This Report has been cleared for submission to the Board by the Programme Manager F Clinton Signed: Alcolore Date: 10/2/10



OFFICE OF CLIMATE. **LICENSING & RESOURCE USE**

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

то:	Directors	
FROM:	Technical Committee	- Environmental Licensing Programme
DATE:	10 February 2010	
RE:		lfill, Killagh More, Ballybaun (E.D. Killaan), Ballinasloe, Co.

Application Details	
Class(es) of activity (P = principal activity):	3 rd Schedule:1, 4, 5P, 6 & 13 4 th Schedule: 4, 11 & 13
Location of activity:	East Galway Landfill, Killagh More, Ballybaun (E.D. Killaan), Ballintober E.D. Killaan), Ballinasloe, Co. Galway.
Licence review initiated:	18 June 2009
PD issued:	19 October 2009
First party objection received:	16 November 2009 Note 1
Third Party Objections received:	12 November 2009 and 13 November 2009
Submissions on Objections received:	None

Note 1: In accordance with Section 17(1) of the Waste Management Acts (1996 to 2008), as the final date for a valid objection was a Sunday (15th November), all valid objections received up to and including Monday 16th November were regarded as having been received before the expiration of the objection period.

Introduction

On 18 June 2009, the Environmental Protection Agency initiated a review of the waste licence relating to the landfilling activities at East Galway Landfill, waste licence register number W0178-02. The main reasons for initiating the review were:

- To give effect to articles 5 and 6 of Council Directive 1999/31/EC on the landfill of waste (the Landfill Directive) regarding the treatment of waste prior to landfill and diversion of biodegradable municipal waste from landfill;
- To incorporate limits on the acceptance of biodegradable municipal waste at landfill (expressed in the document Municipal Solid Waste - Pre-treatment and Residuals Management: An EPA Technical Guidance Document published 19 June 2009) that have regard to the need to implement and achieve landfill diversion targets set out in the Landfill Directive. The diversion of biodegradable

municipal waste will, *inter alia*, reduce landfill gas production and have consequent benefits regarding greenhouse gas emissions and the potential for odour nuisance.

To address odour issues as requested by the Office of Environmental Enforcement on foot of odour complaints received in relation to the facility.

One submission was received (first party) in relation to the application and this was considered by the Board at PD stage.

Consideration of the Objection

On 2 February 2010 the Board of the Agency approved the recommendation of Licensing Inspector Brian Meaney that an oral hearing of the objections was not required in this case based on the following criteria:

- 1. Whether there were any new issues not previously raised that are specific to the location or the development.
- 2. The sensitivity of the location/local environment.
- 3. Whether it is a matter of national or regional importance.
- 4. The scale or complexity of the development.
- 5. Whether there was any significant new information.

The Technical Committee, comprising of Jennifer Cope (Chair) and Seán O'Donoghue, has considered all of the issues raised in the objection, and this report details the Committee's comments and recommendations following the examination of the objections and submissions together with discussions with the Inspector, Michael Owens. The Technical Committee also consulted Inspector Brian Meaney (expert for the waste sector), in relation to waste issues.

This report considers the first party objection and two third party objections to the Proposed Decision.

First Party Objection

Objection No.	1					Date Received
Ms. Margaret Wicklow	Heavey,	Greenstar,	Fasseroe,	Bray,	Co.	16 November 2009

The licensee makes 16 points of objection, each of which have been dealt with below.

Objection No.1 Ms. Margaret Heavey, on behalf of licensee.

The licensee submitted a letter with sixteen points of objection relating to specific conditions and/or schedules of the Proposed Decision.

A.1. Condition 1.6

Condition 1.6 states:

"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.
- (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 hazards to human health or the environment."

The licensee objects to the condition and proposes the following wording to comply with EU law (additional text in bold):

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

Technical Committee's Evaluation: The EPA technical guidance document *Municipal Solid Waste – Pre-treatment and Residuals Management*, EPA 2009 fully addresses the requirements of the landfill directive and the technical committee does not consider it necessary to include any specific reference to the Landfill Directive.

Recommendation:		
No change		

A.2. Condition 1.7.1

Condition 1.7.1 states:

"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 2010 and 2013, 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, 2016, part thereof,

unless an alternative has been agreed in writing by the Agency in accordance with condition 1.7.2."

The licensee objects to the wording of condition 1.7.1 and states "the term '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."

The licensee has requested the removal of the percentage limits from this condition, on the basis that the percentages used are significantly out of date, and the use of more up to date percentage figures will have a big impact in terms of required infrastructure and investment.

Furthermore, the use of percentage figures is flawed and targets should be expressed in terms of tonnes. The licensee believes that the use of percentages disincentivises recycling of both biodegradable and non-biodegradable waste. The Agency should focus on increasing the absolute level of biodegradable waste diversion, and should limit the amount of non-processed

waste delivered directly to landfill. This would require waste collectors to invest in biowaste treatment or use MRF facilities.

