



**OFFICE OF
LICENSING &
GUIDANCE**

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

TO:	Directors	
FROM:	Technical Committee	LICENSING UNIT
DATE:		
RE:	Greenstar Recycling Holdings Ltd., East Galway Residual Landfill Site. Reg 178-1	

Application Details	
Principal Class of activity:	Third Schedule Class 5; Specially engineered landfill, including placement into lined discrete cells, which are capped and isolated from one another and the environment.
Location of activity:	Killagh More, Ballybaun, Ballintober, Ballinasloe, County Galway.
Licence application received:	27 th September 2002
PD issued:	03 rd February 2004
First party Objection received:	27 th February 2004
Third Party Objection received	01 st March 2004
Submission on Objections:	08 th April 2004

Company

Greenstar Recycling Holdings Ltd. proposes to develop an engineered landfill for the disposal of treated non-hazardous household, commercial and industrial waste. Inert waste will also be accepted for restoration purposes. The facility may accept up to 100,000 tonnes per annum (tpa) for disposal and 27,320 tpa for recovery and will have an operating life of approximately 10 years. The landfill will be located within a 60.8-hectare site and the area to be land filled will occupy approximately 14.8 hectares. There are five houses within 500 metres of the landfill footprint, the nearest approximately 450 metres southeast, and a further 13 residences within approximately 1000m.

Consideration of the Objection

The Technical Committee, comprising of Marie O’Connor and Niamh O’ Donoghue, have considered all of the issues raised in the Objections and this report details the

Committee's comments and recommendations following the examination of the objections.

This report considers the first party objection, the third party objection, and the submission on the objection.

First Party Objection

The applicant makes 12 points of objection. There were no submissions on this objection.

A.1. Part 1 Activities Licensed (Third Schedule)

The applicant requests that the description of Class 1 be amended to 'This activity is limited to the disposal of non-hazardous waste into lined cells in and under land.' They state that Condition 3.12.1 requires all peat to be removed from the site necessitating excavation and Condition 3.12.2 sets the formation levels requiring up to 4 meters of excavation.

Technical Committee Comment:

The non hazardous waste must be deposited into lined cells and therefore there is no need to specify further. The reference to 'on land' can be removed.

Recommendation

Remove 'on land' from end of second line of Table in Part 1 Activities Licensed

A.2. Condition 3.8.1 Weighbridges

The applicant requests that the last sentence of the condition be modified to "Drainage from these areas shall be directed to the road drainage system." They state that all vehicles that have travelled over waste will previously have passed through a wheel wash. The area before and after the weighbridge will drain to the surface water collection system and this Condition will involve a separate drainage network for an isolated, small overall area.

Technical Committee Comment:

Waste collection vehicles may contain leachate which should be directed for treatment. This site is not yet constructed therefore the surfacewater collection system should be designed and constructed to cater for the weighbridge drainage.

Recommendation:

The licensee shall establish and maintain two weighbridges at the facility which shall be directed to an appropriate collection/treatment system. Following the commencement of waste acceptance at the facility drainage from the weighbridge areas shall be directed to the leachate collection system.

A.3. Condition 3.9.1

The applicant requests the following amendment to this condition, following the first sentence the Condition to read as “ Two weeks prior to commencement of waste intake drainage from the wheel wash shall be directed to the leachate collection system. Prior to this period drainage from the wheel wash shall be directed to either the storm water or leachate collection systems”. They state that prior to waste intake there will be no leachate contamination on any vehicles. During construction if a wheel wash is in place they feel it should drain to the surface water management infrastructure, which due to Condition 3.16.2 will be in place prior to the commencement of the construction of the remainder of the facility.

Technical Committee Comment:

Condition 3.1 requires that all infrastructure is established either prior to the commencement of the licensed activity or as otherwise required by a condition of the licence. It is recommended that the wording of Condition 3.9.1 is amended to clarify that wheel wash prior to commencement of acceptance of waste shall be directed to an appropriate treatment system and not necessarily to the leachate collection system.

