



**OFFICE OF  
LICENSING &  
GUIDANCE**

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

<b>TO:</b>	Directors	
<b>FROM:</b>	Technical Committee	<b>- LICENSING UNIT</b>
<b>DATE:</b>		
<b>RE:</b>	Objection to Proposed Decision for Greenstar Recycling Holdings Limited, Millenium Business Park, Grange, Ballycoolin, Dublin 11, Waste Reg. No. 183-1	

Application Details	
Classes of activity:	Third Schedule of Waste Management Act 1996: Class 11, 12, 13 activities. Fourth Schedule of Waste Management Act 1996: Class 2, 3, 4, 11, 12, 13.
Location of activity:	Millenium Business Park, Grange, Ballycoolin, Dublin 11.
Licence application received:	5 December 2002
PD issued:	19 November 2003
First party objection received:	18 December 2003
Third Party Objection received:	None

**Company**

The application relates to a new materials recovery facility, transfer station and biowaste treatment facility in Ballycoolin, Co. Dublin. The facility is to be located in a business park zoned for commercial and industrial use. The facility will accept the following non-hazardous wastes: biowaste for on-site treatment/composting, municipal, commercial and industrial, construction and demolition waste. The facility will be developed on a phased basis subject to the provision of adequate waste handling capacity, the completion of an odour impact survey and the implementation of any recommendations arising from this survey. The maximum quantity of waste to be accepted is 270,000 tonnes per annum.

## Consideration of the Objection

The Technical Committee, comprising of Emer Cooney (Chair) and Patrick Byrne, has considered all of the issues raised in the Objection and this report details the Committee's comments and recommendations following the examination of the objection together with discussions with the inspector, Kealan Reynolds, who also provided comments on the points raised. The Technical Committee consulted with Agency Inspector Donal Howley in relation to the issues raised in the objection.

This report considers the first party objection.

## First Party Objection

### 1. Condition 1.4 and Schedule A

*The applicant objects to the inclusion of three phases of development of the facility and the restrictions on waste acceptance linked to those phases. They propose instead to develop the facility in two phases, with the first phase corresponding to the original phases I and II, and the second phase corresponding to the original phase III. This would allow them to accept municipal waste in the proposed new first phase into a facility with an area 269m<sup>2</sup> smaller than that specified in phase II of the PD.*

Waste Type	As per PD			As per objection	
	Phase I 2467m <sup>2</sup>	Phase II <b>3229m<sup>2</sup></b>	Phase III 4388m <sup>2</sup>	Phase I <b>2960m<sup>2</sup></b>	Phase II 4388m <sup>2</sup>
<b>Municipal</b>	0	<b>65,000</b>	100,000	<b>65,000</b>	100,000
<b>Commercial &amp; Industrial</b>	45,000	<b>70,000</b>	90,000	<b>70,000</b>	90,000
<b>Construction &amp; Demolition</b>	12,000	<b>24,000</b>	30,000	<b>24,000</b>	30,000
<b>Total</b>	57,000	<b>159,000</b>	220,000	<b>159,000</b>	220,000

Technical Committee's Evaluation: The phasing of the development in the PD was based on the projections supplied in the Environmental Impact Statement. It was stated in the application that the phasing indicated was for illustration purposes and was subject to future economic conditions and operational requirements.

The Technical Committee considers the proposed change from three phases to two phases for the Materials Recovery Facility to be acceptable subject to the conditions in the PD. The licensee shall establish all infrastructure referred to in the licence either prior to the commencement of the licensed activities or as required by the conditions in the licence. Therefore the proposed Phase I represents an amalgamation of Phases I and II as included in the PD and does not represent a significant change to the proposed facility. The licensee has not requested any change to the Phases included in the PD for the Biowaste Facility. The Materials Recovery Facility and the Biowaste Facility are separate buildings which may be developed independently in accordance with the conditions of the licence. The Technical Committee proposes that *Table A.1 Waste Categories and Quantities* shall list two Phases for the Materials Recovery Facility as requested in the objection and the Biowaste Facility will

have three phases as in the PD: the Phases for the Biowaste Facility are defined based on the information supplied in the Environmental Impact Statement.