The licensee notes that from the EPA Waste Workshop in October 2009 it is acknowledged that the percentage figures will change.

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

<u>Technical Committee's Evaluation:</u> In accordance with the landfill directive "landfill' means a waste disposal site for the deposit of the waste onto or into land". Landfilling as an activity is disposal. The term disposal is not contrary to the Landfill Directive.

The calculation on BMW diversion from landfill in the EPA technical guidance document *Municipal Solid Waste – Pre-treatment and Residuals Management (2009)* was based on 2007 statistics. The guidance stated that as further statistical data became available the EPA would update this direction to the sector, as necessary. The 2008 National Waste Report identifies that there has been a decrease in the generation of municipal waste. This may allow for an increase in the percentage limit in order to ensure that diversion of BMW from landfill is adequate to meet the requirements of the Landfill Directive and a change in the percentage limit for 2010 has been signalled accordingly. Condition 1.7.1 allows for the EPA to vary percentage limits.

With regard to the use of percentage limits as opposed to tonnages, the licensee does not elaborate on how this disincentivises waste recycling. The percentage limits specified in the condition are derived directly from the percentages specified in Article 5 of the landfill Directive 1999/31/EC as they have been applied to national statistics in the National Strategy on Biodegradable Waste and most recently updated in the National Waste Report 2008. With regard to the proposal to *limit the amount of non-processed waste delivered directly to landfill*, condition 1.6 prohibits the landfilling of untreated waste.

The EPA initiated a review of 25 landfill licences in June 2009. It is anticipated that all landfills that accept municipal solid waste will be reviewed prior to commencement or prior to July 2010.

Based on the above the technical committee do not consider it necessary to amend this condition.

Recommendation:	No change

A.3. Condition 1.7.2

Condition 1.7.2 states

"Two or more licensed landfills may seek the agreement of the Agency that collectively they will arrange to comply with condition 1.7.1. Such agreement may be sought by review of the landfill licence for any facility seeking an increase in the limits set out in condition 1.7.1, 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."

The licensee proposes a change to Condition 1.7.2 to remove the requirement to review of the landfill licence in order to allow an increase in the limits set out in Condition 1.7.1. The licensee objects to applying for a review of a waste licence unless overall tonnage is to be increased.

The licensee states that increased BMW diversion through recycling at a MRF upstream of the landfill should be the Agency's focus. The conditions should reflect upstream recycling and

landfill diversion. Not to do this would place the expansion of recycling at a disadvantage compared to the expansion of bio-stabilisation technology.

Technical Committee's Evaluation:

An application for a waste licence review will only be required when there is a proposed increase in the limits set out in condition 1.7.1. A technical amendment may be sought for a decrease. An increase in BMW acceptance at the landfill may give rise to odour nuisance at the landfill given the fact that BMW is odour forming. Therefore the EPA would be required to assess the impact of an increase in BMW acceptance at the landfill under a licence review and there would be a need to allow public participation.

The purpose of this licence review is to implement the landfill directive. The EPA has not at this time proposed allowing collective agreements with facilities other than landfills. The limits apply to all landfill operators, but compliance with the limits will impact on all upstream waste operations.

Recommendation: No change

A.4. Condition 1.8.1

Condition 1.8.1 states

"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 1.8.4 shall not be considered BMW."

The licensee requests an amendment to the condition requiring it to determine the biodegradable municipal waste content of Municipal Solid Waste (MSW) accepted for disposal at the facility. The amendment would only require such determination when testing protocols have been agreed to the satisfaction of the Agency. The licensee requests the amendment on the basis that it is premature to require such testing in advance of agreed testing protocols.

Technical Committee's Evaluation:

The EPA has published a draft "Protocol for the Evaluation of Biodegradable Municipal Waste sent to Landfill by Pre-Treatment Facilities" for public consultation. Submissions have been invited up to 1 April 2010. It is anticipated that this guidance will be finalised prior to the 1 July 2010 implementation date for BMW diversion. In the interim, the licensee should be in a position to use the preliminary BMW factors published in that document or to use locally generated factors, subject to the agreement of the Agency, in accordance with condition 1.8.3.

Recommendation: No change

A.5. Condition 1.8.2

Condition 1.8.2 states

- "Biostablised residual wastes meeting the requirements of
- Condition 1.8.4, 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 1.7.1."

The licensee requests that chemical treatment processes be included in this condition (in addition to biological treatment processes) with regard to criteria for defining waste as bio-stabilised. This would allow access to a greater range of available and emerging tests.

<u>Technical Committee's Evaluation:</u> There appears to be confusion between the biological treatment process for stabilisation and the testing of the bio-stabilised residual waste. The wording proposed by the licensee makes reference to chemical treatment process parameters, however it appears to the technical committee that the intent of the objection is to include chemical tests for measuring the extent of biostabilisation. The committee does not see how the amended wording proposed will meet the purpose of the objection as the condition makes no reference to the test method for determining biostabilisation.

