

# OFFICE OF LICENSING & GUIDANCE

# REPORT OF THE TECHNICAL COMMITTEE ON OBJECTIONS TO LICENCE CONDITIONS

TO: Directors

FROM: Technical Committee LICENSING UNIT

**DATE**: 24 May 2004

**RE:** Greenstar Recycling Holdings Ltd., Reg 168-1

Application Details		
Principal Class of activity:	Class 5 Third Schedule WMA Act 1996 – Specially engineered landfill, deposit of non-hazardous commercial, industrial and residual municipal waste.	
Location of activity:	Usk Residual Landfill, Usk, Kilcullen, Co. Kildare	
Licence application received:		
PD issued:	03 October 2003	
First party Objection received:	28 October 2003	
Third Party Objection received	30 October 2003	
Submission on Objections:	04 February 2004	

#### **Company**

Greenstar Recycling Holdings Ltd. proposes to develop an engineered landfill for the disposal of non-hazardous commercial, industrial and residual household waste. The site is currently owned and operated as a sand and gravel quarry by Kilsaran Concrete Ltd. The quarry will continue in operation during the development of the landfill but will cease operation prior to the commencement of waste acceptance. Greenstar Recycling Holdings Ltd. have indicated that they intend to purchase the site.

The overall site area is 19.3 hectares with the proposed landfill footprint occupying 12.5 hectares. There are 31 residential properties within 500m of the facility.

#### **Consideration of the Objection**

The Technical Committee, comprising of Marie O'Connor and Maeve McHugh, 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 together with discussions with the inspector.

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

### **First Party Objection**

The applicant makes 10 points of objection and the submissions on the objection are dealt with in relation to each point raised.

#### 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 deposit of inert waste and non-hazardous commercial, industrial, and residual municipal waste onto land' as all other municipal/commercial and industrial landfills licensed by the Agency are covered under Class 1 for activities also covered under Class 5.

#### **Submission on Objection:**

The submission outlines that the description of the activity is set out in the legislation and cannot be changed. They also state that the description of Class 5 in the Act makes no reference to the types of waste which may be deposited in the type of landfill specified and therefore cannot be used to amend or extend Class 1. The submission also refers to the reference by the applicant to 'residual municipal waste' and submits that under the requirements of Directive 1999/31/EC on the landfill of waste only residual waste can be deposited in a landfill. The issue of the impact of the development of a large scale landfill at Timahoe in Co. Kildare is also raised in the context of the financial viability of this site.

#### **Technical Committee Comment:**

Class 1 in this instance refers to the deposit of inert waste in the area within the zone as specified in Condition 3.12 of the PD. Other waste cannot be deposited in this area and this should be clarified in the Schedule. The issue of residual waste is dealt with in the description of Class 5.

**Recommendation**: Amend Part I Activities licensed as follows:

Class 1 Deposit on, in or under land (including landfill)

This activity is limited to the deposit of inert waste onto land in the area referred to in Condition 3.12.1

#### **A.2. Condition 3.12.1**

The applicant requests that the first sentence of this condition be modified to 'The Licensee shall maintain a minimum distance of 100m between the non-hazardous landfill footprint and any occupied dwelling house. They state that the landfill does not require consideration of unoccupied houses.

#### **Submission on Objection:**

The submission refers to four reasons why the objection should be rejected:

- 1. House was to be come occupied again then it would be less than 100m from active landfill.
- 2. It could be taken that the unoccupied house could not become occupied during the lifetime of the landfill and this would interfere with the rights of the house owner.
- 3. The house owner cannot be prevented from re-occupying the house.
- 4. The buffer zone should be extended to at least 150m as in some other licenses issued by the Agency.

#### **Technical Committee Comment:**

The condition as written imposes a restriction on the licensee with regard to the use of on-site areas which are within 100m of a dwelling house. The TC consider (taking into account the legislation under Housing and Planning and Development Acts) that a dwelling house would not necessarily have to be occupied. The waste licence cannot prevent an individual from applying to build a house or occupy a vacant dwelling within this area. In the case of a landfill the footprint cannot be changed once the deposition of waste commences and therefore it would not be possible to comply with the condition of the licence should a new dwelling be built or an unoccupied dwelling renovated.