<b>Recommendation:</b>			
Amend Table A.1 of Schedule A to read as follows:			
Waste Type	<b>Phase I<sup>Note 3</sup></b>	<b>Phase II<sup>Note 3</sup></b>	
Municipal Waste <sup>Note 1</sup>	<b>65,000</b>	<b>100,000</b>	
Commercial & Industrial Waste	<b>70,000</b>	<b>90,000</b>	
Construction & Demolition Waste	<b>24,000</b>	<b>30,000</b>	
<b>TOTAL<sup>Note 2</sup></b>	<b>159,000</b>	<b>220,000</b>	
<b>Note 1: Subject to Condition 3.15.1(i)</b>			
<b>Note 2:</b> The amount of each waste stream may be varied providing the total quantity is not exceeded and subject to agreement by the Agency.			
<b>Note 3:</b> Phase I follows the provision of 2,960m <sup>2</sup> Materials Recovery Facility and Phase II follows the completion of 1,428m <sup>2</sup> extension to this building.			
Waste Type	<b>Phase I<sup>Note 1</sup></b>	<b>Phase II<sup>Note 2</sup></b>	<b>Phase III<sup>Note 3</sup></b>
<b>Biowaste</b>	<b>12,500</b>	<b>25,000</b>	<b>50,000</b>
<b>Note 1:</b> Phase I is defined as the first year of operation following the provision of the 4,405m <sup>2</sup> biowaste treatment building.			
<b>Note 2:</b> Phase II is defined as the subsequent years of operation of 4,405m <sup>2</sup> biowaste treatment building.			
<b>Note 3:</b> Phase III follows the completion of 1,841m <sup>2</sup> extension to biowaste treatment building. Subject to Condition 10.3			
<b>Recommendation:</b>			
Amend Condition 3.15.1(i) to read as follows			
<i>Prior to the acceptance of municipal waste at the facility, the licensee shall provide a dedicated area for the acceptance and handling of such waste.</i>			

**2. Condition 1.6.1 & 1.6.2**

*The applicant objects to these conditions as they restrict waste acceptance and handling hours at the facility.*

Technical Committee’s Evaluation:

The hours proposed by the applicant in the EIS (Section 5.4.1) and Attachments D.2 and E.3 of the application were:

Waste Acceptance: 06:30 to 20:00      Waste Handling: 07:00 to 19:00.

The hours allowed in the PD are:

Waste Acceptance: 06:30 to 19:00      Waste Handling: 06:00 to 20:00

The hours proposed in the application were considered by the inspector. The PD broadly reflects the hours applied for, with minor changes to facilitate waste handling before and after waste acceptance at the facility. The Technical Committee considers that the proposal for 24hours/7 days a week operation had not been included in the application and as such was not available for consideration by third parties. The Technical Committee believes that it would not be appropriate to consider such a change at this stage.

**Recommendation:** No change.

### 3. Condition 3.9.2

*The applicant objects to this condition as it refers to drainage from the vehicle cleaning unit which the applicant states is a closed loop system which will not result in a discharge. The applicant requests that the condition be amended to permit the use of the proposed closed loop cleaning unit.*

Technical Committee's Evaluation: This condition does not prohibit the use of the closed loop vehicle wash, rather it allows for the occasional drainage that will occur, even from a closed loop system. Condition to be amended for clarification.

**Recommendation:** Amend Condition 3.9.2 to read as follows

The licensee shall provide a vehicle cleaning unit at the facility and **any** drainage from this area shall be directed to the wastewater drainage system.

### 4. Condition 3.14

*The applicant objects to this condition as details of the firewater storage capacity were submitted in Section 8.4.2.3 of the EIS and requests that the Agency confirm that the proposed storage capacity is adequate.*

Technical Committee's Evaluation: The Technical Committee notes that this is a standard condition. It allows for any changes in building design which may take place prior to commencement of waste activities to be taken into account. This is particularly relevant given the changes to the development phases as per the objection to Condition 1.4 and Schedule A (Objection 1 above).

**Recommendation:** No change.

### 5. Condition 3.15.1 (ii)

*The applicant objects to this condition as it requires the provision of an air extraction and filtration system for odour control at the municipal waste area. The applicant states that the odour assessment submitted as part of the application concluded that, subject to the mitigation measures proposed for the facility, the daily operations will not be a source of odour impact. They propose that if their daily inspections find that odours from the MRF are presenting a nuisance and that air extraction and filtration is necessary, then it will be*

*provided. The applicant states that the provision of such a system would require a change in the building design.*

Technical Committee's Evaluation: The Technical Committee considers, based on the proposed maximum municipal waste intake, the various other requirements/controls specified by conditions of the PD and that the maximum municipal waste levels are notional, that an air extraction system with filtration may not be necessary for odour control at the municipal waste area. However, the applicant has stated that if air extraction and filtration are necessary at a later date then they will be provided. That being the case the condition should be amended to allow for the provision of this infrastructure in the event that the Agency deems it necessary. The applicant states that a change in the design of the building would be required to facilitate this change.

