" which is one of the control parameters should read "Differential pressure across biofilter" and requests to amend the schedule accordingly.

Technical Committee's Evaluation

The Technical Committee accepts the points raised by the applicant and proposes amendment to the schedule.

Recommendation:

Amend Schedule C.1.1 for Emission Points A2-1, A2-2 A2-3, A2-4 A2-5, A2-6 to read as follows:

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

Description of Treatment: Humidification
Bio-filtration
Acid scrubbing, **if required**

Control Parameter	Monitoring	Key Equipment ^{Note 1}
Air Management and Treatment		
Air extraction	Continuous with alarm/call-out	Pumps/ engines Pressure gauges
Humidification	Daily visual check of flow	Flow and level meters
Acid scrubbing	Daily visual check of pressure drop	Pressure gauges
Bio-filters		
Ammonia	Monthly (at inlet and outlet)	Colorimetric indicator tubes <small>Note 2</small>
Hydrogen sulphide	Monthly (at inlet and outlet)	Colorimetric indicator tubes <small>Note 2</small>
Mercaptans	Monthly (at inlet and outlet)	Colorimetric indicator tubes <small>Note 2</small>
Amines	Monthly (at inlet and outlet)	Colorimetric indicator tubes <small>Note 2</small>
Bed Media ^{Note 3}		
Odour assessment	Daily	Subjective impression
Condition and depth of bed media	Daily	Visual inspection
Moisture content	Monthly	Agreed method
pH	Bi-annually	Agreed method
Ammonia	Bi-annually	Agreed method
Total viable counts	Bi-annually	Agreed method
General		
Fan	Daily visual check	System is operational
Differential pressure across biofilter	Monthly	Air current tubes

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

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

Note 3: The biofilter shall be examined to ensure that no channelling is evident. Turning, restructuring and the addition of supplementary bed materials or total replacement of bed materials shall be carried out as required subject to bed performance.

Objection 36. Schedule C.1.1 Control of Emissions to Air - Table for emission point A2-7

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

Control Parameter	Monitoring	Key Equipment ^{Note 1}
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 monitoring stability	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.

The applicant states that in the interests of clarity, the terms "Fuel Loading" and "Maximum emission flow volume" need to be further defined or amended, as the meaning/intention of these terms is not intuitively understood.

Technical Committee's Evaluation

The Technical Committee proposes to remove the requirement to monitor fuel loading as monitoring of other control parameters is considered sufficient and to amend the table to monitor the emission flow volume and not maximum emission flow volume.

Recommendation:

Amend Schedule C.1.1 for Emission Point A2-7 to read as follows:

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

Control Parameter	Monitoring	Key Equipment ^{Note 1}
Biogas intake flow	Continuous with alarm/call-out	Flow detector
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 monitoring stability	Frequency control system
Stack temperature	Continuous with alarm/call-out	Temperature probe
Stack efflux velocity	Continuous with alarm/call-out	Standard equipment
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.

Objection 37. Schedule 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 ^{Note 1}	See Note 1
Ammonia	Monthly (at outlet of Biofilter)	Colorimetric indicator tubes Note 2
Hydrogen sulphide	Monthly (at outlet of Biofilter)	Colorimetric indicator tubes Note 2
Mercaptans	Monthly (at outlet of Biofilter)	Colorimetric indicator tubes Note 2
Amines	Monthly (at outlet of Biofilter)	Colorimetric indicator tubes Note 2

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.

The applicant suggests that the odour monitoring frequency should be reviewed after 12 months of operation and states that on the basis that the facility is not leading to odour nuisance and that the odour emission concentrations from the biofilters are within specification the frequency of monitoring should be reduced to once per annum after the first year of operation.

Technical Committee's Evaluation

Condition 6.8 allows for amendment of monitoring frequencies following evaluation of test results. No change is recommended.

Recommendation:

No change.

Objection 38. Schedule C.1.2 – Monitoring of Emissions to Air

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

Parameter	Monitoring Frequency	Analysis Method/Technique
Dust NOx SO₂ CO H₂S HCl HF	Monthly for the first twelve months of operation and quarterly thereafter	To be agreed with the Agency

The applicant refers to air dispersion modelling of emissions from the CHP outlet stack and requests to amend the requirement in the "Monitoring Frequency" column to read:

"Frequency to be based on results of the initial monitoring programme.