Recommendation:

Reword Condition 3.9.1 as follows:

The licensee shall establish and maintain a wheelwash at the facility which shall be directed to an appropriate collection/treatment system. Two weeks prior to the commencement of waste acceptance at the facility drainage from the wheel wash shall be directed to the leachate collection system.

A.4. Condition 3.10.1

The applicant requests the amendment of the condition to allow for wastewater drainage arising at the facility prior to operations commencing to be managed as agreed by Agency. During construction the leachate tank will not be in place.

Technical Committee Comment:

To provide for adequate protection of the environment during the construction of the landfill cells the TC recommend that the condition is reworded.

Recommendation:

The licensee shall establish and maintain an appropriate wastewater treatment system. Following the commencement of waste acceptance at the facility wastewater shall be directed to the leachate collection system.

A.5. Condition 3.12.3 (c)

The applicant requests that this condition is amended to allow for the use of equivalent material agreed by the Agency as a drainage layer, to allow alternatives to be explored. Also the applicant requests the particle size and shape requirement removed to allow scope for providing a more environmentally friendly alternative. The applicant proposes testing of the alternative layer to ensure the protective geotextile is sufficient to prevent puncturing of liner.

Technical Committee Comment:

The TC recommend that the licensee be allowed to specify an equivalent material which will provide equal or better protection for the environment.

Recommendation: Reword Condition 3.12.3 (c) as follows:

A 500mm thick drainage layer placed over the geotextile layer with a minimum hydraulic conductivity of 1×10^{-3} m/s, of prewashed, uncrushed, granular, rounded stone (16-32mm grain size) incorporating leachate collection drains (or equivalent as agreed with the Agency); and

A.6. Condition 3.15.1

The applicant requests the Condition be amended to require the licensee to submit a proposal on the extent of pumping trials within six months of waste disposal commencement. Once the results have been agreed with the Agency the infrastructure for the collection and flaring of landfill gas shall be installed at the facility. They state that it is normal for 12 months of waste deposition for sufficient gas development to maintain a flare. Pumping trials will allow determination of when sufficient gas is produced. The licence requires passive landfill gas management until operation of the landfill gas flare.

Technical Committee Comment:

The TC accepts that it may take 12 months of waste deposition for sufficient gas to be produced and recommends that the wording is amended to reflect that used in recent licences.

Recommendation:

Reword Condition 3.15.1 as follows:

Within twelve months of waste acceptance at the facility, infrastructure for the active collection and flaring of landfill gas shall be installed at the facility. The flare shall comply with the emission limits in *Schedule C: Emission Limits*, of this licence.

A.7. Condition 3.18.1

The applicant requests an amendment to the last paragraph of the condition to allow for the monitoring infrastructure to be operational prior to the commencement of waste intake not commencement of surface water discharges. They state that under condition 3.16.2 the surface water management infrastructure will be in place prior to all other construction and given the nature of the construction activity and the requirement for telemetry equipment to be housed it will not be possible to have it installed at this stage.

Technical Committee Comment:

Given the nature of the construction works to be undertaken and the fact that drainage is to two watercourses which drain to the River Raftord the TC recommend that the requirements of Condition 3.18 during the construction phase should be maintained. The surface water management structure is required to be in place before any other construction works commence (Condition 3.16.1) therefore it is not considered too onerous to require the monitoring of the discharge.

Recommendation: No Change

A.8. Condition 4.4.1

The applicant requests the amendment of the condition to read “ drainage layer of 0.3m thickness having a minimum hydraulic conductivity of 1.7×10^{-4} m/s or an equivalent material layer”. They state this would provide a greater drainage capacity and reduce the volume of traffic required to import the drainage layer. Also, by specifying an equivalent they state this will reduce the environmental impact both in reduced traffic and the use of virgin raw materials.

Technical Committee Comment:

This is similar to A5 and the TC recommend that the condition is reworded to allow for equivalent systems to be proposed.