The TC recommend therefore that the condition should be reworded to reflect the situation with respect to the date of issue of the licence and impose the 100m zone in relation to any dwelling (occupied or unoccupied) which is located there.

**Recommendation**: Reword Condition 3.12.1

The amended wording is shown under objection B3 below.

#### **A.3. Condition 3.13.1(a)**

The applicant requests the removal of this condition as the draft aquifer map for Kildare prepared by the GSI shows the Usk site to be underlain by a poor bedrock aquifer and the site is clearly lying outside a nearby area which is underlain by a locally important gravel aquifer.

Further they outline that the site has acceptable hydrogeological conditions for the location of a landfill without the provision of additional geological layers in excess of the general requirements of the Landfill Directive.

#### **Submission on Objection:**

The submission outlines that the applicant cannot use the more generalised information in the GSI draft map to revise the original classification of the aquifer beneath the site. In addition they refer to a report submitted with their objection which confirms the importance of the aquifer and supports the original classification as a locally important aquifer. They submit that this should be a reason for refusal of a waste licence.

#### **Technical Committee Comment:**

The TC reviewed the County Kildare draft (Dec. 2002) Groundwater Protection Scheme (GPS) including the main report, groundwater vulnerability map and aquifer classification map for the area around the proposed landfill site. The aquifer

classification in the general area is Pu-Poor Aquifer generally unproductive. The vulnerability class however is inconclusive due to the scale of the maps etc. The applicant had disputed the vulnerability rating as Extreme however no supporting data was submitted as part of the application. In addition no further supporting data has been submitted with the objection. The TC accept that the GPS maps are not of a suitable scale to revise the site specific classification and as no further site specific information was submitted by the applicant the provisions of the condition should remain.

**Recommendation**: No Change

#### **A.4. Condition 3.13.3(c)**

The applicant requests the amendment of the condition to allow the licensee to demonstrate the equivalency of alternative drainage designs.

#### **Submission on Objection:**

The objector states that 'the expression "or equivalent as agreed with the Agency" is not sufficiently precise, and leads to uncertainty about the intentions of the applicant and the adequacy of any alternative drainage designs proposed'.

#### **Technical Committee Comment:**

The aim is the protection of the environment and if this can be achieved using an alternative design then the applicant shall be required to demonstrate this to the Agency.

**Recommendation**: Amend Condition 3.13.3(c) to read as follows:

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

#### **A.5. Condition 3.18.2 (b)**

The applicant considers that TOC monitoring of surface water is less important in the management of a landfill having a lower strength leachate owing to the non-acceptance of putrescible waste. The co-relation of electrical conductivity with COD is considered adequate for trigger/alarm purposes in this case. They ask that the condition is amended to replace TOC with temperature monitoring.

#### **Submission on Objection:**

Submission requests that the condition is unchanged and disagree with the use of electrical conductivity for detecting dissolved organic substances.

#### **Technical Committee Comment:**

The TC recommend that the requirement for TOC monitoring is maintained so as to provide for the protection of the surfacewater.

**Recommendation**: No Change

#### **A.6. Condition 3.20.1(a)**

The applicant requests that the requirement to install monitors for landfill gas on pathways to badger setts should be with the agreement of the landowners and requests that the condition is amended to reflect this.

#### **Submission on Objection:**

The submission states "The suggested amendment of Condition 3.20.1(a) is acceptable"

#### **Technical Committee Comment:**

Schedule D in the PD specifies that the monitoring is carried out at boundary locations but this can be clarified further by amending the wording as recommended below.

**Recommendation**: Amend Condition 3.20.1(a) to read as follows:

Prior to commencement of waste acceptance at the facility, the licensee shall install landfill gas migration monitoring points at the boundary locations shown on Figure 5.4 *Landfill Gas Layout Design* of the Environmental Impact Statement and on pathways to badger setts identified in the pNHA 1772 by the local Wildlife Ranger on or within the facility boundary.

Amend Schedule D, Table D.1.1 Monitoring locations as follows:

Note 4: Landfill Gas boundary monitoring stations as shown on Figure 5.4 *Landfill Gas Layout Design* of the Environmental Impact Statement and other locations as stipulated in Condition 3.20.1

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

The applicant requests the amendment of the condition in relation to Final Capping to allow the licensee to demonstrate the equivalency of alternative drainage designs.

