

Objection to PD WL 0146-02 by Greenstar

Obj (2) App  
+  
Hiley

**Greenstar Holdings Ltd., Knockharley Landfill, Knockharley, Navan, County Meath**

**Objection by Licensee Greenstar**

Contact name: Margaret Heavey, Greenstar, Fassaroe, Bray, Co. Wicklow

**Introduction**

Greenstar hereby objects to the PD WL 0146 02 for the Knockharley Residual Landfill for the reasons outlined hereunder. An Oral Hearing is requested to discuss this objection and a payment of €600 accompanies this appeal. The conditions appealed, together with proposed alternative wording, are described as follows:

**Appealed Conditions**

***Interpretation***

**Existing Wording:**

None

**Proposed Wording:**

*Asbestos Waste: Construction Materials Containing Asbestos deemed to meet the criteria of a stable non-reactive hazardous waste suitable for disposal in a non-hazardous landfill, in accordance with Section 2.3.3 of the Annex to the Council Decision 2003/22/EC.*

**Reason for Appeal:**

To update the "Interpretation" section of the waste licence to include a suitable definition of the construction materials containing asbestos proposed for disposal at Knockharley Landfill.

***Asbestos (Stabilised Non-Reactive)***

**Existing Wording:**

None

**Proposed Wording:**

"Asbestos Waste

- a) Asbestos waste to be disposed of at the facility shall comply with the requirements of Article 6(c)(iii) of the Landfill Directive (1999/31/EC) and be accepted and managed in accordance with the procedures laid down in Section 2.3.3 of the Annex to Council Directive 2003/33/EC.
- b) Asbestos waste must be double wrapped in heavy gauge plastic, which is clearly labelled to indicate the presence of asbestos.

## Objection to PD WL 0146-02 by Greenstar

- c) Disposal of asbestos waste shall be into prepared bays or trenches of at least 2 metres in depth.
- d) Deposited asbestos waste shall be covered immediately with at least 250mm of suitable material. At the end of the day, the waste shall be covered with a minimum of 500mm of suitable material.
- e) No asbestos waste shall be present within 2.5 metres of the final surface levels.

### **Reason for Appeal:**

The proposal for asbestos acceptance is in accordance with the licence application currently with the Agency and submitted by Greenstar in December 2008.

The closure of KTK landfill in October 2008 means that there are now no suitable disposal facilities for asbestos in Ireland resulting in increased fly-tipping of the material and costly export for disposal abroad which is in contrast to national waste policy and the proximity principle. Knockharley could provide a much needed outlet for at least some of the current asbestos waste arisings in Ireland.

Greenstar's KTK landfill has successfully accepted asbestos waste for disposal for a number of years with numerous EPA audits confirming complete compliance with the licence conditions. It is proposed that identical working procedures to those successfully employed at the KTK landfill would be adopted at Ballynagran.

### ***Condition 1.5***

#### **Existing Wording:**

*"No hazardous waste or liquid wastes shall be disposed of at the facility"*

#### **Proposed Wording:**

*"No hazardous wastes (with the exception of hazardous waste suitable for disposal in non-hazardous landfills in accordance with Article 6(c)(iii) of Council Directive 199/33/EC), or liquid wastes shall be disposed of at the facility."*

### **Reason for Appeal:**

To facilitate the acceptance and disposal of construction wastes containing asbestos at the facility.

### ***Condition 1.6***

#### **Existing Wording:**

*Waste Treatment*

*Only waste that has been subject to treatment shall be accepted for disposal at the landfill facility.*

- (i) *Treatment shall reflect published EPA technical guidance as set out in Municipal Solid waste – Pre-treatment and Residuals Management, EPA, 2009.*

Objection to PD WL 0146-02 by Greenstar

- (ii) *With the agreement of the Agency, this condition shall not apply to:*
- *inert wastes for which treatment is not technically feasible;*
  - *other waste for which such treatment does not contribute to the objectives of the Landfill Directive as set out in Article 1 of the Directive by reducing the quantity of the waste or the hazards to human health or the environment.*

**Proposed Wording:**

(i) *Treatment shall reflect published EPA technical guidance as set out in Municipal Solid Waste - Pre-treatment and Residuals Management, EPA, 2009 and the EU Directive on the landfilling of waste.*

**Reason for Change:**

To comply with EU law.