Recommendation:

Reword Condition 4.4.1 (c) to read as follows:

Drainage layer of 0.5m thickness having a minimum hydraulic conductivity of 1×10^{-4} m/s (or equivalent as agreed with the Agency);

A.9. Condition 5.14.4

The applicant requests an amendment to this Condition to allow the drainage from the wheel wash to go to either the storm water or leachate collection lagoon and only two weeks prior to the commencement of waste intake to require it to go solely to the leachate lagoon. They state there will be no leachate contamination on vehicles prior to waste intake. During construction if a wheel wash is in place they feel it should drain to the surface water management infrastructure, which will be in place at this

point, under condition 3.1, and 3.14 installation of the leachate lagoon is required only prior to the commencement of licensed activities.

Technical Committee Comment:

Condition 3.9.1 has been reworded to take into consideration the situation above under objection A3. In addition the TC recommend that Condition 5.14.4 is amended to remove the reference to the leachate lagoon as this has been dealt with in Condition 3.9.1.

Recommendation:

Reword Condition 5.14.4 to read as follows:

The wheel-wash shall be inspected on a daily basis.

A.10. Condition 7.5

The applicant requests that the requirement for all vehicles leaving the facility to use the wheel cleaner be amended to apply to only those vehicles leaving the landfill footprint. They state that vehicles from visitors, postmen, staff private cars etc. do not have direct contact with the waste.

Technical Committee Comment:

The TC recommend that the wording is slightly amended to provide further clarity in relation to the fact that it was not the intention in the PD to require uncontaminated vehicles to pass through the wheel wash.

Recommendation:

Reword Condition 7.5 to read as follows:

The wheel wash shall be used, unless exempted, by all vehicles, to ensure that no process water or waste is carried off-site. The exemption of certain vehicles entering the facility from using the wheel wash shall be agreed with the Agency.

A.11. Condition 11.7.1

The applicant requests that this Condition be amended to allow for the submission on the assessment of landfill gas utilisation as energy within twelve months of commencement of waste intake not eighteen months of grant of licence. They state the proposed time frame is not directly tied to the date of waste intake and may not provide sufficient time to assess the type of waste and the volume of gas generated.

Technical Committee Comment:

The initial study on the landfill gas utilisation is essentially a desktop study which may be undertaken without the site specific information referred to in the objection. Within twelve months of waste acceptance on the site the infrastructure must be in place for landfill gas collection and it would be in the interests of the company to have investigated the feasibility of landfill gas utilisation at that stage to minimise the purchase of equipment which may be redundant should the gas be utilised rather than simply flared.

Recommendation: No Change

A.12. Schedule D.5

The applicant requests the frequency of visual inspections/odour be reduced to monthly until works commence on site. They state monitoring prior to commencement is to provide background levels and weekly inspections at this stage are unnecessary and impractical.

Technical Committee Comment:

The main intention of the condition is to deal with nuisance from the deposit of waste on site and the TC agree that the condition is amended to allow for monthly monitoring as requested by the applicant.

Recommendation:

Amend line 2 of **Schedule D.5 Surface Water, Groundwater and Leachate Monitoring** as follows:

D.5 Surface Water, Groundwater and Leachate Monitoring

PARAMETER^{Note 1}	SURFACE WATER^{Note 2}	GROUNDWATER	LEACHATE^{Note 3}
	Monitoring Frequency	Monitoring Frequency	Monitoring Frequency
Visual Inspection/Odour^{Note 2}	Monthly	Quarterly	Quarterly
Groundwater Level	Not Applicable	Monthly	Not Applicable

Note 7: Prior to the commencement of waste acceptance on-site the monitoring frequency shall be monthly.

Third Party Objection

The First Party submission on the Third Party objection is dealt with under each objection point below:

B. Objection – Kilconnell, Cappataggle, New Inn Anti Superdump Group.

The above group submitted its objection under three broad headings;

1. Non-compliance with Waste Management Act of 1996 and European Directives pertaining to waste management,
2. Correspondence from Western Regional Fisheries Board,
3. Summary of residents concerns.

