

W0165-02

Applicant
Valid

Ann Kehoe

From: Margaret Heavey [margaret.heavey@greenstar.ie]
Sent: 20 July 2009 21:02
To: Licensing Staff
Subject: New submission entered for Reg no: W0165-02. (Reference Number: W0165-02-090720090158)
Importance: High
Attachments: Waste Licence Review WL0165-02.pdf

Sub.

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:
Phone Number: 0863805196
Email: margaret.heavey@greenstar.ie

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.

Waste Licence Review W0165-02

**Ballynagran Residual Landfill, Ballynagran, Coolbeg and Kilcandra,
Co. Wicklow**

Submission by Licensee Greenstar

20th July 2009

Introduction

This submission is made in response to the Agency's correspondence dated 18th June 2009 and addresses proposed amendments to the following conditions.

Conditions 1.5.3 and 11.3 which relate to waste treatment;

Conditions 4.3.1, 5.4, 5.5.1, 5.8.5, 7.1, 7.9, Schedules C.5, D.2 & D.3 which relate to matters including odour management;

Conditions 1.6.1.3, Schedule A, and 1.5.2 which relate to waste acceptance;

Conditions 11.5 and 11.5.2 which relate to reporting.

Conditions Relating to Waste Treatment

Licence Condition 1.5.3

Existing Wording:

The Licensee shall ensure that all waste accepted at the facility is subject to treatment. This provision may not apply to inert waste for which treatment is not technically feasible, nor to any 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 hazard to human health or the environment.

Proposed Wording:

No Change

Reason for No Change:

Ballynagran landfill has been accepting treated waste in compliance with this condition and in compliance with the landfill directive since its opening in October 2006. The Landfill Directive already defines treatment as "the physical, thermal, chemical or biological processes, including sorting, that change the characteristics of the waste in order to reduce its volume or hazardous nature, facilitate its handling or enhance recovery". There is therefore no regulatory compliance need to review this condition.

It is understood from correspondence from the EPA dated 18th June 2009 that the Agency intends to review this licence mainly for the purposes of addressing the “*newly elaborated limits on the acceptance of biodegradable municipal waste at landfill*” ... “*which have been published in **Municipal Solid Waste - Pre-treatment and Residuals Management: An EPA Technical Guidance Document***”

The BMW ‘limits’ in question are set out in Figure 8 of the technical guidance document as 40% by weight of MSW accepted at the landfill facility for disposal in 2010, 2011, 2012; 24% by weight of MSW accepted at the landfill facility for disposal in 2013, 2014, 2015; and 15% by weight of MSW accepted at the landfill facility for disposal in 2016 and subsequent years.

Firstly these limits are based on old calculations that fail to take into account the most recent ESRI economic forecasts and the associated downturn in waste arisings. As a result, if these levels of BMW diversion were forced on every landfill in the state, the required levels of over-compliance, and the investment that would entail, would be significantly disproportionate to the actual Landfill Directive targets. This is not a reasonable expectation, particularly in these times of economic distress and limited fund availability.

Secondly, these limits make no reference to diversion of BMW through recycling and provide a disincentive to any operator to invest in recycling technologies over and above what is already present in the baseline calculation. These limits provide an inequitable pressure on landfill operators to ensure that increasing amounts of BMW is stabilised prior to disposal in the void but it provides no benefit to landfill operators with separate recycling facilities who wish to increase recycling standards in the waste stream outside of the landfill facility boundary as diversion is not counted in this wording. The limits apply to landfill operators only and there is no mechanism for encouraging waste operators without landfills to increase BMW treatment or recycling.

Thirdly, the devolution, to a small number of landfill operators, of a Member State obligation to reduce BMW to landfill is in itself a disproportionate, inequitable, and inappropriate last-minute response to a failure by the State to create the planning and commercial environment conducive to the provision of infrastructure for biodegradable waste treatment in advance of the EU deadlines.

Fourthly, the restriction of biodegradable waste at landfill, in the absence of identifiable appropriately licensed and planning permitted alternatives, is contrary to the Agency’s obligations to environmental protection.

Furthermore, in the absence of appropriate enforcement protocol, it is not possible to understand how these conditions are to be enforced. Indeed, new conditions to restrict biodegradable waste at landfills applied, in a vacuum, without any regulatory link to the rest of the waste hierarchy or to waste collection regulations, must be considered to be unenforceable, and hence flawed.

