APPENDIX 1

Revised Non-Technical Summary WLA

REVISED NON-TECHNICAL SUMMARY

Introduction

In April 2003 the Environmental Protection Agency (EPA) issued a revised Waste Licence to Noble Waste Disposal ltd, now trading as Greenstar Ltd. (Greenstar), to operate its Materials Recovery and Transfer facility at Fassaroe, Bray, Co. Wicklow (Reg. No. 53-2). Greenstar is now applying to the EPA for a review of the Waste Licence conditions. The information included in the application for review is based the requirements of the Waste Management (Licensing) Regulations 2004 (2004 Regulations).

The objectives of the review are: -

- To amend the boundary of the licensable area to reflect a proposed change in land ownership.
- To allow a variation in the operational/waste acceptance hours at the facility subject to the Agency's approval.
- To increase the overall limit set for annual waste inputs from 129,500 tonnes specified in Schedule A to 200,000 tonnes and to increase the individual limits for the household, commercial and construction and demolition waste.
- To change the location of the composting facility from that specified in Condition 3.16.1.1.
- To increase the volume of waste composted at the site from 2,000 tonnes specified in Condition 5.4.1.1 to 10,000 tonnes per annum.
- To amend the capping system specified in Condition 4.4.2.
- To amend Condition 5.1.1 to allow the external processing of Construction and Demolition waste to continue indefinitely.
- To amend Condition 1.6 to allow hours of operation to be amended with the Agency's agreement.
- To amend Conditions 3.11.2. and 3.11.2 to allow the discharge of process and foul water generated at the site to a new foul sewer on completion of the current development works undertaken by third parties on lands adjacent to the facility boundary.
- To amend Conditions 5.5.1 and 5.5.2 to allow permitted waste carriers and licensed/permitted disposal/recovery facilities to be used without the Agency's prior agreement.

- To allow for the acceptance of bonded asbestos wastes and electrical waste in the civic amenity area.

- To allow for the extension of the timeframe set in Condition 4.8 for the restoration of the site, to April 2009.

Applicant Details

Greenstar Ltd., Bray Depot, Fassaroe, Bray, Co. Wicklow.

Telephone No: 01 - 2829610
Fax No. 01 - 2050774

Name and Address for Correspondence

Mr. Micheal Geary, Greenstar Ltd., La Vallee House, Fassaroe, Bray, Co. Wicklow.

Telephone No: 01 - 2743318
Fax No. 01 - 2743325

The relevant planning authority is Wicklow County Council.

The proposed changes to facility activities will result in the discharge of a trade effluent and sanitary wastewater to a new foul sewer on an adjoining property which in turn will connect to a foul sewer controlled by Wicklow County Council. Details of the quality and volume of the wastewater is presented in Section 5 of the EIS that accompanies this application.

The facility is located at Fassaroe, Bray, County Wicklow. It is in the townland of Fassaroe at National Grid Reference: E3242 N2179.

The activity is not an activity to which the European Communities (Major Accident Hazards of Certain Activities) Regulations, 2001 (S.I. No. 476 of 1986) apply. The activity is not one that gives rise or could give rise to an emission into an aquifer containing List 1 and II substances specified in the Annex to the Council Directive 80/68/EEC of 17 December 1979.

Nature of the Facility

The facility is a non hazardous waste materials recovery and the transfer operation. Waste materials are processed and treated on-site to recovery wastes that are suitable for recovery and to minimise the quantity of treated waste disposed to residual landfill. The current licence permits the composting to biodegradable waste at the facility.

Classes of Activity

The relevant activities as per the Third and Fourth Schedules of the Waste Management Act 1996 will be as follows: -

Third Schedule – Waste Disposal Activities

Class 12

"*Repackaging prior to submission to any activity referred to in the preceding paragraph of this Schedule*".

Class 11

"Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule".

Class 13

"Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced".

Fourth Schedule – Waste Recovery Activities

Class 2

"Recycling or reclamation of organic substances which are not used as solvents, (including composting and other biological processes)".

Class 3

"Recycling or reclamation of metals and metal compounds".

Class 4

"Recycling or reclamation of other inorganic materials".

Class 11

"Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule".

Class 12

"Exchange of waste for submission to any activity referred to in a preceding paragraph of this Schedule".

Class 13

"Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced".

Quantity and Nature of the Waste to be Recovered or Disposed

The proposed quantity and nature of the wastes are presented in Table 1.

Table 1 Waste Categories and Quantities

WASTE TYPE	MAXIMUM (TONNES PER ANNUM) (Note 1)
Household waste Note 2	38,600
Commercial	107,358
Construction and Demolition Note 3	54,040
Hazardous Waste (Machinery Batteries)	2
TOTAL	**200,000**

Note 1: The quantities of the different categories referred to in this table can be amended with the agreement of the Agency provided that the total quantity of waste specified is not exceeded.

Note 2: Will include 400 Tonnes of Waste Electrical Equipment.