**Recommendation:** Amend Condition 3.15.1(ii) to read as follows:

*Prior to the acceptance of municipal waste at the facility the licensee shall provide a dedicated system for the control of odour emissions. **The licensee shall include details of this odour control system as part of the AER. The licensee shall, at such time as the Agency considers necessary, undertake an assessment of the environmental performance of the odour control system. In the event that the assessment demonstrates that the odour control system is inadequate the licensee shall implement abatement measures, including air extraction and filtration, within a period specified by the Agency.***

#### **6. Condition 3.15.2(iii)**

*The applicant objects to this condition as it requires the provision of noise attenuation barriers around plant used for sorting and/or processing of C&D waste. The applicant states that the predicted impact beyond the site boundary is in the range 50-55 dB(A) and that no further attenuation is necessary given that a further barrier is to be erected at the perimeter of the site.*

Technical Committee's Evaluation: The Technical Committee considers it sufficient that the licensee is subject to *Condition 3.5.1, Condition 5.1 and Schedule C: Emission Limits* in relation to noise.

**Recommendation:** Remove Condition 3.15.2(iii). Renumber Condition 3.15.2(iv).

#### **7. Condition 4.3.1**

*The applicant objects to this condition as it requires that the floor of the transfer building (other than the C&D area) be cleared of all waste at the end of the working day. The applicant maintains that it is not practical to empty storage bays and remove waste but that the floor areas used to off-load waste materials will be cleared by the end of the working day.*

Technical Committee's Evaluation: It is important that no material which might give rise to nuisance, such as odour, should be left overnight in the transfer building. Condition 4.3.1 to be amended for clarification purposes.

**Recommendation:** Amend Condition 4.3.1 to read as follows:

*4.3.1.1 The floor of the municipal waste area and areas used to off-load waste in the waste transfer building (other than the C&D area) shall be cleared of all waste at the end of the*

working day. **Only non-putrescible waste may be stored overnight in the dedicated storage bays prior to recovery.**

4.3.1.2 *The floor of the reception/pre-treatment area within the biowaste treatment building shall be cleared of all waste at the end of the working day.*

## 8. Condition 4.3.5 & 1.6.2

*The applicant objects to Condition 4.3.5 as it requires that biowaste for composting (other than bulking agents) shall be processed and put into the aerated composting area within twelve hours of its arrival at the facility. The applicant maintains that, given the restrictions on operating hours on Condition 1.6.2 it might not be possible to incorporate biowaste that arrives late in the day into the compost area by the end of the specified waste handling period. The applicant requests that the twelve hours specified be extended to 24 hours.*

**Technical Committee's Evaluation:** The Technical Committee notes that in the Proposed Determination there is an hour following the end of the waste acceptance period during which waste can be handled in the facility. However, the Technical Committee acknowledges that flexibility may be required to take into account operational requirements that may arise from time to time. For this reason, the Technical Committee proposes to allow provision for the 12 hour period to be extended, subject to the written agreement of the Agency, where the licensee has demonstrated to the satisfaction of the Agency that such an extension would not give rise to environmental nuisance or risk.

Note that one typographical error in the Condition should be amended also.

**Recommendation:** Amend Condition 4.3.5 to read as follows:

*Any biowaste accepted at the facility for composting (other than bulking agents, e.g. woodchip, cardboard) shall be processed and put into the aerated composting area within twelve hours of its arrival at the facility, **unless otherwise agreed in writing by the Agency.***

## 9. Condition 4.4 & Schedule F

*The applicant objects to this condition as the criteria in Schedule F Sections 1, 2 and 3 for compost not to be considered a waste differ from those specified in other waste licences (i.e. Reg. No. 53-2, 182-1, 159-1). The applicant requests that these Sections be amended to be consistent with other waste licences and the draft working document on Biological Treatment of Biowaste.*

**Technical Committee's Evaluation:** The Technical Committee acknowledges that Schedule F should reflect the current licence template and the 2<sup>nd</sup> Draft Working Document on Biological Treatment of Biowaste.

**Recommendation:** Amend Schedule F: Standards for Compost Quality as follows:

*Section 1. Maturity* to be replaced with:

### **1.Maturity**

**The state of the curing pile must be conducive to aerobic biological activity.**

**Compost shall be deemed to be mature if it meets two of the following groups of requirements:**

- 1. Respiration activity after four days AT<sub>4</sub> is ≤10mg O<sub>2</sub>/g dry matter or Dynamic**

Respiration Index is  $\leq 1,000 \text{ mg O}_2/\text{kg VS/h}$ .

2. Germination of cress (*Lepidium sativum*) seeds and of radish (*Raphanus sativus*) seeds in compost must be greater than 90 percent of the germination rate of the control sample, and the growth rate of plants grown in a mixture of compost and soil must not differ more than 50 percent in comparison with the control sample.
3. Compost must be cured for at least 21 days *and* Compost will not reheat upon standing to greater than 20°C above ambient temperature.
4. If no other determination of maturity is made, the compost must be cured for a six month period. In addition, offensive odours from the compost shall be minimal for the compost to be deemed mature.
5. Or other maturity tests as may be agreed with the Agency.