Licence Condition 11.3

Existing Wording:

“Within twelve months of the date of grant of this licence, a report examining waste recovery options shall be submitted to the Agency for its agreement. This report shall address methods to contribute to the achievement of the recovery targets stated in national and European Union waste policies and shall include the following:-

- a) *Proposals for the contribution of the facility to the achievement of targets for the reduction of biodegradable waste to landfill, going to landfills as specified in the Landfill Directive.*
- b) *The treatment of waste as required by the Landfill Directive.*
- c) *The separation of recyclable materials from the waste.*
- d) *The recovery of Construction and Demolition Waste.*
- e) *The recovery of commercial waste, including cardboard.*
- f) *Inert waste to be used for cover/restoration material at the facility.*
- g) *The feasibility of using landfill gas as a fuel for on-site vehicles."*

Proposed Wording

Rather than amend existing conditions in landfill licences relating to *waste treatment*, it would be more appropriate to strengthen the wording of Condition 11.3 to require the annual reporting of known waste recovery rates related to accepted wastes.

Conditions Relating to matters including Odour Management

Licence Condition 4.3.1

Existing Wording:

"The final capping shall consist of the following:

- a) *Top soil (150 – 300mm).*
- b) *Subsoils, such that total thickness of top soil and subsoils is at least 1m.*
- c) *Drainage layer of 0.5m thickness, having a minimum hydraulic conductivity of 1×10^{-4} m/s.*
- d) *Compacted mineral layer of a minimum 0.6m thickness with a permeability of less than 1×10^{-9} m/s or a geosynthetic material (e.g. GCL) or similar that provides equivalent protection.*
- e) *Gas collection layer of natural material (minimum 0.3m) or a geosynthetic layer."*

Proposed Wording:

"The final capping shall consist of the following:-

- a) *Top soil (150 – 300mm).*
- b) *Subsoils, such that total thickness of top soil and subsoils is at least 1m.*
- c) *Drainage layer of 0.5m thickness, having a minimum hydraulic conductivity of 1×10^{-4} m/s, or equivalent agreed by the Agency*
- d) *Compacted mineral layer of a minimum 0.6m thickness with a permeability of less than 1×10^{-9} m/s or a geosynthetic material (e.g. GCL) or similar that provides equivalent protection.*
- e) *Gas collection layer of natural material (minimum 0.3m), a geosynthetic layer or equivalent agreed by the Agency."*

Reason for Change:

The proposed minor changes will allow Greenstar to employ a capping infrastructure that will incorporate suitable Agency approved materials depending on factors such as availability, cost and current best practice. The landfill will be capped in phased stages over a period of a number of years and during this time there will inevitable changes in what procedures constitute BAT in terms of landfill capping. These minor changes to the licence condition

wording will allow both Greenstar and the Agency to ensure that the most suitable capping systems are employed without the future need for further lengthy technical amendment or licence review procedures to be undertaken, and also improve future gas and odour management programmes at the facility.

Licence Condition 5.4

Existing Wording:

"All wastes shall be checked at the working face. Any wastes not suitable for acceptance shall be removed for recovery or disposal at an appropriate alternative facility. Such waste shall be stored in the Waste Quarantine Area only. No waste shall be stored in the Waste Quarantine Area for more than one month."

Proposed Wording:

"All wastes shall be checked at the working face. Any wastes not suitable for acceptance shall be removed for recovery or disposal at an appropriate alternative facility. Such waste shall be stored in the Waste Quarantine Area only. No malodorous waste shall be stored in the Waste Quarantine Area for more than one month with any other un-suitable waste stored for a maximum of six months."

Reason for Change:

Only small quantities of non-conforming wastes are detected at the facility, which are most commonly tyres, batteries and gas bottles. Due to the relatively low weight and quantity of these materials that are discovered it can be difficult to arrange uplift of these materials for recovery on the basis that regular trips to a landfill by a recovery operator to uplift minimal quantities is not cost or environmentally beneficial. It is therefore proposed that, if the material is not malodorous the storage limit is extended to a maximum of six months which will allow more practicable quantities to be collected.