B.1 Non-compliance with Waste Management Act of 1996 and European Directives pertaining to waste management

The objectors state that the licence infringes several Directives namely;

- *European (Waste) Framework Directive 75/442/EEC*
- *European (Landfill) Directive 99/31/EC*
- *European (EIA) Directive 85/337/EEC as amended by Directive 97/11/EC*
- *European (IPPC) Directive 96/61/EC*

They state that under the WMA and amendments made by the PoE Act 2003 the EPA cannot grant a licence for a waste activity that has not complied with the above-mentioned Directives. They also state that under Section 83(5) (iii) of the PoE Act the Agency shall not grant a licence unless it is satisfied that any emissions from the activity will not result in the contravention of any relevant standard. They feel the proposed licence granted by the EPA infringes the above legislation.

Infringements of the European (EIA) Directive 97/11/EC

The objectors state the EIS for the proposed activity failed to contain a significant amount of the information that is mandatory in order to give effect to the provisions of Article 5 (3) of the above Directive. The general area of the proposed site has been identified in the Galway Waste Management Plan as being generally suitable for a landfill. Greenstar stated that they did consider other sites identified in the Connaught Waste Management Plan but due to confidentiality agreements with landowners and commercial sensitivity they could not publicly identify the sites. The objectors feel the company in fact failed to consider alternatives infringing on adequate public consultation taking place. Therefore, Greenstar are not in compliance with the Directive.

The objectors state the EIS also failed to contain information on how the company would impose charges in respect of waste disposal therefore not in compliance with Section 53 (1) of the WMA. Greenstar they point out has appealed seven of the planning permission conditions firstly, to pay €40,000 per annum to Galway County Council for supervision and monitoring, and also the requirement to lodge €200,000 cash or bond to secure final restoration measures. The objectors feel this is evidence that Greenstar does not intend to comply with Section 53(1) and therefore the EPA cannot grant a licence under Section 53(8) as the Agency cannot be sure the company will continue to take steps to comply with subsection (1).

The objectors state that certain conditions in the license refer to information that is mandatory in an EIS. These are, Condition 1 requires that all waste accepted at the facility is subjected to treatment. Condition 4 requires that within eighteen months a detailed Restoration and Aftercare Plan be submitted to the Agency for its agreement and Condition 5 which states that only non-hazardous waste asbestos shall be disposed of at the facility. Condition 11 states written procedures for the acceptance and handling of all waste are submitted to the Agency for agreement. The objectors state the absence of this information resulted in the EIS non-technical summary being incomplete under the provisions of Article 5 (3) (a) (b) (c) and (d).

The objectors state the EIS also failed to contain a description of the measures to deal with significant adverse effects, and the data required to identify and assess the main effects on the environment.

The objectors state that the EIS prepared failed to comply with Article 3 of the above Directive. This along with the points raised above resulted in the EIS being legally flawed and as such the EPA decision to grant a licence was also legally flawed.

Infringements of the European (Waste) & (Landfill) Directives

The objectors state the Section 22 (2) of the WMA requires Local Authorities to prepare Waste Management Plans. They state the Connaught Waste Management Plan (September 2001) supersedes and replaces all waste plans prepared previously by the Councils.

The objectors feel the EPA did not give effect to the provision of the WMA in requiring adequate information to show the landfill is consistent with the Connaught Waste Management Plan and will not prejudice measures taken or to be taken for the purposed of the implementation of the plan.

The licence is for a “Residual Landfill Site”. The objectors state this new landfill definition infringes Article 4 of the European (Landfill) Directive 1999/131/EC which states a landfill shall be classified in one of the following classes 1) Landfill for hazardous waste, 2) Landfill for non-hazardous waste or 3) Landfill for inert waste. They state there is no legal definition for the term “Residual Landfill Site” in the European Directives and the EIS and licence fails to identify the source of the “Municipal Waste” or how it will be separated or treated to create “Residual Waste” as defined in the Irish Governments Document “Preventing and Recycling Waste Delivering Change” which defines it as the fraction of municipal waste remaining after source separation of municipal waste fractions, such as food and garden waste, packaging, paper and paperboard, metals, glass and (which is) unsuitable for the production of compost because it is mixed, combined or contaminated with potentially polluting products or materials.