**Condition 1.13.1**

**Existing Wording:**

*Unless otherwise as may be specified by the Agency, the following limits shall apply:*

- (i) *From 1 July 2010 to 30 June 2013 inclusive, a maximum of 40% by weight of municipal solid waste (MSW) accepted for disposal to the body of the landfill shall comprise biodegradable municipal waste (BMW), measured on a calendar year basis or, in 2010 and 2013, part thereof,*
- (ii) *From 1 July 2013 to 30 June 2016 inclusive, a maximum of 24% by weight of MSW accepted for disposal to the body of the landfill shall comprise BMW, measured on a calendar year basis or, in 2013 and 2016, part thereof, and*
- (iii) *From 1 July 2016, a maximum of 15% by weight of MSW accepted for disposal to the body of the landfill shall comprise BMW, measured on a calendar year basis or, in 2016, part thereof,*

*unless an alternative has been agreed in writing by the Agency in accordance with condition 1.13.2.*

**Proposed Wording:**

- (i) *From 1 July 2010 to 30 June 2013 inclusive, a limit, to be agreed with the Agency, of municipal solid waste (MSW) accepted to the body of the landfill shall comprise biodegradable municipal waste (BMW), measured on a calendar year basis or, in 2010 and 2013, part thereof,*
- (ii) *From 1 July 2013 to 30 June 2016 inclusive, a limit, to be agreed with the Agency, of MSW accepted to the body of the landfill shall comprise BMW, measured on a calendar year basis or, in 2013 and 2016, part thereof, and*
- (iii) *From 1 July 2016, a limit, to be agreed with the Agency, of MSW accepted to the body of the landfill shall comprise BMW, measured on a calendar year basis or, in 2016, part thereof, unless an alternative has been agreed in writing by the Agency in accordance with condition 1.13.2.*

## Objection to PD WL 0146-02 by Greenstar

### **Reason for Change:**

The term 'for disposal' should be removed from the wording of this condition as it is contrary to the Landfill Directive (Council Directive 1999/31/EC) which refers only to biodegradable waste 'going to' landfill.

At the EPA Waste Workshop held in the Hodson Bay Hotel in Athlone on 21<sup>st</sup> and 22<sup>nd</sup> October 2009, Dr Jonathan Derham confirmed that the percentages used in this condition are now significantly out of date. He presented a completely new set of percentages to the invited audience of licensees. The difference between the scale of infrastructure and investment required in this PD wording, and that which would be required if the percentages used by Dr Derham were to be used is a very significant 50%. To use the current percentages, knowing they are flawed, would in itself be a flaw. To avoid this, and to allow BMW diversion through upper hierarchy means with lower carbon footprint, i.e. recycling, the Agency should use a wording which does not specify BMW accepted as a percentage of landfilled MSW; we contend that to express biowaste diversion from landfill as a percentage of landfilled MSW will lead to a discouragement of recycling of both biodegradable and non-biodegradable waste. The focus should be on increasing the absolute level of biodegradable waste diversion. The Agency could limit the amount of non-processed waste delivered directly to landfill and thereby put the onus on the waste collectors to either invest in biowaste treatment or ensure they dispose of their waste through a MRF which can divert biowaste from landfill.

It is of concern both in terms of environmental risk and anti-competitiveness, that the Agency has not sought to attach conditions restricting BMW intake in all landfill licences currently accepting or licensed to accept MSW.

