INSPECTORS REPORT

WASTE LICENCE REGISTER NUMBER: 183-1

APPLICANT: Greenstar Recycling Holdings Limited, Unit 6, Ballyogan Business Park, Ballyogan Road, Sandyford, Dublin 18.

LOCATION OF FACILITY: Millennium Business Park, Cappagh Road, Townland of Grange, Ballycoolin, Dublin 11.

INSPECTOR: Kealan Reynolds

INSPECTOR'S RECOMMENDATION: That a licence be granted subject to conditions

(1) Introduction

Greenstar Recycling Holdings Limited (Greenstar) has applied to operate a new materials recovery facility, transfer station and biowaste treatment facility at the Millennium Business Park in Ballycoolin, Dublin. The proposed facility is located approximately 8.5km to the north west of Dublin city centre and it is approximately 3km to the north-east of Blanchardstown. The area of the proposed facility is approximately 4.45 ha in size and is located within the Millennium Business Park, which has been zoned for commercial and industrial use. It is envisaged that the proposed facility will replace the existing waste transfer station currently being operated by Greenstar at St. Margarets, Dublin.

The proposed facility is bounded to the east and north by sand and gravel quarries and there are commercial/light industry units located within 20m of the western boundary. The area immediately to the south of the facility has not yet been developed, however planning permission is being sought to construct a concrete batching plant at this location. The nearest private residences to the proposed facility are located approximately 200m to the south of the facility boundary. **A plan showing the location and proposed layout of the facility to which the application relates is provided in Appendix 1.** Greenstar were granted planning permission for the proposed development by Fingal County Council in March 2003 and Greenstar subsequently appealed the conditions to An Bord Pleanála. An Bord Pleanála decided the appeal in August 2003.

The recommended PD permits the acceptance of up to 270,000 tonnes of non-hazardous waste per annum (as applied for by the applicant) at the facility. Under the terms of the recommended PD, the applicant will be required to develop the facility on a phased basis (three phases) subject to the provision of adequate waste handling capacity and the completion of an odour impact survey and the implementation of any subsequent recommendations arising from this survey. The recommended PD permits the acceptance of up to 50,000 tonnes of biowaste for on-site treatment/composting, 100,000 tonnes of municipal waste, 90,000 tonnes of commercial and industrial waste and 30,000 tonnes of construction and demolition waste.

Quantity of waste (tpa) to be accepted	270,000 tonnes (max.)
Environmental Impact Statement Required	Yes. I have assessed the EIS and am satisfied that it complies with the EIA and Licensing Regulations.
Number of Submissions Received	2

Site Visits

Date	Personnel	Comments
19/12/02	Eamon Merriman	Site Notice Compliant
27/03/03	Kealan Reynolds	Noted site location and environs

02/06/03	Kealan Reynolds & M. Henry	-

(2) Facility Development

The applicant has proposed to construct the facility on a phased basis over a number of years with the proposed maximum tonnage of 270,000 tonnes being accepted in the seventh year of operation. The biowaste treatment facility (BTF) and the materials recovery facility (MRF)/transfer station will be constructed in two and three phases, respectively. In addition to the BTF and the MRF, the applicant has also proposed to provide 2 weighbridges, a vehicle wash, maintenance building, control building, administration building, foul water and surface water drainage systems and adequate vehicle parking and fuel storage. The proposed design and operating methods for the BTF and MRF are provided below:

- *Biowaste Treatment Facility:* The applicant has proposed to use a "Hangar" type composting system at the facility. The "Hangar" system can be extended from an initial treatment capacity of 12,500 tpa to ultimately 50,000 tpa. The system will be fully enclosed and will comprise of aerated piles with the material initially being turned with mobile plant and subsequently fully automated plant when/if Phase II of the BTF has been constructed. The floor of the BTF will be fully aerated and controlled remotely so as the rate of aeration can be varied across the length of the floor. The duration of the process will be between 5 –6 weeks from the acceptance of the waste to the removal of the treated material from the system. Negative pressure will be maintained in the BTF at all times and all of the air extracted will be passed through a water scrubber and a biofilter prior to being discharged via a 16m high stack. The expansion of the biowaste treatment facility above 25,000 tonnes per annum is subject to an odour impact study as per Condition 10.3 of the recommended PD (see section 4 below). The total floor space of the BTF (if fully developed as proposed) will be approximately 6200m^2 and this includes the aerated floor, waste acceptance/mixing area, waste storage area (for wood chip) and the compost refinement area.
- *Materials Recycling Building/Transfer Station:* The MRF will have a floor size of 4388m^2 when fully constructed and this will house the following infrastructure: waste acceptance areas, 2 trommels, 4 balers, 2 shredders, 2 conveyors, 2 bag openers and a waste inspection and quarantine area. The MRF is to be constructed in three phases as proposed by the applicant and this is reflected in Schedule A of the recommended PD. The applicant will be required to provide three separate areas within the MRF for the acceptance and processing of a) municipal waste, b) commercial and industrial waste and c) construction and demolition waste. In addition, the recommended PD requires that the applicant provide a suitably sized area with the MRF building for the storage of processed waste materials prior to their removal off-site.