Licence Condition 5.5.1

Existing Wording:

"Unless the prior agreement of the Agency is given, the following shall apply at the landfill:-

- f) Only one working face shall exist at the landfill at any one time for the deposit of waste other than cover or restoration materials.*
- g) The working face of the landfill shall be no more than 2.5 metres in height after compaction, no more than 25 metres wide and 25 metres in length and have a slope no greater than 1 in 3."*

Proposed Wording:

"Unless the prior agreement of the Agency is given, the following shall apply at the landfill:-

- a) Only one working face shall exist at the landfill at any one time for the deposit of waste other than cover or restoration materials.*
- b) The working face of the landfill shall be no more than 3.5 metres in height after compaction, no more than 35 metres wide and have a slope no greater than 1 in 3."*

Reason for Change:

The current licence wording restricting the width of the working face creates a health and safety issue. In order to allow two vehicles to eject or tip simultaneously a safe working face width of 35 metres is required to ensure that there is adequate room between vehicles with regard to the safe opening and closing of tailgates and to allow sufficient room between vehicles should one require to be towed clear from the working face. It is also important to ensure that there is adequate width to allow vehicles to reverse onto the working face safely.

Furthermore, an increase in the working height of the working face to 3.5 metres would allow the length of the working face to be decreased, minimising the potential for other nuisances, such as scavenging birds and odour nuisances

Licence Condition 5.8.5

Existing Wording:

"Filled cells shall be permanently capped within twelve months of the cells having being filled to the required level."

Proposed Wording:

"Filled cells shall be permanently capped within twenty four months of the cells having being filled to the required level."

Reason for Change:

The current requirement to place an engineered cap on a cell within twelve months of filling the cell to the required level places undue risk on the long term integrity of the cap. This is due to initial rapid settlement of the waste body during this period meaning that, if a permanent cap was placed it would inevitably be damaged with the potential to cause undue nuisance, including odours and costly repairs.

A period of twenty four months is considered more suitable to allow sufficient time for stabilisation of the waste mass to occur, ensuring that the risk of damage to the engineered cap is minimised. Even with careful planning, any final capping placed will require the removal of sections of gas collection infrastructure for periods of time which could cause unnecessary odour nuisance. Any area of the site that is filled to required levels will have suitable temporary capping installed to ensure that the potential for nuisance is minimised. The proposed change is also in accordance with the EPA Landfill Operation Practices Manual (1997), Section 4.7 which advises that, due to the effects of settlement, permanent capping systems should not be installed until significant settlement has ceased. The Landfill Operational Practices Manual also states that *"it is preferable to place a temporary cap of low permeability material over the filled area. This should be laid to a fall in order to allow water to shed water. Once the initial settlement rate has slowed, usually within the first five years after completion of filling, the temporary cap can be removed."* Finally, the proposed changes would also bring the Ballynagran licence into line with other similar licences, such as W0201-02 (Drehid) and W0081-03 (KTK).

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 7.9 to prevent or, where that is not practicable, to minimise the odour."

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
- 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.3, Table D.3.1, Dust/Odour Monitoring

Existing Wording:

"Table D.3.1 Dust/Odour Monitoring Frequency and Technique

Parameter	Monitoring Frequency	Analysis Method/Technique
Dust	Monthly	Standard Method ^{Note 1}
Odour	Bi-annually ^{Note 4}	^{Note 2}
PM ₁₀	Quarterly	^{Note 3}

Note 1: Standard method VDI2119 (Measurement of Dustfall using Bergerhoff Instrument (Standard Method) German Engineering Institute). Any modifications to eliminate interference due to algae growth in the gauge should be reported to the Agency.

Note 2: To be agreed with the Agency.

Note 3: Monitoring shall be carried out as described in prEN12341 "Air Quality – field test procedure to demonstrate reference equivalence of sampling methods for PM₁₀ fraction of particulate matter" or an alternative agreed in writing with the Agency.

Note 4: Monitoring to commence within six months of the commencement of disposal of waste and thereafter on a bi-annual basis.

Proposed Wording:

Table D.3.1 Dust/Odour Monitoring Frequency and Technique

Parameter	Monitoring Frequency	Analysis Method / Technique
Dust	Monthly	Standard Method ^{Note 1}
Odour	Bi-annually ^{Note 4}	^{Note 2}
PM ₁₀	Quarterly	^{Note 3}

Note 1: Standard method VDI2119 (Measurement of Dustfall using Bergerhoff Instrument (Standard Method) German Engineering Institute). Any modifications to eliminate interference due to algae growth in the gauge should be reported to the Agency.

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

Note 3: Monitoring shall be carried out as described in prEN12341 "Air Quality – field test procedure to demonstrate reference equivalence of sampling methods for PM₁₀ fraction of particulate matter" or an alternative agreed in writing with the Agency.