### **Condition 1.13.2**

#### **Existing Wording:**

*Two or more licensed landfills may seek the agreement of the Agency that collectively they will arrange to comply with condition 1.13.1. Such agreement may be sought by review of the landfill licence for any facility seeking an increase in the limits set out in condition 1.13.1, and by technical amendment of any licence for a facility seeking a decrease. Such agreement will be contingent on the net combined acceptance of biodegradable municipal waste at the participating facilities remaining unchanged.*

#### **Proposed Wording:**

Two or more licensed facilities may seek the agreement of the Agency that collectively they will arrange to comply with condition 1.13.1. Such agreement may be sought by technical amendment of any licence for a facility seeking a decrease. Such agreement will be contingent on the net combined acceptance of biodegradable municipal waste at the participating facilities remaining unchanged.

#### **Reason for Change:**

The condition shouldn't just be open to landfills. As outlined in our objection to 1.13.1, increased BMW diversion through recycling at a MRF upstream of the landfill should be the Agency's focus and the conditions imposed on the landfill operator should reflect upstream recycling and landfill diversion. Not to allow this would place the expansion of recycling at a disadvantage compared to the expansion of bio-stabilisation technology.

## Objection to PD WL 0146-02 by Greenstar

There is no need for a time consuming and costly full licence review of a waste licence unless overall tonnage is to be increased.

### **Condition 1.14.1**

#### **Existing Wording:**

*The licensee shall determine the biodegradable municipal waste content of MSW accepted for disposal to the body of the landfill. Waste that has been bio-stabilised in accordance with condition 1.14.4 shall not be considered BMW.*

#### **Proposed Wording:**

*When testing protocols have been agreed to the satisfaction of the Agency, the licensee shall determine the biodegradable municipal waste content of MSW accepted for disposal to the body of the landfill. Waste that has been bio-stabilised in accordance with condition 1.14.4 shall not be considered BMW.*

#### **Reason for Change:**

It is premature to obligate the testing of BMW in advance of the establishment of agreed protocols.

### **Condition 1.14.2**

#### **Existing Wording:**

*Bio-stabilised residual wastes meeting the requirements of*

- Condition 1.14.4, or
- an alternative protocol as may be agreed with the Agency based on biological treatment process parameters (e.g. validated residence time and temperature parameters at the treatment facility),

*received at the landfill facility may be included in the determination of MSW quantities accepted at the facility for the purposes of Condition 1.13.1.*

#### **Proposed Wording:**

*Bio-stabilised residual wastes meeting the requirements of*

- Condition 1.14.4, or
- an alternative protocol as may be agreed with the Agency based on biological or chemical treatment process parameters (e.g. validated residence time and temperature parameters at the treatment facility), received at the landfill facility may be included in the determination of MSW quantities accepted at the facility for the purposes of Condition 1.13.1.

#### **Reason for Change:**

To allow access to a greater range of available and emerging tests.

Objection to PD WL 0146-02 by Greenstar

**Condition 1.14.3**

**Existing Wording:**

*In determining BMW content, the licensee shall use approved calculation factors for BMW content of municipal waste streams published by the EPA. With the agreement of the EPA, alternative factors can be used if they have been determined following waste characterisation carried out in accordance with EPA-approved characterisation protocols including, where appropriate, the use of EPA-approved contractors.*

**Proposed Wording:**

*In determining BMW content, the licensee shall use approved calculation factors for BMW content of municipal waste streams published by the EPA. With the agreement of the EPA, alternative factors can be used if they have been determined following waste characterisation carried out in accordance with EPA-approved characterisation protocols.*

**Reason for Change:**

Independent third party consultants used by licensees should not have to be selected from EPA 'approval lists'. This could be considered to be anti-competitive.

**Condition 1.14.4**

**Existing Wording:**

*In the case of bio-stabilised residual wastes, stabilisation means the reduction of the decomposition properties of the waste to such an extent that offensive odours are minimised and that the respiration activity after four days is <10mg O<sub>2</sub>/g DM until 1 January 2016 and <7mg O<sub>2</sub>/g DM thereafter.*

**Proposed Wording:**

*In the case of bio-stabilised residual wastes, stabilisation means the reduction of the decomposition properties of the waste to such an extent that offensive odours are minimised and that the respiration activity after four days is <10mg O<sub>2</sub>/g DM.*

**Reason for Change:**

The added limitation post 2015 is excessive and has a detrimental effect on the bankability of biostabilisation technology, probably preventing its construction. The limit itself gives very little extra benefit for the costs involved.

