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environmental management for business

Licensing Unit,
Office of Licensing & Guidance,
Environmental Protection Agency,
Headquarters,
P.O. Box 3000,
Johnstown Castle Estate,
Co. Wexford.

29 JUL 2005

28th July 2005

RE: Notice in Accordance with Article 14(2)(b)(ii) of the Waste Management (Licensing) Regulations - Greenstar Ltd - Reg. No. 53-3

Dear Sirs,

Please find enclosed, on behalf of Greenstar Ltd, an original and 2 no. copies of Article 12 & 13 Compliance. Also enclosed is 16 no. copies of Article 12 & 13 responses on CD in pdf format as requested. I also enclose the appropriate fee of €6,000.00.

If you have any queries, please call me.

Yours sincerely,

Jim O'Callaghan

0307204/JOC/PS
Encs.
c.c. Mr. Micheal Geary, Greenstar Ltd.

greenstar
setting the standard

ARTICLE 14(2)(b)(ii) FURTHER INFORMATION

PARTICULARS AND EVIDENCE

FOR

GREENSTAR LTD

WASTE LICENCE APPLICATION NO. 53-3

ARTICLE 12 & 13 COMPLIANCE

Prepared For: -

Greenstar Ltd.,
La Vallee House,
Fassaroe,
Bray,
Co. Wicklow.

Prepared By: -

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

28th July 2005

environmental management for business

Article 14(2)(b)(ii) Further Information

Particulars and Evidence

For

Greenstar Ltd

Waste Licence Application No. 53-3

Article 12 & 13 Compliance

Prepared For: -

Greenstar Ltd.,
La Vallee House,
Fassaroe,
Bray,
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28th July 2005

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1. INTRODUCTION

Greenstar Limited (Greenstar) has, in response to the Notice issued under Article 14(2)(b)(ii) of the Waste Management Licensing Regulations, prepared the following information requested by the Environmental Protection Agency (Agency) in relation to the application for the review of a Waste Licence, at Fassaroe, Bray, Co. Wicklow (Waste Licence Register No. 53-3).

Section 2 contains the responses to the various requests by the Agency. For ease of interpretation each of the requests are presented in italics followed by Greenstar's response.

2. ARTICLE 12 COMPLIANCE REQUIREMENTS

1. *The applicant has submitted €15.000.00 for disposal of waste where the annual intake is likely to exceed 100,000 tonnes. According to the review waste licence application activities other than disposal of waste are proposed to be carried out, namely Classes 2, 3, 4, 11, 12 and 13 of the Fourth Schedule of the Waste Management Acts 1996 to 2003. The fee provided with the application on 10/09/04 does not cover these waste recovery activities. The fees, which are required to accompany waste licence applications, are set out in the Second Schedule of the Waste Management (Licensing) Regulations. 2004 (S.I. No. 395 of 2004). Provide the appropriate application fee in relation to the waste recovery activities concerned.*

The fee for recovery (€6,000) according to the Waste Management (Licensing) Regulations. 2004 (S.1. No. 395 of 2004) is included with the cover letter which accompanies this response.

2. *Provide an updated and revised non-technical summary including the omitted information outlined below as well as any further information supplied in response to this notice.*

   The following information was omitted from the non-technical summary supplied with the waste licence application: -

   - *In accordance with the Licensing Regulations, 2004 the non-technical summary shall contain the information detailed in Article 12 (a) to (t). Please provide a non-technical summary containing the required information as detailed in Article 12 (a), (b), (c), (s) and (t).*
   - *Detail the national grid reference of the facility.*
   - *Provide the EWC codes for waste to be accepted at the facility.*
   - *Provide information requested in paragraphs (a) to (g) of Section 40(4) of the Waste Management Acts 1996 to 2004.*

A revised non-technical summary containing the omitted information is included in Appendix 1.

3. *Submit dust monitoring results for 2004 and 2005 including a full interpretation of the obtained results.*

Dust monitoring results for 2004 including a full interpretation of the obtained results are included in Appendix 2. As the application for review was submitted in September 2004 it was not possible to include monitoring data for 2005 at that time. Dust monitoring has not been completed for 2005.

4. *Submit landfill gas monitoring results for 2004 and 2005 including a full interpretation of the obtained results.*

Landfill gas monitoring results for 2004 and 2005 including a full interpretation of the obtained results are included in Appendix 2. As the application for review was submitted in September 2004 it was not possible to include monitoring data for 2005 at that time.