#### **Submission on Objection:**

The objector states that 'the expression "or equivalent as agreed with the Agency" is not sufficiently precise, and leads to uncertainty about the intentions of the applicant and the adequacy of any alternative capping systems proposed'.

#### **Technical Committee Comment:**

Condition 4.3.1(d) allows the use of similar systems where it provides equivalent or better protection. This can be extended to Condition 4.3.1(c) to allow for alternative drainage systems with equivalent protection

**Recommendation**: Amend Condition 4.3.1(c) to read as follows:

Drainage layer of 0.5m thickness having a minimum hydraulic conductivity of  $1 \times 10^{-4}$  m/s or similar that provides equivalent or better protection;

#### **A.8. Condition 11.7.1**

The applicant requests the amendment of the condition regarding the submission of the AER so that it is required the year following commencement of waste activities.

#### **Submission on Objection:**

The submission considers that the first AER should be submitted within six months of commencement of waste related activities to give an early warning of any issues and problems.

#### **Technical Committee Comment:**

This condition can be reworded to clarify the Agency requirements regarding submission of reports.

**Recommendation**: Amend Condition 11.7.1 to read as follows:

For each full calendar year from the date of commencement of waste activities, the licensee shall submit to the Agency, by the 31<sup>st</sup> March of the following year, an AER which shall be to the satisfaction of the Agency. In addition, the first AER report shall, separately from the calendar year report, include a report covering the period from the date of grant of the licence to the 31<sup>st</sup> December of the same year.

#### **A.9. Condition 12.3.1**

The applicant requests that 'so as to allow for the protection of information of a commercially sensitive nature the applicant requests that the statement of the determination of charges is submitted under separate cover and not with the AER'.

#### **Submission on Objection:**

The submission refers to the Waste Management (Licensing) Regulations 2000 and amendments which require the submission of a statement in respect of the determination of charges. They also state that the applicant has made no case for commercial confidentiality.

#### **Technical Committee Comment:**

This is a standard requirement of waste licenses to fulfil the requirements of the Landfill Directive and Waste Management Licensing Regulations. The information should be available as part of the AER.

**Recommendation**: No Change

#### A.10. Schedule A: A2 Waste Acceptance

The applicant requests that the requirement to receive prior agreement from the Agency for the disposal of separately collected fractions of municipal waste is removed. They consider that the acceptance of source segregated, non recyclable non-putrescible commercial waste, complying with the treatment requirements of the Landfill Directive could be accepted at the site under the terms of waste acceptance procedures described in C.5.3.1. and agreed with the Agency.

#### **Submission on Objection:**

The submission states that it was the understanding of the objectors that "separately collected fractions of municipal waste (presumably source segregated) would be collected by the licensee for the purpose of recycling, composting ... and should not be placed in a landfill".

#### **Technical Committee Comment:**

The PD requires the prior agreement of the Agency for the disposal of separately collected fractions of municipal waste. It is considered that this should remain to ensure that the requirements of the Landfill directive are met.

**Recommendation**: No Change

## **Third Party Objections**

#### B. Objection – Usk and District Residents Association Ltd.

Environmental Management Services Ltd. submitted an objection on behalf of Usk and District Residents Association Ltd. It consists of 6 sections and two Appendices

There were no submissions on this objection.

#### B.1 Sections 1,2,3 and 4 of the Objection

Sections 1,2 and 3 of the objection are general background information in relation to the application. Section 4 deals with the Principal grounds for the objection and the subsections are specified below:

- Conflict with the provisions of the Kildare County Development Plan, 1999
- European Community Environment Action Programme, 2001-2010

- National Policy on Waste Management
- Waste minimisation activities in other countries
- Failure to provide information on supplying residual waste to the proposed landfill
- Groundwater
- Proximity of the Usk Marshes pNHA, and likely damage to flora and fauna
- Density and proximity of housing
- Potentially detrimental effects on human health
- Devaluation of properties in the vicinity of the proposed development
- Unsuitability of the access road network and adverse impacts of landfill related traffic

#### **Technical Committee Comment:**

No specific condition was referred to in the comments above and it was agreed by the TC that those issues which were relevant in relation to the consideration of the objection were either adequately addressed in the preparation of the PD or were addressed below as objections to specific conditions of the PD.