Note 4: Monitoring to commence within six months of the commencement of disposal of waste and thereafter on a bi-annual basis.

Reason for Change:

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

Licence Condition 7.9

Existing Wording:

None

Proposed Wording:

"Odour Control

7.9.1 *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.*

7.9.2 *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."*

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.

Schedule C.5

Existing Wording:

"Emission Point Reference numbers: To be agreed with the Agency

Location: Landfill Gas Utilisation Plant and/or flare

Volume to be emitted: 3000m³/hr (unless otherwise agreed with the Agency)

Minimum discharge height: 8m (unless otherwise agreed with the Agency)

Parameter	Flare Emission Limit Value <small>Note 1,3</small>	Utilisation Plant Emission Limit Value <small>Note 1,3</small>
Nitrogen Oxides (NOx)	150 mg/m ³	500 mg/m ³
CO	50 mg/m ³	650 mg/m ³
Particulates	Not applicable	130 mg/m ³
Total Organic Carbon (TOC)	10 mg/m ³	Not applicable
TA Luft Organics Class I <small>(Note 2)</small>	Not applicable	20 mg/m ³ (at mass flows > 0.1kg/hr)
TA Luft Organics Class II <small>(Note 2)</small>	Not applicable	100 mg/m ³ (at mass flows > 2 kg/hr)
TA Luft Organics Class III <small>(Note 2)</small>	Not applicable	150 mg/m ³ (at mass flows > 3 kg/hr)
Hydrogen Chloride	50 mg/m ³ (at mass flows > 0.3 kg/hr)	50 mg/m ³ (at mass flows > 0.3 kg/hr)
Hydrogen Flouride	5 mg/m ³ (at mass flows > 0.05 kg/hr)	5 mg/m ³ (at mass flows > 0.05 kg/hr)

Note 1: Dry gas referenced to 3% oxygen by volume for utilisation plants and 3% oxygen by volume for flares.

Note 2: In addition to the above individual limits, the sum of the concentrations of Class I, II and III shall not exceed the class III limits.

Note 3: The emission limit values may be revised with the agreement of the Agency on the basis of the technology employed.

Proposed Wording:

"Emission Point Reference numbers: To be agreed with the Agency

Location: Landfill Gas Utilisation Plant and/or flare

Minimum discharge height: 8m (unless otherwise agreed with the agency)

Parameter	Flare Emission Limit Value <small>Note 1,3</small>	Utilisation Plant Emission Limit Value <small>Note 1,2</small>
Nitrogen Oxides (NOx)	150 mg/m ³	500 mg/m ³
CO	50 mg/m ³	1400 mg/m ³
Particulates	Not applicable	130 mg/m ³
Total Organic Carbon (TOC)	10 mg/m ³	Not applicable
Total VOCs	Not applicable	1000 mg/m ³
Total Non-Methane VOCs	Not applicable	75 mg/m ³

Note 1: Dry gas referenced to 5% oxygen by volume for utilisation plants and 3% oxygen by volume for flares.

Note 2: The emission limit values may be revised with the agreement of the Agency on the basis of the technology employed."

Reason for Change:

It is proposed to remove the restriction of 3000m³/hr on the volume to be emitted. Whilst gas modelling by independent consultants has indicated that the expected maximum LFG production will be in the region of 2500m³/hr for Ballynagran, it is possible that this could increase to a figure of 3000m³/hr or more, due to a number of factors including changes in waste composition and leachate re-circulation activities. The proposed change will also facilitate the use of suitable, on-site flaring capacity during any periods of downtime of the

LFG utilisation engines. Greenstar will regularly update the LFG projections and ensure that the required flaring/utilisation capacity to deal with LFG produced by the landfill is installed at all times.

The existing ELV of 650 mg/m³ of CO for utilisation plants is not best practice with technology currently available on the market and is therefore an unrealistic value. The proposed increase to 1400 mg/m³ represents an increase to an achievable limit and would bring the Ballynagran licence into line with other recently issued licences such as W0081-01 (KTK) and W0201-02 (Drehid) and also represents compliance with the UK Environment Agency "Guidance for Monitoring Landfill Gas Engine Emissions" (LFTGN 08).