5. *Submit leachate monitoring results for 2004 and 2005 including a full interpretation of the obtained results.*

Leachate monitoring results for 2004 and 2005 including a full interpretation of the obtained results are included in Appendix 2. As the application for review was submitted in September 2004 it was not possible to include monitoring data for 2005 at that time.

6. *Provide details and an assessment of the proposed wastewater emission from the facility to the foul sewer, include details on any proposed mitigation measures. Complete Tables E.3(i) Emissions to sewer and E.3(ii) Emissions to sewer - Characteristics of the emission of the application form for each emission point to sewer e.g. toilet/canteen, wheel wash area, compactor etc.*

Wastewater

1.1.1 Existing & Proposed Systems

Sanitary wastewater from the facility toilets is directed to the on-site septic tank where it receives primary treatment. The partially treated effluent from the tank is pumped by a float control pump onto a 4 modular Puraflo ™ biofiltration system for secondary treatment. Final effluent subsequently receives tertiary polishing in a percolation area.

Process wastewater currently generated at the facility comprises washwater from vehicle cleaning and washing of the floors in the transfer station buildings and in the compactor and loading area. The wash water from the vehicle wash drains into a sump, which is pumped out to a balancing tank that controls flows through to the on-site septic tank and then to the secondary biofiltration system.

It is proposed to discharge all wastewater generated at the site to the new foul sewer installed on lands adjacent to the facility as part of commercial development. The proposed connection point to the new sewer is shown on Drawing No. B8575-C003-A. The process wastewater will discharge via a petrol/oil interceptor to the new sewer which in turn connects to the municipal sewer that connects to the municipal wastewater treatment plant in Bray.

1.1.2 Proposed System – Biowaste Area

It is proposed to discharge the wastewater generated at the biowaste area to the new foul sewer. The discharge will be directed to a new pump sump located close to the existing biofiltration system from where it will be pumped to the municipal sewer.

Process wastewater generated by the biowaste treatment plant will include two types: -

1. *Pre-sanitisation*; run-off from in-vessel biowaste treatment floor wash downs, blending operations in the reception building and leachate from the in-vessel units; and

2. *Post-sanitisation;* run-off from the Aerated Static Piles (ASP).

Wastewater generated in the reception building and the in-vessel units will be directed to a holding tank for recirculation at the blending stage. Run-off from the ASP will be directed to a holding tank for settling and subsequent re-circulation to the ASPs. Excess run-off from the ASPs will be directed from this holding tank to a surplus storage tank from where it will discharge to the foul sewer.

During normal operations all leachate generated in the reception building and in-vessel units will be re-used in the biowaste treatment process. On occasions, surplus leachate may be generated and in this event it will be directed to the surplus storage tank. The contents of this storage tank will discharge via a petrol/oil interceptor to the new foul sewer. The drainage layout for the biowaste treatment area is shown on Drawing No. B8575-C003-A.

1.1.3 Proposed System - Transfer Station Buildings, Wheel Wash Area, Compactor Area, Sanitary

It is proposed to discharge the existing process and sanitary wastewater generated at the site to the new foul sewer. The wastewater will be directed to the new pump sump located close to the existing biofiltration system from where it will be pumped along with wastewater from the biowaste area to the new sewer. As the existing wastewater is already directed to this area of the site (to the bio filtration area) the existing drainage pipework will continue to be used and will be connected to the new pump sump.

1.1.4 Volume and Quality

Biowaste Area

As the biowaste treatment system is typically a net water user the majority of the wastewater will be floor wash down from the transfer buildings and the biowaste reception building. It is estimated that approximately up to 2 m^3 of process wastewater from the biowaste area will discharge to the sewer on a daily basis.

The floor of the biowaste reception building will be swept before washing to remove large items. The floor drains will be provided with grids to prevent entry of large items into the drains. All oils and other chemicals will be stored in dedicated bunded storage areas, which will reduce the potential for accidental releases of oils or chemicals to foul sewers. Facility personnel will be trained in spill response actions and adequate spill containment and clean up equipment will be maintained on-site.

Storm water from the site will not be discharged to the foul drainage system. Automatic cut-off valves will be installed on the foul sewer drainage system before the connection to the new sewer to prevent the direct discharge of firewater run-off in the event of a fire on the site.