Section 2. Foreign Matter and Section 3. Trace Elements to be replaced by:

## 2. Trace Elements<sup>Note 1&2</sup>

Parameter (mg/kg, dry mass)	Compost Quality Standards <sup>Note 3</sup>		Stabilised Biowaste
	Class I	Class II	
Cadmium (Cd)	0.7	1.5	5
Chromium (Cr)	100	150	600
Copper (Cu)	100	150	600
Mercury (Hg)	0.5	1	5
Nickel (Ni)	50	75	150
Lead (Pb)	100	150	500
Zinc (Zn)	200	400	1500
Polychlorinated Biphenyls (PCBs)	-	-	0.4
Polynuclear Aromatic Hydrocarbons	-	-	3
Impurities > 2mm <sup>Note 4</sup>	<0.5%	<0.5%	<3%
Gravel & Stones <sup>Note 4</sup>	<5%	<5%	-

Note 1: These limits apply to the compost just after the composting phase and prior to mixing with any other materials.

Note 2: The above alone should not be taken as an indication of suitability for addition to soil as the cumulative metal additions to soil should be first calculated.

Note 3: Normalised to 30% organic matter content.

Note 4: Compost must not contain any sharp foreign matter measuring over a 2mm dimension that may cause damage or injury to humans, animals and plants during or resulting from its intended use.

Section 4. Pathogens to be replaced by:

## 3. Pathogens

**Pathogenic organism content must not exceed the following limits:**

<i>Salmonella sp.</i>	Absent in 50g	n=5
<i>Faecal Coliforms</i>	≤ 1000 Most probable number (MPN) in 1g	n=5

Where n=number of samples to be tested.

*Section 5. Monitoring to be renamed Section 4. Monitoring.*

### 10. Condition 5.1

*The applicant objects to this condition as the emission limit value specified in Schedule C.4 for hydrogen sulphide and mercaptans is not consistent with the limit set in other waste licences (i.e. Reg. No. 53-2, 182-1, 159-1).*

Technical Committee's Evaluation: The Technical Committee acknowledges that the emission limit value should read 5ppm (v/v) each for hydrogen sulphide and mercaptans. The Technical Committee notes that (ppm v/v) should read ppm (v/v) in this table.

**Recommendation:** Amend Schedule C.4 to read as follows:

Emission Limit Values from Biowaste Treatment Building

Emission point reference No. BW-1 & BW-2 (emission point(s) from biowaste treatment building)

Parameter	Emission Limit Value
Total Particulates	50 mg/m <sup>3</sup>
Ammonia	50 ppm (v/v)
Amines	5 ppm (v/v)
<b>Hydrogen sulphide</b>	<b>5 ppm (v/v)</b>
<b>Mercaptans</b>	<b>5 ppm (v/v)</b>

### 11. Condition 5.7.10

*The applicant objects to this condition as it requires screening of wastewater discharges prior to discharge to sewer and the applicant contends that it is sufficient to install grids on gullies and provide a holding tank with a hydrobrake to limit the discharge to 5 l/s.*

Technical Committee's Evaluation: The Technical Committee notes that this is a general consent condition required by Fingal County Council (correspondence dated 1 July 2003) as provided for under Section 52 of the Waste Management Act 1996. The Agency forwarded a copy of this objection to Fingal County Council on 30 March 2004 for consideration. Fingal County Council responded on 31 March 2004, confirming that this condition is required.

**Recommendation:** No change.

### 12. Condition 6.5.3.1

*The applicant objects to the requirement to provide dust and air curtains on the entry/exit points of the waste transfer building. It is stated that dust curtains are easily damaged. They*



*state that the waste handling, separation and processing with the potential to create dust will be carried out internally in the MRF. Dust emissions will be controlled using a specially engineered dust suppression system*

Technical Committee's Evaluation: The Technical Committee acknowledges that full length dust curtains may be damaged by frequent vehicle movements and recommends that shorter sheeting will allow the safe passage of vehicles while still providing some protection against fugitive dust emissions.

**Recommendation:** Replace Condition 6.5.3.1 with the following:

*The doors of the waste transfer building shall be kept closed where possible. The licensee shall, to the satisfaction of the Agency, provide and maintain heavy duty plastic sheeting along the top of these door openings and which extend as far down as is compatible with the safe passage of facility vehicles through the doorways;*

**Note:** The Technical Committee wishes to point out one typographical error in the Proposed Decision.

**Recommendation:**

Amend Table D.5.1 of Schedule D: Monitoring as follows:

*'See note 5'* to be replaced with *'See note 4'*.

## **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 determination and
- (ii) subject to the conditions and reasons for same in the Proposed Determination,
- and
- (iii) subject to the amendments proposed in this report.

Signed

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Emer Cooney

for and on behalf of the Technical Committee