(3) Waste Types and Quantities

The maximum annual tonnage that may accepted at the facility is 270,000 tonnes and this will be accepted over a three phase (Phases I, II, III) development of the facility as proposed by the applicant (Schedule A). The four principal waste streams to be accepted are as follows:

- *Biowaste:* 12,500 tonnes per annum (Phase I) increasing up to 50,000 tonnes per annum (Phase III)
- *Municipal Waste:* 65,000 tonnes per annum (Phase II) and 100,000 tonnes per annum (Phase III).

- *Commercial and Industrial Waste(C&I):* 45,000 tonnes per annum (Phase I) increasing up to 90,000 tonnes per annum (Phase III)
- *Construction and Demolition Waste(C&D):* 12,000 tonnes per annum (Phase I) increasing up to 30,000 tonnes per annum (Phase III)

(4) Emissions to Air

Dust: The main potential source of dust from the facility is the MRF building where dust emissions may arise from waste shredding, tromelling and loading. Condition 4.1 of the recommended PD requires that all waste processing takes place indoors and Condition 3.15 prescribes certain dust control requirements for each of the specified waste acceptance areas at the facility while Condition 6.5 of the recommended PD requires that all doors at the facility remain shut where practical. The BTF building will be under negative pressure at all times and this should prevent any uncontrolled dust emissions to air.
The recommended PD requires the applicant to carry out dust deposition monitoring at the facility while Condition 5.1 and Schedule C.2 of the recommended PD sets out limits for dust deposition.

Odour: The primary source of odours from the proposed development is likely to be from the BTF. The applicant undertook odour modelling of predicted emissions from the BTF (after passing through a water scrubber and biofilter with 95% odour removal efficiency) and from the main MRF building. The modeling suggests that the waste activities would not have an adverse impact around the facility providing the BTF is operated as required (i.e. aeration, moisture content, scrubber & biofilter efficiency) and providing that emissions from the biofilter(s) are emitted via a stack located 16m above ground level (Table D.5.2 of the recommended PD).
Given that the modeling was not based on actual data and having regard to the proximity of the facility to commercial premises (20m from western boundary) the applicant is not permitted to increase the quantity of biowaste above 25,000 tonnes until such time as (i) further modelling (using actual data) is carried out (Condition 10.3) and (ii) the recommendations of this report are carried out.
In addition to the BTF the MRF may also be a source of malodours and in particular the municipal waste acceptance area. Condition 3.15.1 requires that prior to the acceptance of municipal waste at the facility (i.e. Phase II) that the licensee shall provide a dedicated odour control system in the municipal waste area.
Potential odour nuisances are controlled by Condition 6 of the recommended PD while Condition 7.1 and Schedule D provide for the monitoring of the on-site biofilter(s) on a regular basis.

Noise: The applicant has not proposed to accept waste or process waste on a 24 hour basis and the waste handling hours are limited to between 6.00am and 8.00pm (Monday to Saturday). The applicant carried out a noise impact study as part of the waste licence application and the modelled results suggested that noise emissions from the facility would not exceed the noise level limits as set out in the recommended PD - 45dBA(night-time) and 55dBA(daytime). Nevertheless, because of the close proximity of the Millennium Business Park, the recommended PD requires the applicant to provide an acoustic barrier along the western and southern boundaries. The recommended PD (Condition 3.16.2) also requires that the applicant provides localised noise attenuation barriers around the proposed construction and demolition waste area as it is considered that this area would potentially have a high level of noise emissions.
Condition 7.1 and Schedule D of the recommended PD sets out the monitoring requirements and noise limit values.