**Condition 1.16**

**Existing Wording:**

*Bio-stabilised residual waste shall only be used as landfill cover where it has been stabilised in accordance with Condition 1.14.4 (or meets the requirements of an alternative protocol as may be agreed under condition 1.14.2), and complies with any requirements of the*

Objection to PD WL 0146-02 by Greenstar

*Department of Agriculture, Fisheries and Food relating to the management of animal by-products and has been agreed in advance with the Agency.*

**Proposed Wording:**

*Bio-stabilised residual waste shall only be used as landfill cover where it has been stabilised in accordance with Condition 1.14.4 (or meets the requirements of an alternative protocol as may be agreed under condition 1.14.2) and has been agreed in advance with the Agency.*

**Reason for Change:**

There is full suite of conditions already existing in the waste licence which collectively meet the requirements of the Department of Agriculture to ensure that farm animals or food chain does not come in contact with waste.

**Condition 2.5.1**

**Existing Wording**

*The licensee shall carry out an audit of the energy efficiency of the site within one year of the date of grant of this licence. The audit shall:-*

- (i) identify all opportunities for energy use reduction and efficiency;*
- (ii) be carried out in accordance with the guidance published by the Agency- "Guidance Note on Energy Efficiency Auditing"; and*
- (iii) be repeated at intervals as required by the Agency*

*The recommendations of the audit will be incorporated into the Schedule of Environmental Objectives and Targets under Condition 2.3.2.1 above.*

**Proposed Wording:**

*The licensee shall undertake an audit of the energy efficiency of the site at intervals as required by the Agency. The audit shall:-*

- (i) identify all opportunities for energy use reduction and efficiency;*
- (ii) be carried out in accordance with the guidance published by the Agency- "Guidance Note on Energy Efficiency Auditing"*

*The recommendations of the audit will be incorporated into the Schedule of Environmental Objectives and Targets under Condition 2.3.2.1 above.*

**Reason for Appeal:**

Knockharley Landfill has previously submitted an energy audit to the Agency as per Amendment A to Waste Licence 146-01.

**Condition 6.11**

**Existing Wording:**

## Objection to PD WL 0146-02 by Greenstar

*"The licensee shall install a continuous VOC monitor with directional information at the school (if agreed) otherwise at a location on a site agreed with the Agency. This requirement will be reviewed by the Agency on an annual basis."*

### **Proposed Wording:**

Remove condition

### **Reason for Appeal:**

Despite numerous attempts by Greenstar (between October 2005 – May 2007) both verbal and written, to agree a location for the installation of a continuous VOC monitor at the school, we have been unable to obtain a confirmed location for this installation from the school board. Furthermore, Greenstar suggests that the installation of a VOC monitor at a location approximately 1km from the landfill would be subject to interference from a number of VOC sources (including both farm and road traffic) that its usefulness would be questionable and hence any results obtained would be unreliable. It is therefore proposed that this condition is removed from the licence.

### **Condition 7.1**

### **Existing Wording:**

*"The licensee shall ensure that vermin, birds, flies, mud, dust, litter and odours do not give rise to nuisance at the facility. Any method used by the licensee to control any such nuisance shall not cause environmental pollution."*

### **Proposed Wording:**

*"Emissions from the activities shall be free from odour at levels likely to cause significant odour annoyance outside the site, as perceived by an authorised officer of the Agency, unless the operator has used appropriate measures agreed with the Agency under condition 7.8 to prevent or to minimise the odour to the lowest level possible using BAT."*

*The licensee shall ensure that birds, vermin, dust, mud and flies do not cause pollution and are managed in accordance with the requirements of this waste licence."*

### **Reason for Change:**

The suggested wording in relation to odour is based on that used by the Environment Agency (England and Wales) in the licensing of waste facilities. The wording obliges the operator to keep the facility free from odour annoyance or to prevent odour as much as is practicable using Best Available Techniques.