Parameters detected at levels greater than 20% of the ELV shall be monitored at a frequency of once per quarter.

All other parameters to be monitored at a frequency of once per annum"

Technical Committee's Evaluation

The Technical Committee notes that the suggested amendment to the monitoring frequency is based on the air dispersion modelling and not on actual monitoring results. Condition 6.8 allows for amendment of monitoring frequencies following evaluation of test results. No change is recommended to this Schedule.

Recommendation:

No change.

Objection 39. Schedule C.4.2 Dust Deposition and Micro-Organisms

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 ^{Note 1}	VDI 2119 (Bergerhoff method)
Bacteria	Bi-annually	Grab sample ^{Note 2}
Aspergillus fumigatus	Bi-annually	Grab sample ^{Note 2}

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.

The applicant suggests that, in the interests of clarity, Note 1 needs to be further defined or amended, as the meaning/intention of this note is not understood. The applicant explains that this is particularly the case for the latter part of this note ("...concurrently with all of the above") and states that the term 'above' needs to be precisely defined.

Technical Committee's Evaluation

The Technical Committee accepts the applicant's point and proposes the following amendment.

Recommendation:

Amend Schedule C.4.2 so to read as follows:

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 ^{Note 1}	VDI 2119 (Bergerhoff method)
Bacteria	Bi-annually	Grab sample ^{Note 2}
Aspergillus fumigatus	Bi-annually	Grab sample ^{Note 2}

Note 1: Twice during the period May to September concurrently with **the monitoring of Bacteria and Aspergillus fumigatus.**

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.

Objection 40. Schedule C.6 Noise Monitoring

Location: As agreed by the Agency

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

The applicant states the content of this table has been superseded by publication of the following table that appears in a document on the Agency's website as FAQ on *Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)* and requests that the table in Schedule C.6 is 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)'* as shown below.

Table 5 Recommended Minimum Survey Durations

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

The applicant requests also amendment to Note 2 so it does not include the reference to the 'relevant licence' and is specific to this licence.

Furthermore, the applicant also requests an additional note 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."

Technical Committee's Evaluation

The applicant is correct to point out that the table 5 of NG4 has been amended by the FAQ document. It is proposed to use the new table 5 from the FAQ to amend Schedule C.6. It is also proposed to amend the note referring to the sampling periods.

Regarding the relaxing the requirements of the noise monitoring, Condition 6.8 allows for change to the monitoring frequency following evaluation of test results.

Recommendation:

Amend Schedule C.6 to read as follows:

Location: As agreed by the Agency

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

Note 1: Night-time measurements should be made between 23:00hrs and 04:00hrs, Sunday to Thursday, with 23:00hrs being the preferred start time.

Note 2: Sampling periods shall be as follows: Daytime dB L_{Ar, T} (30 minutes), Evening dB L_{Ar, T} (30 minutes) and Night-time dB L_{Aeq, T} (15 – 30 minutes)

Objection 41. Schedule E Annual Environmental Report

Annual Environmental Report Content <small>Note 1</small>
.... Quantity and composition of waste received, recovered and disposed of during the reporting period and each previous year (relevant EWC codes to be used).

Note 1: Content may be revised subject to the agreement of the Agency.

The applicant refers to the requirement for the quantity and composition of waste received, recovered and disposed of during the reporting period and each previous year and states that in the interests of conciseness and given that Annual Environmental Reports (AERs) for previous years will be available, the AER for any particular year (with the exception of first year) should only require waste details for the reporting year and the previous year as opposed to each previous year.

Technical Committee's Evaluation

While the data may be available in each AER, the Technical Committee considers it preferable that all data related to the quantity and composition of waste recovered, received and disposed of is included in each AER, in order to highlight trends. It would be more difficult if reference had to be made to previous AERs.

Recommendation:

No change.

3. Overall Recommendation

It is recommended that the Board of the Agency grant a licence to the applicant

- (i) for the reasons outlined in the Proposed Decision, and
- (ii) subject to the conditions and reasons for same in the Proposed Decision, and
- (iii) subject to the amendments proposed in this report.

Signed:



Ewa Babiarczyk, Inspector
for and on behalf of the Technical Committee