Note 3: Will include 2000 Tonnes of Asbestos Cement Containing Materials.

The EWC codes for the facility are listed on Table 2.

Table 2 EWC Codes

EWC	Description
13 08 99	Oil Not Specified
15 01 01	Paper and Cardboard Packaging
15 01 02	Plastic Packaging
15 01 02	Plastic Packaging (PET bottles)
15 01 03	Wooden Packaging (pallets)
15 01 04	Metallic Packaging (cans)
15 01 06	Mixed Packaging
15 01 07	Glass Packaging
16 05 04	Gas Cylinders
16 06 01	Batteries
17 06 05	Asbestos
17 02 01	C&D Wood
17 05 04	Soil and Stones
17 09 04	Mixed C and D
19 08 01	C&D Fines
19 13 06	Sludges
20 01 01	Paper and Cardboard
20 01 02	Glass
20 01 08	Biodegradable kitchen & Canteen waste
20 01 11	Textiles
20-01-23	Discarded equipment containing chlorofluorocarbons
20-01-35	Discarded electrical and electronic equipment other than those mentioned in 20-01-21 and 20-01-23 containing hazardous components
20 01 38	Wood
20 01 39	Plastic
20 01 40	Metals
20 02 01	Biodegradable green waste
20 03 01	Mixed Municipal waste
20 03 07	Bulky Waste

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

Details on the raw and ancillary materials, substances, preparations, fuels and energy that are utilised at the facility are included in the AER for 2004.

Plant, Methods, Processes and Operating Procedures

The proposed increases in the waste volumes accepted for processing and composting will not result in any changes to the current plant, methods, processes and operating procedures that are currently employed or envisaged under the current licence conditions, with the exception of increasing the capacity to the compost system.

Information Related to Section 40(4) (a) to (g) of the Waste Management Act, 1996 to 2004

Section 40 (4) (a)

Details of the emissions from the proposed extension are presented in Sections 8, 9, 10 and 11 of the EIS which accompanies this application. The emissions will not result in the contravention of any relevant standard or emission limit prescribed under enactment.

Section 40 (4) (b)

The facility operations, when carried out in accordance with licence conditions, will not cause environmental pollution.

Section 40 (4) (c)

The site activities and proposed amendments to the current licence conditions are based on best management practice and take into consideration the Draft BAT Guidance Note for the Waste Sector: Waste Transfer Activities published by the EPA.

Section 40 (4) (d)

Greenstar Ltd is a wholly owned subsidiary of Greenstar Holdings Ltd.

It is not proposed to amend the current management structure at the facility. Facility personnel with responsibility for the management of the waste activities comply with the requirements of Condition 2.1 of the current licence.

In 2001 Noble Waste Disposal Limited, Fassaroe, Bray, Co. Wicklow (Waste Licence No. 53-1), now trading as Greenstar Ltd and a fully owned subsidiary of Greenstar Holdings Ltd, was convicted of the following offences: -

1. That on the 22nd day of March 2001 Noble Waste failed to submit to the Agency the copies of all environmental data which related to the facility in the manner provided in Condition 3.7 of the Waste Licence.

2. That on the 12th day of December 2000 Noble Waste failed to maintain adequate records as required by Condition 3.13 of the Waste Licence.

3. That on the 12th day of December 2000 Noble Waste failed to render all tank and drum storage areas impervious to the materials stored therein and to bund same as required by Condition 4.12.2 of the Waste Licence.

4. That on the 22nd day of March 2001 and in breach of Condition 5.14 of the Waste Licence Noble Waste placed or allowed waste to accumulate outside the Transfer Building other than baled cardboard in fully enclosed trailers/containers or as otherwise agreed with the Agency.

5. That on the 1st January 2001 and continuing up to 30th September 2001 and in breach of Condition 8.2 of the Waste Licence Noble Waste failed to submit a detailed Restoration and Aftercare Plan for the facility to the Agency for approval.

The relevant section of the profit and loss account for the facility for the year ending 2003 is included in Appendix 1 of this application. An Environmental Liabilities Risk Assessment (ELRA) for the facility, which addresses liabilities arising from the carrying on of the proposed waste activities, is included in Appendix 3 of this application.

The ELRA includes details of the financial provisions in place to address any environmental liability including insurance cover to the sum of €6,350,000 for any one occurrence. There is also a €2,000,000 accrual on the balance sheet for Greenstar Recycling Holdings Ltd. for last year. This fund is also available to cover any environmental damage caused at the Fassaroe facility.

Section 40 (4) (f)

Energy will be used efficiently in the carrying on of the activity.

Section 40 (4) (g)

Noise from the activity concerned will comply with and will not result in the contravention of any regulations under Section 106 of the Act of 1992.

Source, Location Nature, Composition, Quantity, Level and Rate of Emissions

Surface Water

There are no direct discharges to surface water from the site. Surface water emissions from the site are generally restricted to that of surface water run-off from hardstanding and roofed areas after a rainfall event. The surface water drainage system collects and discharges storm water from roofed and paved areas to soakaways which ultimately drain via shallow sub-surface flow to the Glenmunder River. The Glenmunder ultimately drains to the River Dargle, which is a designated salmonid river.