Recommendation: No change

A.6. Condition 1.8.3

Condition 1.8.3 states

"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.

The licensee requests the removal of the reference to the use, where appropriate, of EPA approved contractors for the determination of calculation factors for use in determining BMW content. This is requested as it is considered to be anti-competitive.

<u>Technical Committee's Evaluation:</u> The enabling condition allowing the EPA to require the use of EPA-approved contractors is, *inter alia*, designed to ensure consistency in determination of BMW factors should this prove necessary in light of variable or inconsistent findings being reported from treatment or landfill facility operators. The ability to carry out the characterisation in accordance with approved protocols will be the qualifying criterion for approval. It is therefore not the opinion of the committee that this practice will be anti-competitive.

Recommendation: No change

A.7. Condition 1.8.4

Condition 1.8.4 states

"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_2/g DM until 1 January 2016 and <7mg O_2/g DM thereafter."

The licensee objects to the post 2016 limitation, stating that it is excessive, has a detrimental effect on the bankability of existing biostabilisation technology, and will probably prevent its construction. Also, this limit provides very little extra benefit for the costs involved.

Technical Committee's Evaluation: The relevant EPA guidance, (Municipal Solid Waste – Pretreatment and Residuals Management: An EPA Technical Guidance Document published 19 June 2009) specifies the 10mg O₂/g DM, and 7mg O₂/g DM standards as specified in the condition. With regard to the 7 mg O₂/g DM standard, the guidance states: "The higher standard required from 2016 onwards reflects the desire to reduce the residual landfill gas production potential in the bio-stabilised waste sent to landfill. The higher standard is appropriate under the terms of BAT." This guidance was published following extensive consultation with industry stakeholders.

Recommendation: No change

A.8. Condition 1.9.2.1

Condition 1.9.2.1 states

"Operation of the borrow area is limited to 8.00am and 8.00pm Monday to Friday inclusive and 8.00am - 3.00pm on Saturdays."

The licensee notes that there is a typing error in Condition 1.9.2.1 '8.00am and 8.00pm' should be 8.00am - 8.00 pm

Technical Committee's Evaluation: Agreed

Recommendation:

Amend Condition 1.9.2.1 to read

Operation of the borrow area is limited to 8.00am - 8.00pm Monday to Friday inclusive and 8.00am - 3.00pm on Saturdays."

A.9. Condition 5.4.1

Condition 5.4.1 states

"Bio-stabilised residual waste shall only be used as landfill cover where it has been stabilised in accordance with Condition 1.8.4 (or meets the requirements of an alternative protocol as may be agreed under condition 1.8.2), and complies with any requirements of the Department of Agriculture, Fisheries and Food relating to the management of animal byproducts and has been agreed in advance with the Agency."

The licensee objects to the wording of the condition and states that there are already conditions in the waste licence which meet the requirements of the Department of Agriculture to ensure farm animals or food chain do not come into contact with waste.

<u>Technical Committee's Evaluation:</u> The purpose of this condition is to ensure full compliance with any requirements of the Department of Agriculture, Fisheries and Food relating to the management of animal by-products. The technical committee sees no reason for change in this regard.

Recommendation: No change

A.10. Condition 7.1

Condition 7.1 states

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

The licensee requests the amendment of this condition to the following:

"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, 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."

<u>Technical Committee's Evaluation:</u> This request was originally included as part of a submission made by the licensee during the review of the licence and was fully addressed in the inspector's report. The PD retained this condition unchanged. The Technical Committee considers that the licensee has not provided any further grounds of objection and therefore do not recommend any change to the PD in this regard.

Recommendation: No change

A.11. Schedule D, Table D.9.

Schedule D,

D.9 Ambient Odour Monitoring

	Programs	Accept Schulene
Odour	Monthly	As agreed with the Agency

The licensee requests a biannual ambient odour monitoring frequency and also that monitoring need not commence until six months from the date of commencement of waste disposal. The licensee also requests that the monitoring method is specified in the table as one of those described in the draft CEN Standard CEN/TC264/WG2.

Technical Committee's Evaluation:

The Office of Environmental Enforcement (OEE) currently operates to a standard procedure when undertaking odour assessments in the vicinity of landfill facilities. This methodology requires the use of a Field Sheet for odour assessment at the landfills – mapping odour intensity on a grid basis, taking account of local topography and prevailing weather conditions. Whilst the document has not yet been formally published OEE have provided the Standard Operating Procedure to a number of landfill operators in order to assist operators in assessing odour impact. It is considered that the use of this procedure will allow operators to trend odour impact over a prolonged period in the immediate vicinity of the landfill. It is the intention of the OEE to formalise this document and to make it available to all landfill operators in the short term.

This request, in its entirety, was originally included as part of a submission made by the licensee during the review of the licence and was fully addressed in the inspector's report. The PD imposed a monthly monitoring frequency, using a method to be agreed with the Agency which will enable a database of odour incidence to be developed.