The objectors state Greenstar failed to comply with the above Directive in failing to meet the requirements relating to groundwater and the geological and hydro-geological conditions of the area. The objector’s state that the Council informed Greenstar that the groundwater aquifer may be more vulnerable than originally identified and the protection category indicated of R2 may not be accurate and requested that further information be submitted.

The objectors also state the requirement of the European (Landfill) Directive that a landfill site shall not be authorised unless following an EIS the indication is that it is sustainable development. They feel the proposed development is unsustainable because it infringes Community Environmental Laws as described. Also, Ireland still sends most of its biodegradable waste to landfill and has a long way to go to meet its Landfill Directive targets, this landfill will not promote our targets in this regard.

Infringements of the European (IPPC) Directives

The objectors state that Section 5 (2) of the WMA was amended to include 'Best Available Techniques' and the proposed landfill fails to identify how the applicant is to comply with this requirement. The objectors state the Agency was not in compliance with Articles 4,7 and 9 of the IPPC Directive in failing to ensure the conditions were fully co-ordinated with Galway County Council in order to guarantee an effective integrated approach to waste management.

Summary

The decision by the EPA to grant a licence to Greenstar is legally flawed as the application failed to comply with Articles 4, 7, and 9 of the European (IPPC) Directive 96/61/EC, Articles 5, 6, and 7 of the European (EIA) Directive 85/337/EEC as amended by Directive 97/11/EC and Article 4 of the European (Landfill) Directive 1999/131/EC.

Submission on objection:

The applicants clarify that the reference to 27,320 tonnes per annum of inert waste refers to the recovery for redevelopment, restoration or construction purposes at the landfill facility. They indicate that the level of information in the EIS etc. was sufficient. In relation to Section 53(1) of the WMA they will impose a gate fee for disposal of waste at the facility which will be used to meet the costs associated with the construction operation, aftercare measures and monitoring of the facility

Technical Committee Comment:

No specific condition was referred to in this section of the objection. The TC are satisfied that the assessment of the application and EIS was in accordance with relevant legislation and that points raised were dealt with in the Inspectors report and PD particularly in its response to the submissions.

In relation to the issue of the costs of landfill of the waste the TC recommend that the wording is amended to reflect the requirements of S.I. No. 337 of 2002 requiring the submission of an annual statement.

Recommendation:

Amend Condition 12.3 to read as follows:

The licensee shall provide a statement in writing to the Agency on an annual basis as part of the AER in respect of the determination of charges for the disposal of waste. The Statement shall be in accordance with the requirements of the European Communities (Amendment of Waste Management (Licensing) Regulations, 2000)

B.2 Correspondance from Western Fisheries Board

The objectors included in the submission correspondence from the Western Regional Fisheries Board to An Bord Pleanala regarding the appeal against the granting of planning permission by Galway County Council for the proposed landfill. The letter states that the Board has an interest in the outcome in view of the significance of the Raford River as a Salmonid fishery and submitted that the Board should consider the following issues:

- 1. Adequacy, availability and proximity of a sewage treatment plant for the treatment of the landfill leachate.*
- 2. Scope for enhanced riparian zones*
- 3. The implications of the decision of Galway County Council to zone 50 acres at Cross New Inn as the location for a landfill site*

The Fisheries Board state that any failure in the regulatory arrangements in relation to the management of the site could have serious consequences for the fishery and attached a draft paper in relation to riparian zones for information. This draft paper discusses the important of riparian zones in conserving biodiversity and providing essential habitat in the lifecycle of freshwater organisms including salmon and trout, and having a profound influence on the well-being of freshwater and associated fisheries.

Submission on objection:

The applicant states in response to the issues above that there is no proposal to discharge leachate to the adjoining surfacewater channels or groundwater.

In relation to surfacewater the applicant state that they propose to operate a reed bed at the outfall of the settlement lagoon and the Western Fisheries Board have stated their satisfaction with this on public record at the An Bord Pleanala oral hearing.