**Recommendation**: No Change

The points raised in Section 5 will be dealt with below:

#### B.2 Condition 1.5.2 and Condition 1.5.4

The objectors state that Condition 1.5.2 is unenforceable given the difficulty of separating hazardous wastes, liquid wastes, sludges (other than treated industrial sludges with greater than 25% dry matter), vegetable matter wastes, food wastes and green waste from the large volume of waste streams to be accepted at the proposed facility. They also state that it seems that the licensee has no means of ensuring separation of these wastes at source.

In relation to Condition 1.5.4 they state that it may not be technically feasible to treat inert waste. In addition they state that it is not based on any detailed information from the licensee or any guideline or conditions guaranteeing the degree of treatment so as to ensure that that the material does not cause nuisance or noxious odours locally.

#### **Technical Committee Comment:**

Condition 1.5.2 prohibits the acceptance of certain named wastes into the facility. Condition 1.5.4 requires that only treated waste shall be accepted at the facility. The procedures for the acceptance of waste are required to be agreed with the Agency (Condition 5.3.1) and these must include details of the pre-treatment of all waste prior

to acceptance at the facility, the methods for the characterisation of the waste and the maintenance of a register of all the wastes. Condition 7 and in particular Condition 7.8 provides for the identification and minimisation of nuisances from odour.

**Recommendation**: No Change

#### B.3 Condition 3.12.1 and Condition 5.7.1

The conditions allow for the deposition of inert waste within the 100m buffer zone. The objectors request that no waste should be deposited within the buffer zone otherwise it ceases to be a buffer zone as understood by the normal meaning of the term.

#### **Technical Committee Comment:**

This condition was also objected to by the applicant (objection A2 above). The 100m zone referred to in Condition 3.12.1 is the distance from the dwelling house to the non-hazardous landfill footprint. Within this 100m zone the applicant is permitted to deposit inert waste between the quarry face and the non-hazardous landfill liner. The TC agree that the use of the term 'buffer zone' may be misleading in this context and recommend that the condition is amended.

**Recommendation**: Reword Condition 3.12 to read as follows:

Landfill Area

Reword Condition 3.12.1 to read as follows:

The licensee shall maintain a minimum distance of 100 metres between the non-hazardous landfill footprint and any dwelling house (occupied or unoccupied) present at date of issue of licence. Waste deposition within the 100m zone, between the quarry face and the non-hazardous landfill liner, will be restricted to inert waste.

#### **B.4 Condition 3.13.1**

The objectors requests that the requirements in relation to the landfill base is applied across the entire footprint of the site. They also request that Conditions 3.13.2 and 3.13.3 should be applied in full and not weakened or reduced in any way.

#### **Technical Committee Comment:**

The requirements with respect to the landfill base apply to the area to be used for the inert waste and this is clarified in Condition 3.13.2. However, for further clarity Condition 3.13.1 may be amended as outlined below.

**Recommendation**: Reword 1<sup>st</sup> line of Condition 3.13.1 as follows:

The landfill base for all waste deposition areas shall comprise of, as a minimum,:-

#### **B.5 Condition 3.14.1**

The objectors consider that the condition should specify the treatment plant to which leachate would be taken by road tanker. The issue is addressed in Condition 5.9.5.

#### **Technical Committee Comment:**

As stated by the objectors the issue of leachate treatment is dealt with in Condition 5.9.5 where prior to acceptance of waste at the facility a report must be submitted to the Agency for agreement regarding the proposed treatment of the leachate. The licensee must either provide an on-site leachate treatment plant or have it tankered off-site. Given that leachate will not be generated until after deposit in the landfill and that considerable infrastructural works are required to be completed prior to this it is acceptable that this is addressed as part of the enforcement of the licence.

**Recommendation**: No Change

#### **B.6 Condition 3.16.1**

The objectors consider that the condition is inadequate in that it does not detail how the licensee must respond to an escape of contaminated surface water, especially as they state that the quantity of surface water to be dealt with is very likely to be greater than that estimated by the applicant.