The Technical Committee considers that the licensee has not provided any further grounds of objection and therefore do not recommend any change to the PD in this regard.

Recommendation: No Change

A.12. Odour control (proposed new condition)

The licensee has proposed a condition which requires the licensee to undertake an odour assessment and prepare an odour management plan, and specifies the scope of both. The condition also requires the submission to the Agency of a programme for ongoing odour monitoring and assessment. The licensee states that the proposed condition is based on conditions in the current licence and will help to reduce the potential for odour nuisance.

<u>Technical Committee's Evaluation:</u> This request was originally included as part of a submission from the licensee during the review of the licence and was fully addressed in the inspector's report.

As outlined in the inspector's report, condition 8.13 of the PD imposes new obligations regarding prevention, assessment and management of odour. This is due to the number of odour complaints received in relation to East Galway landfill. The Office of Environmental Enforcement has identified the facility as being in need of enhanced control regarding the prevention and management of odour.

The Technical Committee considers that the licensee has not provided any further grounds of objection and therefore do not recommend any change to the PD in this regard.

Recommendation: No change

A.13. Condition 11.12

Condition 11.12 states

"Reporting to Demonstrate Compliance with Diversion Targets

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 1.7.1. 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."

The licensee requests three changes to the condition:

- 1. The removal of the first sentence, which requires the licensee to report to the Agency such data and records, and at such a frequency, as may be specified by the Agency to demonstrate compliance with condition 1.7.1.
- 2. The deadline for the submission of quarterly reports to be extended from a week to ten days after the end of the reporting period.
- 3. The removal of the requirement to report on compliance on a cumulative basis for the calendar year to date.

The licensee submits these objections on the basis that the requirements are excessively onerous and out of line with existing quarterly reporting requirements.

<u>Technical Committee's Evaluation:</u> This condition requires the licensee to monitor for compliance with condition 1.7.1 on an ongoing basis. It is considered that the licensee should be able to produce figures within one week of the end of each quarter to demonstrate compliance with the relevant targets (both quarterly and year to date), and that such practice would be consistent with good management of the landfill. This is not considered excessively onerous, and the licensee has not provided any specific details in this regard.

Recommendation: No change

A.14. Condition 12.2 Financial Charges

Condition 12.2 states

"12.2.1 The licensee shall pay to the Agency an annual contribution of €31,446, or such sum as the Agency from time to time determines, having regard to variations in the extent of reporting, auditing, inspection, sampling and analysis or other functions carried out by the Agency, towards the cost of monitoring the activity as the Agency considers necessary for the performance of its functions under the Waste Management Acts 1996 to 2008. The first payment shall be a pro-rata amount for the period from the date of grant of this licence to the 31 st day of December, and shall be paid to the Agency within one month from the date

of grant of the licence. In subsequent years the licensee shall pay to the Agency such revised annual contribution as the Agency shall from time to time consider necessary to enable performance by the Agency of its relevant functions under the Waste Management Acts 1996 to 2008, and all such payments shall be made within one month of the date upon which demanded by the Agency.

12.2.2 In the event that the frequency or extent of monitoring or other functions carried out by the Agency needs to be increased, the licensee shall contribute such sums as determined by the Agency to defray its costs in regard to items not covered by the said annual contribution."

The licensee states that the proposed increase is out of line with inflation/deflation and the process for its calculation has not been explained by the Agency. This condition is lacking transparency.

Technical Committee's Evaluation:

This fee is the landfill financial charge for 2009, which is determined by the Office of Environmental Enforcement. The risk category for this facility is W-A1. The financial charges are based on compliance assessment days, audit and inspection days, sampling costs and analysis costs. It is expected that the financial charges will be reviewed downwards for 2010 on the basis that there is a reduced sampling and analysis requirement for 2010.

Recommendation:	No Change		 	 	 	

A.15. Schedule A

Schedule A states:

"Table A.1 Waste Categories and Quantities for Disposal

WaterType.	Maximum (Tomas Per Amoun) ^{New I}
Household	45,000
Commercial	27,500
Industrial non-hazardous	24,500
Asbestos waste	3,000
TOTAL	100,000

Note 1: The tonnage of household waste, commercial waste and industrial non-hazardous waste may be altered with the prior agreement of the Agency provided that the total amount of these wastes accepted at the facility does not exceed the combined tonnage of 97,000 tonnes per annum (as specified in the total above).

Table A.2 Waste Categories and Quantities for Recovery

Inert wastes (for the purposes of restoration and aftercare)	27,320
Walter State of the State of th	Marillo (Jesusta Cuna)

Table A.3 Total Permitted Landfill Capacity

facility (over authorised life of facility) 1,452,125 m ³	Total quantity of waste permitted to be placed at the landfill facility (over authorised life of facility)	1,452,125 m ³
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The licensee proposes the following changes to Schedule A: Waste Acceptance:

- the removal of a licence limit for the amount of inert waste accepted for recovery at the facility,
- introduction of an allowance for construction and demolition waste with a limit of 27,320 tonnes per annum and
- permit inclusion of asbestos in the C&D waste stream.