Schedule D.2, Table D.2.1

Existing Wording:

"Table D.2.1 landfill Gas Combustion Plant/Enclosed Flare

Parameter	Flare (enclosed) Monitoring Frequency	Utilisation Plant Monitoring Frequency	Analysis Method / Technique ^{Note 1} _{Note 2}
Inlet			
Methane (CH ₄) % v/v	Continuous	Weekly	Infrared analyser / flame ionisation detector / thermal conductivity
Carbon Dioxide (CO ₂) % v/v	Continuous	Weekly	Infrared analyser / thermal conductivity
Oxygen (O ₂) % v/v	Continuous	Weekly	Electrochemical / thermal conductivity
Total Sulphur	Annually	Annually	Ion chromatography
Total Chlorine	Annually	Annually	Ion chromatography
Total Flourine	Annually	Annually	Ion selective electrode
Process – Combustion	Continuous	Quarterly	Temperature Probe / datalogger
Outlet			
CO	Continuous	Continuous	Flue gas analyser / datalogger
NO _x	Annually	Annually	Flue gas analyser
SO ₂	Annually	Annually	Flue gas analyser
Particulates	Not applicable	Annually	Isokinetic / Gravametric
TA Luft Class I, II, III	Not applicable	Annually	Adsorption / Desorption
Organics			/ GC / GCMS ^{Note 3}
TOC	Annually	Not applicable	Flame Ionisation
Hydrochloric Acid	Annually	Annually	Impinger / Ion Chromatography
Hydrogen Fluoride	Annually	Annually	Impinger / Ion Chromatography

Note 1: All monitoring equipment used should be intrinsically safe.

Note 2: Or other methods agreed in advance with the Agency.

Note 3: test methods should be capable of detecting acetonitrile, dichloromethane, tetrachloroethylene and vinyl chloride as a minimum

Proposed Wording:

"Table D.2.1 landfill Gas Combustion Plant/Enclosed Flare

Parameter	Flare (enclosed) Monitoring Frequency	Utilisation Plant Monitoring Frequency	Analysis Method / Technique ^{Note 1}
Inlet			
Methane (CH ₄) % v/v	Continuous	Continuous	Infrared analyser or equivalent approved
Carbon Dioxide (CO ₂) % v/v	Continuous	Weekly	Infrared analyser or equivalent approved
Oxygen (O ₂) % v/v	Continuous	Weekly	Electrochemical or equivalent approved
Process Parameters			
Combustion Temperature	Continuous	Continuous	Temperature Probe / datalogger
Residence Time	Weekly	Quarterly	To be agreed
Outlet			
CO	Annually	Annually	Flue gas analyser / datalogger
NO _x	Annually	Annually	Flue gas analyser or equivalent approved
SO ₂	Annually	Annually	Flue gas analyser or equivalent approved
Particulates	Not applicable	Annually	Isokinetic / Gravimetric or equivalent approved
TOC	Annually	Annually	Flame Ionisation

Note 1: All monitoring equipment used should be intrinsically safe.

Reason for Change:

The proposed changes for Table D.2.1 should be read in conjunction with the changes proposed for Schedule C.5. These changes will ensure consistency within the licence, bring the licence conditions into line with other recently issued licences, such as W0081-03 (KTK) and W0201-02 (Drehid) and also represents compliance with the UK Environment Agency "Guidance for Monitoring Landfill Gas Engine Emissions" (LFTGN 08).

Furthermore it is proposed that the continuous exhaust monitoring requirement for Carbon Monoxide (CO) for both engines and flares be removed from the monitoring schedule. Current available methods for this type of sampling have been shown to be entirely unreliable as it is extremely difficult, if not impossible, to obtain a continuous sample for analysis due to the extreme temperatures involved, the length of, and the constant blocking of pipework.

Licence Condition 1.6.1.3

Existing Wording:

"Waste shall not be accepted at the landfill on Sundays or on Bank Holidays."

Proposed Wording:

"Waste shall not be accepted at the landfill on Sundays or on Public Holidays."

Reason for Change:

The current wording prevents the site from opening for up to four consecutive days during the Easter holiday period, including Good Friday, a bank holiday (but a normal working day for most industries and sectors). This results in waste being delivered to site that has been collected and stored in transfer stations during this period and significantly increases the potential for odours to be released during on-site deposition operations. The proposed wording change will assist the site with regard to the management of odours and also ensure that waste is collected and disposed of promptly, minimising any public health implications.