#### **Technical Committee Comment:**

Condition 3.16.1 (b) states that the ponds shall have an inlet isolation mechanism should contamination be detected. To provide for further protection of the environment in the event that contamination is detected and the surface water ponds are used as containment the pond should be fitted with an outlet isolation mechanism to prevent contaminated surface water being discharged.

#### **Recommendation**: Amend Condition 3.16.1(b) to read as follows:

The surface water ponds shall be capable of dealing with all surfacewater run-off arising at the facility and will allow controlled soakaway to groundwater. The ponds shall have an inlet and outlet isolation mechanism and suitable settlement chambers installed immediately upstream. Collected solids from the settlement chambers which are not contaminated may be disposed of at the landfill;

#### **B.7 Condition 3.17.1**

The objectors refer to their attached report by consultants Komex which suggests that contamination of groundwater by leachate may be a potentially significant hazard.

#### **Technical Committee Comment:**

The PD deals in many conditions with the protection of groundwater from the type of wastes that can be accepted to the type of liner used and the surface/ground water protection measures to be implemented. These are in accordance with the

requirements of the Landfill Directive and have been assessed to be adequate for the protection of the environment in this situation.

**Recommendation**: No Change

#### **B.8 Condition 5.3**

The objectors requests that the waste acceptance and characterisation procedures must be very strictly enforced and the Agency must make unannounced visits and inspections at relatively frequent intervals to check on the types and characteristics of the wastes being deposited.

#### **Technical Committee Comment:**

The Office of Environmental Enforcement carry out announced and unannounced inspections, audits and visits on licensed facilities where compliance with all the conditions of the licence are checked.

**Recommendation**: No Change

#### **B.9 Condition 5.4.1 and 5.4.2**

The objectors consider that the condition regarding the covering the 'working faces' is weak as Condition 5.4.1 states that 'only one working face shall exist at the landfill at any one time.' In addition the reference to 'suitable material' is weak and vague as it allows the licensee to use material which may not be adequate to prevent wind blown litter, odours or flies to escape from the waste mass.

#### **Technical Committee Comment:**

Condition 5.4.1 allows for more than one working face with the prior agreement of the Agency hence the reference to 'faces' in Condition 5.4.3. There may be occasions when it may be necessary to have more than one working face temporarily however the agreement of the Agency is required to ensure that this is kept to a minimum. There are other conditions in the licence and in particular Condition 7 that provides for the minimisation of nuisances in relation to litter, odours and flies.

**Recommendation**: No Change

#### **B.10** Adequate lighting

The objectors wish to point out that the lighting could provide a significant source of light pollution which would be unacceptable in a rural area.

#### **Technical Committee Comment:**

The objector refers to Condition 5.4.2 however lighting is dealt with in Condition 5.7.8 and the TC took this to be a typographical error. The hours of operation of the facility are specified in Condition 1.6 and are as limited to a maximum of 0800 – 1900. It is not considered that adequate lighting of the facility during these times would constitute light pollution.

**Recommendation**: No Change

#### **B.11 Condition 8.9.1**

The objectors consider that the proposed ecological survey as described in Attachment F2 of the licence is inadequate and that the Agency should strengthen the condition to take into account the issues raised in a report they have submitted (Ms. Anne Behan) and should be the subject of discussion among experts familiar in the area, as well as with Duchas, before being agreed by the Agency.

#### **Technical Committee Comment:**

The applicant had proposed in Attachment F2 that ecological monitoring would be carried out on a biannual basis at the perimeters of the landfill and within the adjacent Dunlavin Marshes. The TC consider that it would be important to set out a more detailed scope for the monitoring and that a proposal for the scope of the monitoring should be submitted for the Agencies agreement.

**Recommendation**: Reword Condition 8.9.1 to read as follows:

The licensee shall submit to the Agency for agreement a proposal for ecological monitoring on a biannual basis, within three months of the date of grant of this licence. The scope of the monitoring shall as a minimum consist of monitoring of groundwater levels, flora and faunal surveys at the perimeters of the landfill site and adjacent areas identified following consultation with The Heritage and Planning Division of the Department of the Environment, Heritage and Local Government. The first survey shall be undertaken during the first year after the issue of licence.

#### **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'Cor	nnor		
for and on be	ehalf of the T	Technical Con	mmittee