The licensee states that the current restriction on the permissible quantities of inert waste at the site for recovery, restoration and development works could result in odour nuisance and the environmentally unsound practice of importing raw material for development works. The licensee requests that the restriction of acceptance of inert waste on-site for the purposes of restoration and aftercare be removed from Schedule A. The licensee states that this would bring the East Galway 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.

Technical Committee's Evaluation:

This request was originally included as part of a submission during the review of the licence by the licensee and was fully addressed in the inspector's report. The proposed changes are outside the scope of this licence review.

Recommendation:	No change	

A.16. D.8 Waste Monitoring

Schedule D.8 states:

Waste class:	Trajuncy :	Parationer	Method
Bio-stabilised residual waste	Every 200 tonnes from each source ^{note 1}	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.

The licensee states that the frequency is excessive with no apparent basis in published research, it is costly and would cause a Health and Safety risk at MRF's. The licensee states that it is not clear how the responsibility for carrying out this rate of testing is to be transferred to the MRF's. The licensee notes that the Agency has committed to covering the full costs of such testing for the first year.

<u>Technical Committee's Evaluation:</u> A draft "Protocol for the Evaluation of Biodegradable Municipal Waste sent to landfill by Pre-Treatment Facilities", November 2009, is available to download from the EPA's website which refers to the sampling frequency. This draft manual sets out the sampling and monitoring regime, which will provide acceptable evidence to the EPA of BMW content of MSW sent to landfill.

The guidance in the draft Protocol and the associated reporting spreadsheet will be field tested over the coming months, with a view to finalising the document by July 2010. Any interested party is invited to make a submission on the content and operation of the protocol up to 1 April 2010.

Table D.8 refers solely to the monitoring of biostablised residual waste which is defined in the licence as 'residual biodegradable municipal waste that has been treated to achieve an EPA-

approved biodegradability stability standard (as defined in this licence) prior to landfilling or alternative use agreed. The monitoring frequency referred to in Table D.8 can be reduced if an alternative protocol is agreed in advance with the Agency under Condition 1.8.2. The landfill may not need to carry out the monitoring if the upstream facility can prove that the bio-stabilised residual waste meets the bio-stabilised residual waste criteria, in accordance with Condition 1.8.2.

Recommendation:	No change	 		
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Third Party Objections

Two third party objections were received.

Objector No. 2	Date Received
Tim Broderick MCC, Kilconnell, Ballinasloe, Co. Galway, Paul Connaughton MCC, Dermot Connelly MCC, Tomas Mannion MCC, Michael Mullins MCC	12 November 2009

Objector No. 3	Date Received	
Margaret Lohan, Secretary, Kilconnell, New Inn, Cappataggle Anti-Dump Group (CADG)	13 November 2009	
C/o Woodberry, Cabbataggle, Ballinasloe, Co. Galway.		
Enclosed in the objection were:		
 A letter from the Cappataggle District Community Group Water Scheme Co-op Society Limited and 		
 163 pages containing several hundred signatures opposing asbestos acceptance at the landfill. 		

The document contains several points of objection each of which have been listed below. The third party objections are concerned largely with the proposed authorisation for the acceptance of hazardous asbestos waste for disposal at the facility.

The Technical Committee has grouped these objections based on the issues raised.

- B. 1 Asbestos Waste planning permission for a residual non hazardous waste facility.
- B.2 Asbestos Waste Greenstar have a valid licence for a residual non hazardous waste facility.
- B.3 Need for ensiling in separate cell
- **B.4 Aftercare of landfill**
- **B.5 Criminal Conviction**
- **B.6 Community Concern**
- **B.7 Hours of Operation in the Borrow Area**
- **B.8** Loaded trucks parked inside the gates.
- B.9 Water courses Risk of pollution and health implications
- **B.10 Boreholes**
- **B.11 Health Hazard of asbestos**

B. 1 Asbestos Waste – planning permission for a residual non hazardous waste facility.

Objector No.2 (Councillors Tim Broderick, Paul Connaughton, Dermot Connolly, Tomas Mannion and Michael Mullins) states that the company was granted planning permission for a residual non-hazardous facility and a new planning application and EIS should be required if Greenstar are to accept hazardous asbestos waste.

Objector No. 3 (Margaret Lohan, Secretary, Kilconnell, New Inn, Cappataggle Anti-Dump Group (CADG)) states that Greenstar are using the EPA-initiated review of their waste licence to change the use of the landfill to allow the acceptance of asbestos and therefore the need to submit a new planning application and EIS to the Planning Authority is avoided.

<u>Technical Committee's Evaluation:</u> The proposed amendment to the licence is made primarily on the basis that there is already provision in Condition 5.10 of the waste licence (W0178-01) to accept "non-hazardous asbestos waste" (and the proposed revision will amend the anomaly stemming from the fact that all asbestos waste has been classified as hazardous waste since 2002).