Technical Committee Comment:

The Fisheries Board have not submitted an objection to this PD and the issues raised above were also dealt with as a submission on the application. The PD requires that the Western Regional Fisheries Board is consulted in advance of the re-direction/culverting of the Killaghmore/Ballintober streams. In relation to the reed bed it is recommended that this proposal is incorporated into the final licence.

Recommendation:

Amend Condition 3.16.5 to read as follows:

The surface water retention lagoon shall be capable of dealing with all surface water arising at the facility. The inlets to the surface water retention lagoon from the surface water swale and the facility roads shall be kept separate for the purposes of individual monitoring. Isolation valves shall be maintained on these inlets in order to stop inflow where necessary. A reed bed treatment system shall be installed and

maintained at the outlet of the surface water retention lagoon following consultation with the Western Regional Fisheries Board.

B.3 Summary of residents concerns

The residents have summarised the submission that they made on the application and the main points are outlined below:

- *The granting of a licence is premature as planning permission is currently before An Bord Pleanála,*
- *Galway County Council erred in law in granting planning permission as in law and under the terms of the Connaught Waste Management Plan they are the only authorised body charged with the development of such facilities,*
- *Greenstar were not involved in the development of the plan and their development is not in accordance with the Irish Government Policy and EU Waste and Environmental Directives,*
- *Greenstar's site selection process was not in accordance with that defined by Galway County Council and its Consultants which themselves short listed three preferred sites, Kilrickle, Newbridge and Cross, New Inn,*
- *The development is contrary to the policy objectives of the Connaught Waste Management Plan and Greenstar failed to establish the need for the development in the context of the plan. The development is premature and the least desirable element of the waste hierarchy.*
- *Galway County Council has now named the preferred site, for the development of a landfill at Cross, New Inn, and they have advertised for applications to develop and operate the new landfill on a public private partnership basis. The Connaught Waste Management plan allows for only one regional landfill.*
- *The absence of a recognised site selection process*
- *The geological unsuitability of the site due to the presence of major faults traversing the site,*
- *The hydro-geological unsuitability of the site and the risk to groundwater and the shellfish industry.*
- *The location of the site on a regionally important aquifer, an EU law exclusionary factor,*
- *The absence of adequate information on the availability, adequacy and proximity of a sewage treatment plant,*
- *The proximity of housing and their resulting devaluation,*
- *The inadequacy of the EIS submitted and the omissions of protected species from it,*
- *The ecological importance of the site and the wide variety of protected flora and fauna,*
- *The inadequacy of the road structure resulting in increased risk to residents and children,*
- *The impact on local residents as a result of increased noise, disturbance and vermin.*

Submission on the objection

The submission by the applicant deals with the points raised above:

- The waste licence process is separate from the planning process;
- Private sector involvement in waste management is government policy
- The site selection process was detailed in the EIS and subsequent information was lodged to Galway CC and the EPA. The proposed development is not contrary to the plan for the Connaught Region.
- There is a shortage of landfill void space in the short to medium term in the Region.
- The proposed facility is not located on a regionally important aquifer
- Greenstar have three letters of agreement to accept leachate from WWTP operators
- Referencing an ABP Inspectors report the applicant concludes that there would be no long term disamenity or property devaluation in the area.
- The EIS did not omit any protected species and further details in relation to white clawed crayfish and otters were submitted with the conclusion that the landfill will not impact on the food sources of the otter
- Roads, traffic and environmental nuisances; no significant impact particularly in light of mitigation measures incorporated into the facility design.

Technical Committee Comment:

The issues and reports raised above were dealt with during the assessment of the application by the Inspector and are referenced in the Inspectors Report. The reports referred to in the objection (O’Neill Groundwater Engineering and Kevil O’Sullivan) were not received as objections but were part of a submission received in December 2003 and assessed during the application process.

Many of the issues raised are relevant to the application for Planning Permission. Having reviewed the issues and reports the TC do not recommend any further amendment to the PD.

Recommendation: No Change

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

Marie O’Connor

For and on behalf of the Technical Committee