Conditions Relating to Waste Acceptance

Schedule A: Waste Acceptance

Existing Wording:

"Table A.1 Waste categories and Quantities for Disposal

Waste Type	Maximum (Tonnes Per Annum) ^{Note 1}
Household	62,500
Commercial	67,500
Industrial	45,000
TOTAL	175,000

Note 1: The tonnage of household waste, commercial waste and industrial waste may be altered with the prior agreement of the Agency provided the total amount of these wastes accepted at the facility does not exceed the combined tonnage of 175,000 tonnes per annum (as specified in the total above)"

Table A.2 Waste categories and Quantities for recovery, restoration and site development works

Waste Type	Maximum (Tonnes Per Annum)
Construction & Demolition	28,000

Proposed Wording:

"Table A.1 Waste Categories and Quantities

Waste Type	Maximum (Tonnes Per Annum) ^{Notes 1&2}
Household	62,500
Commercial	67,500
Industrial	45,000
Construction & Demolition ^{Note 3}	28,000
TOTAL	203,000

Note 1: The tonnage of household waste, commercial waste and industrial waste may be altered with the prior agreement of the Agency provided the total amount of these wastes accepted at the facility does not exceed the combined tonnage of 175,000 tonnes per annum (as specified in the total above)

Note 2: C & D or Inert waste/secondary materials or compost imported to the site for use in construction and waste covering operations. A detailed statement (with mass balance) of waste used in construction and covering operations should be included as part of the AER

Note 3: This waste stream may include asbestos for disposal in accordance with Section 2.3.3 of the Annex to the Council Decision 2003/33/EC

Reason for Change:

The current restriction on the permissible quantities of C&D waste at the site for recovery, restoration and development works (as detailed in Schedule A, Table A.2 of the licence) could result in odour nuisance and the environmentally unsound practice of importing raw materials for development works.

Significant quantities of C&D waste materials are used in the construction of internal haul roads and in daily landfill covering operations. A restriction in the acceptance of suitable cover material could result in avoidable odour nuisances. It is also the considered opinion of Greenstar that the use of recovered C&D wastes for the construction of on site haul roads is both economically and environmentally preferable to the purchase of raw materials from an off-site source resulting in additional costs to the operator and additional, yet avoidable vehicle movements. The proposed changes will also bring the Ballynagran licence into line with other similar licences, such as W0081-03 (KTK) and W0201-02 (Drehid) which have no such restrictions on inert waste acceptance.

Asbestos (Stabilised Non-Reactive)

Existing Wording:

None

Proposed Wording:

“Asbestos Waste

- c) 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.*
- d) Asbestos waste must be double wrapped in heavy gauge plastic, which is clearly labelled to indicate the presence of asbestos.*
- e) Disposal of asbestos waste shall be into prepared bays or trenches of at least 2 metres in depth.*
- f) 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.*
- g) No asbestos waste shall be present within 2.5 metres of the final surface levels.”*

Reason for Insertion:

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. Ballynagran 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.

Asbestos Definition

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 2003/33/EC”

Reason for Insertion:

To update the “Interpretation” section of the waste licence to include a suitable definition of the asbestos waste proposed for disposal as detailed in the section above.

Licence Condition 1.5.2

Existing Wording:

“No hazardous wastes, liquid wastes or sludges 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 1999/33/EC), liquid wastes or sludges shall be disposed of at the facility.”

Reason for Change:

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

Conditions Relating to Reporting

Licence Conditions 11.5.1 & 11.5.2

Existing Wording:

“11.5.1: The licensee shall submit to the Agency for its agreement, not later than January 31st after the first year of operation, and within one month of the end of each year thereafter, an Annual Environmental Report (AER).

11.5.2: The AER shall include as a minimum the information specified in schedule G: Content of Annual Environmental Report of this licence and shall be prepared in accordance with any relevant written guidance issued by the Agency”

Proposed Wording:

“11.5.1: The licensee shall submit to the Agency for its agreement, by the 31st March each year an Annual Environmental Report (AER) covering the previous calendar year. This report, which will be to the satisfaction of the Agency, shall include, as a minimum the information specified in Schedule G of this licence and shall be prepared in accordance with any relevant guidelines issued by the Agency”

Reason for Change:

The proposed change brings the Ballynagran licence in line with other recently issued licences, such as W0201-02 (Drehid) and W0081-03 (KTK) and will allow adequate time for the large quantities of data required for such a detailed report to be collected and appropriately analysed prior to submission to the Agency for approval.

Contact Details

If you have any queries in relation to the above please contact Margaret Heavey, Head of Landfill Operations, Greenstar, Fassaroe, Bray, Co. Wicklow. Alternatively please email your request to margaret.heavey@greenstar.ie.

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