The facility is a non-hazardous waste landfill. The EPA Technical Guidance note "The Landfilling of Asbestos Waste" states "Construction materials containing asbestos can be determined to meet the definition and criteria of a stable non-reactive hazardous waste suitable for disposal in a non-hazardous landfill provided it is landfilled in accordance with the requirements of Section 2.2.3 of the Annex to the Council decision, 2003/33/EC, on the criteria and procedures for the acceptance of waste at landfills."

The National Hazardous Waste Management Plan 2008 – 2012 recommends that at least one non-hazardous landfill facility be authorised to accept construction material containing asbestos as set out in article 6(c)(iii) of the Landfill Directive (1999/31/EC) and section 2.3.3 of the Annex to Council Decision 2003/33/EC.

Whether the planning permission for the facility extends to the acceptance of asbestos waste is a matter for the planning authority.

Recommendation: No change

B.2 Asbestos Waste – Greenstar have a valid licence for a residual non hazardous waste facility.

Objector No. 3, CADG objects to the proposed authorisation for the acceptance of hazardous asbestos waste for disposal at the facility. Objector No.3, CADG states that the waste licence issued to Greenstar Recycling Holding Limited (W0178-01) was for "non-hazardous waste".

<u>Technical Committee's Evaluation</u>: The licensee made a submission during the review of the licensee in relation to the acceptance of asbestos for disposal. A further submission from the licensee (under article 16(3)(a) of the Regulations) was received that clarified the rationale for the acceptance of asbestos and the method by which it will be managed.

The Inspector's report addresses the recommended decision to permit the acceptance at the facility of asbestos waste for disposal. The proposed amendment to the licence is made primarily on the basis that there is already provision in the licence to accept "non-hazardous asbestos waste" (and the proposed revision will amend the anomaly stemming from the fact that all asbestos waste has been classified as hazardous waste since 2002) and there is currently no capacity in the State for the landfilling of asbestos, meaning that all asbestos is exported.

Condition 5.10 has been amended and sets out the requirements to control the disposal of asbestos waste at the landfill.

The facility is a non-hazardous landfill as defined in the Landfill Directive (1999/31/EC). The National Hazardous Waste Management Plan 2008 – 2012 states "The landfilling of asbestos is subject to a unique set of criteria. As a 'stabilised non-reactive hazardous waste', construction materials containing asbestos (EWC 17 06 05*) and other suitable asbestos waste may be accepted at non-hazardous landfills, subject to a set of strict waste acceptance and waste management criteria being followed." Condition 5.10.1 of the PD requires that "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 Decision 2003/33/EC. Article 6(c)(iii) of the Landfill Directive (1999/31/EC) specifically allows that stable non-reactive hazardous wastes can be disposed of in non-hazardous landfills subject to certain specified conditions being met. Council Decision 2003/33/EC elaborates on the conditions and sets down detailed and unique criteria by which asbestos waste can be disposed of at non-hazardous landfills.

This licence amendment will help address the national capacity need for asbestos disposal. The proposal satisfies the recommendations of the National Hazardous Waste Management Plan that at least one non-hazardous landfill facility be authorised to accept construction materials containing asbestos. The proposal conforms with the requirements of the Landfill Directive and associated EU legislation.

Recommendation: No change

B.3 Need for ensiling in separate cell

Objector No. 3, CADG states that Greenstar have made no provision for the development of a distinct and separate cell for hazardous waste only. Objector No.3, CADG states that the waste licence was granted based on the technical information provided which clearly outlines the construction of a three-cell structure development to take waste over a ten year period.

<u>Technical Committee's Evaluation:</u> Condition 1.12 requires the licensee to submit to the Agency for its agreement updated written procedures for the acceptance and handling of all wastes. These procedures shall include details of the treatment of all waste to be carried out in advance of acceptance at the facility and shall also include methods of characterisation, classification and coding of waste. The procedures shall have regard to the Council Decision (2003/33/EC) establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 and Annex II to Directive 1999/31/EC on the landfill of waste.

Condition 5.10.1 requires that asbestos waste disposed at the facility complies with the requirements of Article 6(c)(iii) of the Landfill Directive and be accepted and managed in accordance with the procedures laid down in Section 2.2.3 of the Annex to Council Decision 2003/33/EC.

In accordance with Condition 5.10.3 of the PD "Disposal of asbestos waste shall be into prepared bays or trenches of at least 2 metres in depth and which are formed in a precisely located self contained cell that does not accept any biodegradable non-hazardous waste."

The Technical Committee recommends that Schedule B: Engineering Works is amended to insert a requirement for the licensee to submit for approval any proposals for the development of precisely located self-contained cells for asbestos waste.

Recommendation: Amend Schedule B: Specified Engineering Works to insert:

Development of precisely located self contained cells for asbestos waste.