### **Proposed accompanying change to Glossary of Definitions**

Odour Annoyance: The factors which determine odour annoyance, known as the FIDOL factors, are summarised as follows:

- Frequency of exposure
- Intensity of exposure
- Duration of exposure



Objection to PD WL 0146-02 by Greenstar

- Offensiveness/Character of odours
- Location of exposure

Proposed changes to Schedule D of this waste licence intend to substantially increase the monitoring obligation of licensees in a manner that allows the application of the FIDOL principles in the scientific determination of odour annoyance using methodologies accepted as BAT in other European Countries and which are currently the subject of draft CEN guidance.

*Schedule D, Table D.10, Ambient Odour Monitoring*

**Existing Wording:**

Parameter	Frequency	Method
Odour	Monthly	As agreed with the Agency

**Proposed Wording:**

Parameter	Frequency	Method
Odour	Bi-Annually <i>Note 1</i>	<i>Note 2</i>

*Note 1: Monitoring to commence within six months of the commencement of disposal of waste and thereafter on a bi-annual basis.*

*Note 2: Monitoring shall be carried out using a method described in the Draft CEN Standard CEN/TC264/WG2 or any replacement standard, to the agreement of the Agency.*

**Reason for Change:**

To ensure that the methodology for assessing ambient odour is based on Best International Practice and Best Available Techniques

**Condition 7.8**

**Existing Wording:**

None

**Proposed Wording:**

*Odour Control*

7.8.1 *The licensee shall, not later than six months after the implementation of this condition undertake an independent odour assessment and prepare an odour management plan. The odour assessment shall include but is not limited to the identification and quantification of any significant odour sources, an assessment of the suitability and adequacy of the control system(s) for preventing or minimising impact on sensitive receptors. The Odour Management Plan shall include measures and a timescale for the implementation of recommendations from the Odour Assessment. These proposals shall include VOC surface emissions surveys with trigger levels for target values subject to approval with the Agency.*

7.8.2 *The licensee shall, within three months of the date of grant of this waste licence, submit a programme and plan to the Agency for its agreement for the monitoring and assessment of odours arising from the facility, including the odour monitoring specified in Schedule D of this waste licence.*

Objection to PD WL 0146-02 by Greenstar

**Reason for Insertion:**

This condition is based on the wording of conditions 6.10, 6.11 and 8.14 of W0146-01 (Knockharley). In addition it provides for the monitoring of VOC surface emissions monitoring measures to ensure as much as practicably possible that fugitive VOCs are being captured thus reducing potential for odour nuisance.

***Condition 11.10***

**Existing Wording:**

*The Licensee shall report to the Agency such data and records, and at such frequency, as may be specified by the Agency in order to demonstrate compliance with the requirements of Condition 1.13.1. From 1 January 20 10, and unless otherwise advised by the Agency, the licensee shall submit quarterly summary reports to the Agency within one week of the end of each quarter on the quantity of MSW and BMW accepted at the landfill during the preceding quarter and on a cumulative basis for the calendar year to date. The report shall detail the tonnage of MSW and BMW accepted and the basis (including all calculation factors) on which the figures have been calculated.*

**Proposed Wording:**

*From 1 January 20 10, and unless otherwise advised by the Agency, the licensee shall submit quarterly summary reports to the Agency within ten days of the end of each quarter on the quantity of MSW and BMW accepted at the landfill during the preceding quarter. The report shall detail the tonnage of MSW and BMW accepted and the basis (including all calculation factors) on which the figures have been calculated.*

**Reason for Change:**

The condition as worded is excessively onerous and out of line with existing quarterly reporting requirements.

***D.9: Waste Monitoring***

**Existing Wording:**

Waste Class	Frequency	Parameter	Method
Bio-stabilised residual waste	Every 200 tonnes from each source <sup>note 1</sup>	Respiration activity after 4 days	To be agreed by the Agency

*Note 1: Frequency can be reduced if an alternative protocol is agreed by the Agency under condition 1.8.2.*

**Proposed Wording:**

The monitoring should be at a frequency to be agreed with the Agency.