Sanitary / Canteen Discharges

The total number of employees on site over a 24-hour period will be approximately 70. Based on a discharge rate of 220 litres/person/day, this equates to a dry weather flow of 0.18 litres/sec or approximately 15 m^3/day.

Transfer Buildings

Each of the waste transfer buildings will require floor washdown. This wastewater will be collected by a series of floor drains within the buildings.

The volume of wash water is estimated at 250 litres per day per 500 m^2 floor area. The run-off from the existing transfer building will be 500 litres/day, from the Phase 1 transfer building 850 litres/day and from the proposed Phase 2 transfer building 1000 litres/day.

All wastewater generated at the site will discharge to the new pump sump from where it will discharge to the municipal sewer. Tables E.3(i) and E.3(ii) of the waste licence application form are included in Appendix 3.

Table 5.3 indicates the likely quality of the process and sanitary wastewater from all activities that will be discharged to municipal sewer.

Table 5.3 Wastewater Quality

Parameter	Concentration
Temperature	42 °C
BOD	10 000 mg/l
COD	30 000 mg/l
pH	5 – 10
Ammoniacal Nitrogen	100 mg/l
Suspended Solids	2000 mg/l
Sulphates (as SO_4)	1000 mg/l
Detergents (as MBAS)	100 mg/l
Fats, Oils, Grease	100 mg/l

7. *Submit a proposal for monitoring of wastewater emission to foul sewer including the location(s) of proposed wastewater monitoring points. Revise Drawing No. 03073-01 Rev. A Existing and Proposed Monitoring Locations to include proposed wastewater monitoring points and the national grid reference for each monitoring point.*

Discharges to sewer will be monitored twice per annum for the following parameters: -

- pH,
- Temperature,
- Biochemical Oxygen Demand,
- Chemical Oxygen Demand,
- Suspended Solids,
- Oils, Fats and Greases,
- Sulphate,
- Detergents,
- Fats / oils / grease,
- Ammonical Nitrogen.

Monitoring will only be carried out on the process wastewater from the washdown of the transfer buildings and the discharge from the biowaste area combined. It is not proposed to monitor the sanitary wastewater nor is it proposed to install flow meters or composite samplers as the volume of wastewater will be small and only occur intermittently during washdown periods.

Monitoring will be carried out at location SE-1 as shown on Drawing No. 03072-01 Rev B.

8. *Supply a proposal for the monitoring of process emissions to air from the composting facility including the location(s) of the proposed air emission monitoring points. Revise Drawing No. 03073-01 Rev. A Existing and Proposed Monitoring Location's to include proposed air emission monitoring points and the national grid reference for each monitoring point.*

It is not proposed to change the monitoring programme specified in the existing licence in relation to monitoring air emissions from the composting unit. Schedule C.4 of the licence has set the emission limit values to air from the waste composting process and Schedule D.6 specifies the monitoring parameters, frequency and methodologies.

The proposed monitoring locations for the composting unit will be agreed in advance with the Agency prior to start of composting operations, as specified in Condition 3.17.4.1.

3. ARTICLE 13 COMPLIANCE REQUIREMENTS

1. *Provide an undated and revised Environmental Impact Statement (EIS) non-technical summary including the omitted information outlined below as well as any further infom1ation supplied in response to this notice.*

   The following information was omitted from the EIS non-technical summary supplied with the EIS: -

- *Provide a description of the forecasting methods used to assess the effects on the environment.*

- *Provide an indication of any difficulties such as technical difficulties or lack of know-how, encountered by the developer in compiling the required information.*

A revised non-technical summary containing the omitted information is included in Appendix 4.

2. *Provide an updated ecology report for the facility - Include a list of areas of conservation within 10 km of the facility detailing the distance from each area of conservation to the facility.*

An updated ecology report which includes an overview of the ecology report completed in 1998 as part of the original licence application, a description of the works completed at the site since 1998 and a list of the areas of conservation within 10 km of the site is included in Appendix 5. The report also assesses the ecological impacts of the proposed changes to the existing waste licence conditions.

DRAWINGS

Drawing No. B8575-C003-A

Drawing No. 03072-01 Rev B

Placeholder

This page has been inserted to indicate that content has been extracted from this location in the document and has been stored in a separate file. (This is due to file size issues.)

The extracted content can be found in the following electronic pdf file:

Requested Information-Map-A

Licence: W0053-03