B.4 Aftercare of landfill

Objector No. 3, CADG believes that allowing Greenstar to accept hazardous materials fundamentally alters the management, aftercare and risk profile of the landfill. No commitment has been given to ensure that the operators will remain compliant in the management of a hazardous landfill in the long term as they may not be in a position to surrender their licence.

Technical Committee's Evaluation:

As stated in the National Hazardous Waste Management Plan 2008-2012, the landfilling of asbestos "must be clearly marked on all maps and its presence in a dedicated area means that a landfill licence cannot be surrendered in relation to that area." This has long term implications for the licensee regarding the management of the landfill in its aftercare phase, and for the establishment of financial provision in accordance with Condition 12.1.3 "to cover any liabilities associated with operation (including closure and aftercare) of the facility."

Regarding physical planning for aftercare, in accordance with Condition 4.1 the licensee shall maintain and update to the satisfaction of the Agency a detailed Restoration and Aftercare Plan (RAP) for the facility.

Regarding financial planning for aftercare, Condition 12.1.1 of the PD requires that "The licensee shall as part of the AER, provide an annual statement as to the measures taken or adopted at the site in relation to the prevention of environmental damage, and the measures in place in relation to the underwriting of costs for remedial actions following anticipated events (including closure) or accidents/incidents, as may be associated with the carrying on of the activity."

Thus the long term view must be taken by the licensee and reviewed on an annual basis to ensure that proper preparations are made to manage the facility post-closure and potential liabilities are provided for.

Recommendation: No change

B.5 Criminal Conviction

Objector No.2 and No. 3(CADG) refer to the EPA's successful prosecution of Greenstar Holdings Limited for breaches of its Waste Licence Reg. No. W0178-01 at East Galway Residual Landfill (Kilconnell). The objectors feels that the licensee has failed to comply with the terms of the existing licence and therefore lack confidence in the facility managing a hazardous material.

<u>Technical Committee's Evaluation</u>: In November 2008 Greenstar Recycling Holdings Limited were successfully prosecuted for failing to ensure that activities on the site were carried out in a manner such that emissions did not result in significant impairment of or significant interference with the environment beyond the facility boundary and failing to ensure that odours did not give rise to nuisance at the facility or in the immediate area of the facility.

I have consulted with Damien Masterson of the Agency's Office of Environmental Enforcement in relation to KTK landfill (W0081-03), a facility owned by Greenstar and authorised up until its closure in 2008 to accept asbestos waste. He agrees that the licensee has demonstrated technical capacity in the handling and disposal of asbestos waste by the way of operation of the KTK landfill, which was accepting asbestos waste for disposal in compliance with licensee conditions until acceptance ceased. The licensee proposes to use similar standard operating conditions to manage asbestos waste accepted at East Galway landfill.

Condition 5.10 sets out the requirements to control the landfilling of asbestos waste at the facility.

Condition 1.12 requires the licensee to submit to the Agency for its agreement updated written procedures for the acceptance and handling of all wastes.

While acknowledging the prosecution taken by the EPA against Greenstar Recycling Holdings Limited, the Agency under the provisions set out in Section 40(8) of the Waste Management Acts 1996 to 2008 deems the applicant to be Fit and Proper Persons for the purposes of this licence review. The Fit & Proper Person assessment requires three elements of examination, technical ability, legal standing and financial standing. It is the technical committee's view, that the licensee can be deemed a Fit & Proper Person for the purpose of this licence.

Recommendation: No change

B.6 Community Concern

Objector No. 3, CADG states that Greenstar received planning permission to accept treated, residual waste from the Connaught Region and within a year of opening, Greenstar applied to invoke the 'proximity principle' and got permission to take waste from all over Ireland. Now they are taking advantage of national policy directive which encourages the treating of asbestos in Ireland. The community "has had enough of this calculated and cynical exploitation of loopholes and the creeping eroding of permissions which benefits only one party and which continues to be detrimental to the wellbeing of this community."

<u>Technical Committee's Evaluation:</u> The planning and waste licensing regimes are two completely separate regulatory processes. The EPA waste licence does not restrict where the waste originates.

The EPA's proposed amendment to the licence is made primarily on the basis that there is already provision in the licence to accept "non-hazardous asbestos waste" (and the proposed revision will amend the anomaly stemming from the fact that all asbestos waste has been classified as hazardous waste since 2002) and there is currently no capacity in the State for the landfilling of asbestos, meaning that all asbestos is exported.

Recommendation: No change

B.7 Hours of Operation in the Borrow Area

Objector No. 3, CADG states that a condition of planning is that all activity in the borrow area must cease at 7pm due to the disturbance to residents in homes in the vicinity of the Dump.

<u>Technical Committee's Evaluation:</u> This matter was assessed as part of the licence application Reg. No. W0178-01 and was not considered, nor was consideration sought, as part of this licence review.

Recommendation: No change

B.8 Loaded trucks parked inside the gates.