(6) Emissions to Surface Water

There is a low density of natural surface water drainage features at the facility. Surface water from the Millennium Business Park drains to a large underground tank located near the entrance to the Park and this in turn is then pumped at a constant rate to the surface water drainage system that flows into the nearby Northwest Industrial Park. The recommended PD requires the licensee to provide a surface water system at the facility which includes two large tanks for the storage of rainwater collected from the MRF and BTF buildings. This collected rainwater will be treated where necessary (i.e. UV Treatment prior to use in toilet blocks) and reused at the facility thus minimising the demand on the mains water. All other surface water will be collected and discharged to the surface water drainage system that serves the Millennium Business Park. Condition 7.1 and Schedule D sets out the monitoring requirements at the two discharge points.

Condition 3.13 of the recommended PD requires the applicant to provide silt barriers at the facility up to and until the facility has been paved as required by the recommended PD and this should minimise the risk of elevated levels of suspended solids being discharged from the facility during the construction phases. Condition 3.12 of the recommended PD requires that all surface water discharges pass through a silt trap and Class I interceptor prior to discharge.

(7) Wastewater

The facility is serviced by a sewer which is under the control of Fingal County Council. The emission limit values and monitoring for emissions to sewer (as set out in the recommended PD) reflects the response to a Section 52 notice from Fingal County Council. All wastewater generated at the MRF building; any waste processing/storage areas; weighbridges; sewage, and any wash waters are required to be discharged to the wastewater system at the facility.

Wastewater from the BTF building will be collected and stored in an underground tank and will be reused in the composting process where possible. Any foul water from the BTF building that is not reused in the process will be tankered off-site for treatment. While the applicant considers that this wastewater would be too contaminated to discharge to sewer provision is made in the PD for such a discharge if acceptable to Agency and Sanitary Authority.

(8) Other Significant Environmental Impacts

The applicant is required to submit a report to the Agency as per Condition 10.4 of the recommended PD outlining how they intend to ensure that the composting activities at the facility will comply with the requirements of the EC Regulation of 3rd October 2002 "*Laying down the health rule concerning animal by-products not intended for human consumption"(EC 1774/2002)*.

(9) Waste Management, Air Quality and Water Quality Management Plans

1. The Waste Management Plan for the Dublin Region does not directly refer to the applicant's facility however the plan does state that "the private sector role in provision of collection, treatment and disposal services must be encouraged". In addition the plan states that the recovery and recycling of commercial and industrial wastes by privately operated facilities is a key component of the plan. An additional feasibility study carried out for the biological treatment of waste in the Dublin Region (1999) recommends that two composting facilities of approximately 40,000 tonnes per annum capacity be provided, one in the north and other in the south of the region.

2. The vision statement of the Dublin Regional Air Quality Management Plan states "…protect the environment by the provision of a co-ordinated approach to the control of air pollution and to the sustainable development of the built environment and transportation within the region." Compliance with the Conditions of the recommended proposed decision should ensure that the air emissions from the facility will not exceed emission limits set out in the recommended proposed decision.

(10) Submissions/Complaints

2 valid submissions were received in relation to this waste licence application and a summary of both of these submissions are provided below.

Submission 1: Received from Cormac McCarthy, Fisheries Environmental Officer, Eastern Regional Fisheries Board (ERFB) on 23rd April 2003.
The submission stated that the ERFB had no objections to the proposed facility from a fisheries perspective, however the submission did state that there must be strict adherence to the surface water mitigating measures as outlined in the application.

Response:
The surface water mitigation measures proposed in the application have been taken into account in the recommended PD (e.g. silt control, firewater retention, oil interceptors, fuel bunding, etc)

Submission 2: Received from Fingal County Council on 17th June 2003
Fingal County Council (as the planning authority) provided a comment on the additional information which was submitted as part of the applicant's Article 14(2)(b)(ii) response. It simply stated that the additional information received was in line with the information submitted as part of the planning permission application.

Response:
The comments of Fingal County Council are noted.

Signed _____ Dated:
Kealan Reynolds, Inspector,
Environmental Management & Planning.

APPENDIX 1

LOCATION MAP & SITE LOCATION MAP