Groundwater

In addition to the surface water soakways, the on-site sanitary wastewater treatment unit discharges treated effluent to a percolation area. This practice has been identified as a possible source of slight groundwater contamination identified at the facility.

Dust & Bioaerosols

The existing and proposed activities are a potential source of dust, bioaerosols and odours. The main dust sources being the access roads, waste processing, waste stockpiles and site development works. Dust monitoring has identified occasionally high dust levels inside the property boundary linked to construction work and wind blow from the exposed side walls.

The proposed biowaste treatment system will not be a source of dusts. The moisture content of the compostable material delivered to the facility (ca. 60%) and the moisture content of the material during all stages of the biowaste treatment process (40 to 70%) including mixing, residence in the digester, curing and refining will prevent the generation of dusts. The system is a potential source of bioaerosols.

Odours

Odour emissions are associated with the handling, sorting and transfer of both household and commercial waste due to its organic content. Emissions from handling and storage of dry recyclable material (i.e. plastics, glass, metals) and C&D waste are negligible. The current materials recovery and transfer operations are not a source of odour nuisance and the proposed increases in waste inputs will not result in any significant increase in odours. Biowaste treatment has the potential to be a source of odours due to the organic nature of the waste and the biowaste treatment process itself.

Noise

Noise surveys at noise sensitive locations indicate that the dominant sources of noise are construction works at the facility and adjoining properties and traffic entering and leaving the facility. The proposed increase in waste inputs will not result in any new sources or locations of noise emissions. The proposed changes to the biowaste treatment plant will result in new sources and locations of noise.

Traffic

The current daily vehicle movement are seventy seven (77) vehicles in and 77 vehicles out. This equates to on average, one (1) vehicle entering and leaving the site every ten (10) minutes or approximately six (6) vehicles per hour entering and leaving the site. The proposal to increase the overall volumes of waste will result in increased in traffic. The projected movements are 119 vehicles in and 119 vehicles out per day. This equates to approximately one every 6 minutes or ten per hour.

Assessment of the Effects of Emissions on the Environment

Groundwater

It is proposed to discharge the existing process wastewater, surplus leachate from the biowaste plant, and sanitary wastewater to a new foul sewer.

Following the connection to the sewer the use of the septic tank currently used at the facility, will no longer be used. This will eliminate the discharge of treated effluent ground.

Dust & Bioaerosols

Any bioaerosols generated during the biowaste treatment process would occur during the mechanical pre treatment (blending) and the initial biowaste treatment stage. The reception building the in-vessel units and the Aerated Static Piles will be equipped with air extraction and biofilter treatment of process air. These air collection and treatment measures will effectively minimise the risk of bioaerosol releases to atmosphere.

Odours

Odour emissions from the biowaste treatment process will be controlled by three primary methods i.e. management of the incoming material to prevent the development of anaerobic conditions, temperature control and air emission treatment. The biowaste treatment system design incorporates effective odour control measures which have been proven effective at other locations and the proposed location of the biowaste treatment area is remote from sensitive receptors.

Noise

The biowaste treatment plant will be provided with noise attenuation. An assessment of the impact of the proposed changes to current operations has established that there will be no adverse impacts on noise sensitive locations.

Traffic

The existing local road network and site access has the capacity to cope with these projected traffic volumes.

Monitoring and Sampling Points

With the exception of the relocation of the biowaste treatment system and the loss of one groundwater monitoring well during the changes to the site access, the proposed amendments to the current licence conditions will not result in any change to either the location of any monitoring or sampling points or the current monitoring programme for landfill gas, groundwater, noise, dust or surface water. A monitoring location and programme will be provided for discharges to sewer and will be agreed with the Agency. Greenstar have provided a replacement groundwater monitoring well and a monitoring point for the biowaste treatment plant will be agreed prior to the operation of the plant.

Prevention and Recovery of Waste

Waste oils generated during plant and vehicle maintenance will be collected and sent off-site for recycling.

Off-site Treatment or Disposal of Solid or Liquid Wastes

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

Emergency Procedures to Prevent Unexpected Emissions

Greenstar has developed and adopted Emergency Response Procedures (ERP) to address emergencies and incidents that result in unexpected emissions, as required by the current Waste Licence. The existing ERP will be revised before the start of the biowaste treatment plant operations to ensure that they address unexpected emissions from the plant.

Closure, Restoration and Aftercare of the Site

The proposed amendments to the current licence will not impact on the agreed measures for the closure, remediation and aftercare of the facility. Greenstar is seeking to amend the restoration measures, specifically the capping system specified in Condition 4.4.2 of the current licence and the timeframe allowed for the implementation of the restoration plan specified in Condition 4.8. Greenstar propose to complete the restoration plan by April 2009.