Objector No. 3, CADG states that "local residents have grave concerns as to the reasons, necessity and purpose of Greenstar allowing loaded trucks to park inside the gates of the Dump after the Dump has supposedly closed for the night. This practice was again witnessed by a number of local elected members of Galway County Council as recently as last week"

<u>Technical Committee's Evaluation:</u> The parking of loaded trucks inside the gates of the landfill, if not in compliance with the existing licence, is an enforcement matter and should be forwarded to the Office of Environment Enforcement (OEE) for further investigation. The Technical Committee will bring this matter to the attention of the relevant staff in OEE.

Recommendation: No change.

B.9 Water courses - Risk of pollution and health implications

Objector No. 2 raises major concerns in relation to the potential risk of pollution and subsequent health implication as the waste facility is located on dividing ground of water courses entering the Shannon River Basin catchment area to the East, and the western River Basin catchment are to the West. "The soil composition in this particular should also be taken into consideration."

<u>Technical Committee's Evaluation:</u> The impact of the landfill on the surface water was assessed in the original licence application. The PD contains various measures to be taken to ensure the protection of surface water quality. These include effective surface water management infrastructure and surface water retention lagoon, provision of a grit trap and oil interceptor. Monitoring of the surface water discharge is also required in the PD.

Condition 5.10 sets out the requirements to control the asbestos waste to be disposed at the landfill. It should be noted that asbestos is not soluble in water.

Recommendation: No change

B.10 Boreholes

Cappataggle District Community Group Water Scheme Co-Op Society Limited submitted a letter with the Objector No. 3 CADG objection. The Group Water Scheme (GWS) is concerned that the "toxic waste facility" will contaminate or pollute their existing supply. The GWS asked "what type of guidelines are in place concerning a toxic waste facility and a supply for a water scheme. What are the legal requirements in place for the exact distance between both."

<u>Technical Committee's Evaluation:</u> The impact of the landfill on the ground water was assessed in the original licence application. The PD includes requirements for the lining of the landfill and effective groundwater management infrastructure to protect groundwater resources from pollution by the waste activities.

Condition 6.4.1 states that there shall be no direct emissions to groundwater. Condition 6.4 and Schedule D of the licence requires monitoring of the groundwater. Condition 9.4.3 requires that in the event of the facility having an adverse impact on water supplies, this should be treated as an emergency and alternative water supplies provided.

It is considered that the operation of the landfill in accordance with conditions specified in the PD will protect groundwater resources.

Construction materials containing asbestos waste may be landfilled at landfills for non-hazardous waste in accordance with Article 6(c)(iii) of the Landfill Directive. This is on the basis that the

waste is stable and non-reactive. It is therefore not soluble in water and, notwithstanding the presence of existing safeguards including the landfill liner and leachate collection systems, cannot therefore travel between the landfill and a source of drinking water.

Recommendation: No change

B.11 Health Hazard of asbestos

Objector No. 2 states "Leading World Health Experts have conclusively and consistently proved that asbestos is a highly toxic carcinogenic agent, and asbestosis is a major killer. As the as waste facility is in close proximity to many residential dwellings, and the villages of Kilconnell, New Inn, Cappataggle and woodlawn, we feel that this constitutes a major health hazard."

Technical Committee's Evaluation: Certain hazardous waste is suitable for disposal in non-hazardous landfills: so called stable non-reactive hazardous waste (SNRHW). Article 6(c)(iii) of Council Directive 1999/31/EC (Landfill Directive) on the landfill of waste specifies those waste which may be accepted in a non-hazardous landfills and allows for certain hazardous waste to be deposited provided they are stable and non-reactive. The EPA Technical Guidance note "The Landfilling of Asbestos Waste" states "Construction materials containing asbestos can be determined to meet the definition and criteria of a stable non-reactive hazardous waste suitable for disposal in a non-hazardous landfill provided it is landfilled in accordance with the requirements of Section 2.2.3 of the Annex to the Council decision, 2003/33/EC, on the criteria and procedures for the acceptance of waste at landfills".

Asbestos is a hazardous substance and, when waste, a hazardous waste. Its handling and removal from buildings or other installations is subject to regulated health and safety and environmental provisions. By the same token, its disposal at landfill must be controlled to ensure there is no risk to human health from the release of airborne fibres resulting from the transport and deposit of waste asbestos. Condition 5.10 of the PD sets out the requirements to control the asbestos waste to be disposed at the landfill. Amongst other controls proposed in condition 5.10, it should be noted that condition 5.10.2 requires that asbestos-based waste must be double-wrapped in heavy-gauge plastic, which is clearly labelled to indicate the presence of asbestos. This requirement equally applies to upstream activities and will ensure that asbestos will arrive at the landfill under controlled conditions that will not allow for environmental pollution to occur.

Recommendation: No change

Overall Recommendation

It is recommended that the Board of the Agency grant a licence to the licensee

- (i) for the reasons outlined in the Proposed Decision and
- (ii) subject to the conditions and reasons for same in the Proposed Decision, and
- (iii) subject to the amendments proposed in this report.

Signed

Jennifer Cope

for and on behalf of the Technical Committee