**Reason for Change:**

This is an overly excessive frequency with no apparent basis in published research and would cause significant Health and Safety risk at MRFs through the excessive extra machine movements demanded by the high number of waste characterisations needed prior to the preparation of samples for analysis. It is not yet clear as to how the responsibility for carrying

Objection to PD WL 0146-02 by Greenstar

out this rate of testing is to be transferred to the MRFs. It would also impose testing and reporting costs of more than €200,000 per annum on customers of this one landfill. It is noted that Mr. Jim Moriarty confirmed at the EPA Waste Workshop held in the Hodson Bay Hotel, Athlone, on the 21<sup>st</sup> and 22<sup>nd</sup> October 2009, that the Agency itself would cover the full cost of testing for each landfill for the first year.

*For inspection purposes only.  
Consent of copyright owner required for any other use.*

For inspection purposes only.  
Consent of copyright owner required for any other use.

**Ann Kehoe**

---

**From:** Licensing Staff  
**Sent:** 16 November 2009 15:42  
**To:** margaret.heavey@greenstar.ie  
**Cc:** Licensing Staff  
**Subject:** Successful Objection Payment for Licence Number W0146-02. (Reference Number: W0146-02-091116034122)

Thank you for your online Applicant Objection and Oral Hearing for licence number W0146-02. Your objection has been received by the Environmental Protection Agency and will be acknowledged once the Objection has been validated.

A fee of €600 will be debited from your credit card once the objection has been confirmed.

Your reference number is W0146-02-091116034122. Please retain this for future reference.

Regards,

Environmental Protection Agency

*For inspection purposes only.  
Consent of copyright owner required for any other use.*

For inspection purposes only.  
Consent of copyright owner required for any other use.

## Ann Kehoe

**From:** Margaret Heavey [margaret.heavey@greenstar.ie]  
**Sent:** 16 November 2009 15:41  
**To:** Licensing Staff  
**Subject:** New Applicant objection entered for Reg no: W0146-02. (Reference Number: W0146-02-091116034122)  
**Importance:** High  
**Attachments:** W0146-02 - Knockharley Licence Objection.pdf

**Title:** Ms  
**First Name:** Margaret  
**SurName:** Heavey  
**Organisation Name:** Greenstar  
**Address Line 1:** Fassaroe  
**Address Line 2:** Bray  
**Address Line 3:**  
**County:** Wicklow  
**Post Code:** 0000  
**Phone Number:**  
**Email:** margaret.heavey@greenstar.ie  
**Objector Type:** Applicant  
**Oral Hearing:** Yes

*For inspection purposes only.  
Consent of copyright owner required for any other use.*

For inspection purposes only.  
Consent of copyright owner required for any other use.



## Ann Kehoe

---

**From:** Ann Kehoe  
**Sent:** 16 November 2009 16:14  
**To:** Accounts Receivable  
**Subject:** FW: Successful Objection Payment for Licence Number W0146-02. (Reference Number: W0146-02-091116034122)

please process online obj fee received below

Regards  
Ann

---

**From:** Licensing Staff  
**Sent:** 16 November 2009 15:42  
**To:** margaret.heavey@greenstar.ie  
**Cc:** Licensing Staff  
**Subject:** Successful Objection Payment for Licence Number W0146-02. (Reference Number: W0146-02-091116034122)

Thank you for your online Applicant Objection and Oral Hearing for licence number W0146-02. Your objection has been received by the Environmental Protection Agency and will be acknowledged once the Objection has been validated.

A fee of €600 will be debited from your credit card once the objection has been confirmed.

Your reference number is W0146-02-091116034122. Please retain this for future reference.

Regards,

Environmental Protection Agency

For inspection purposes only.  
Consent of copyright owner required for any other use.

For inspection purposes only.  
Consent of copyright owner required for any other use.