



This report has been cleared for submission to the Board by the Programme Manager, Paddy Nolan
Signed: N. Keavey Date: 01/09/05

REPORT OF THE TECHNICAL COMMITTEE ON OBJECTIONS TO LICENCE CONDITIONS

TO:	Directors
FROM:	Technical Committee - LICENSING UNIT
DATE:	01/09/2005
RE:	Objection to Proposed Decision for Limerick County Council, Gortadroma Landfill, Waste Reg: 17-3

Application Details	
Class(s) of activity:	3 rd Schedule: 1, 5(P), 6, 7, 11 and 13. 4 th Schedule: 2, 3, 4, 9, 10, 11, 12 and 13.
Location of activity:	Gortadroma Landfill, Gortadroma, Ballyhahill, County Limerick
Licence application received:	02 July 2004
PD issued:	26 April 2005
First party objection received:	23 May 2005
Third Party Objection received	23 May 2005

Company

This waste review application relates to an existing facility consisting of a landfill and a civic waste facility at Gortadroma, Ballyhahill, County Limerick. The review of the existing licence was initiated to allow for the construction of an additional 11 lined cells and installation of associated leachate, landfill gas and surface water management infrastructure at the facility. The proposed decision allows the facility to carry out landfilling, composting, storage and recovery of dry recyclables at the civic waste facility. The facility is allowed to accept 130,000 tonnes per annum (tpa) for disposal and 77,000 tpa for recovery.

Consideration of the Objection

The Technical Committee, comprising of Pernille Hermansen (Chair), Jonathan Derham and Malcolm Doak, has considered all of the issues raised in the Objections and this report details the Committee's comments and recommendations following the examination of the objections together with discussions with the inspector, Breen Higgins, who also provided comments on the points raised.

This report considers the one valid third party objection and the first party objection.

First Party Objection

The consultant for the applicant submitted an objection (dated 20 May 2005) addressing the Agency on a number of conditions contained in the proposed decision of 26 April 2005 mainly relating to installation of infrastructure and environmental monitoring requirements at the facility:

A.1. Condition 3.10

The applicant objects to Condition 3.10 stating that silt traps are not required on all surface water discharges from the facility as all surface water is diverted to and discharges from the storm water settling tanks. The storm water settling tanks operate on a weir system which allows retention of the waters and settlement of suspended solids. Furthermore the applicant requests that oil separators are not required on all surface water discharges from the facility but only from run-off from hardstanding areas before the discharge to the surface water settling tanks

Technical Committee's Evaluation: The TC agrees that the storm water settling tanks will ensure settlement of suspended solids. The TC notes that uncontaminated storm water such as storm water from roof building should not be discharged to silt trap and/or oil separator.

Recommendation: For the purposes of clarity Condition 3.10 should be amended to read as follows:

The licensee shall install and maintain oil separator at the facility to ensure that all storm water discharges (excluding storm water from roof buildings) from the facility pass through an oil separator prior to discharge. The separator shall be a Class I full retention separator and be in accordance with I.S. EN 585-2:2003 (separator systems for light liquids)

A.2. Condition 3.19 (D)

The applicant objects to Condition 3.19(d) stating that it is not in accordance with the guidance in the Agency Landfill Manuals Landfill Site Design. Further the applicant states that complying with a minimum fall of 1:50 in all directions may result in the necessity to excavate to greater depths or construct cells of smaller size than those described in the EIS with the preliminary design based on the recommendations of the Landfill Site Design Manual.

The Proposed Decision requests that all further cell designs be forwarded to the Agency as Specified Engineering Works (SEW) and agreed prior to commencement of construction. The applicant requests that this be amended to reflect the recommendation of the Site Design Manual or to refer to "unless otherwise agreed with the Agency":

Technical Committee's Evaluation:

The TC notes that Section 7.3.2 of the Landfill Site Design Manual as referred to by the applicant specifies that the base of cells should be sloped with a minimum fall of 1:50 towards the leachate collection sump [in any cell] and a 1% fall is specified for the main [inter-cell] collector pipe. This is considered BAT and the final design will have to include these requirements.

The applicant has stated in the licence application (Attachment D.2) that design and specifications for various infrastructure will be available at the detailed design stage (see objection below); accordingly, the TC notes that all final cell design detail will be forwarded to the OEE as SEW and agreed prior to commencement of construction. This will provide an opportunity to check that the correct basal slopes are in place.

Recommendation: No change.

A.3. Condition 3.19 (F)

The applicant requests that the condition be amended as the drawing referred to shows the final contour levels of the filled cells and not the formation levels of these cells.

Technical Committee's Evaluation: The TC notes that Drawing No. 6.5 shows the final contour levels. The applicant states in the licence application (Attachment D.2.i) that formation levels will be determined at the detailed design stage.

Recommendation: Delete Condition 3.19(F).

A.4. Condition 3.25.2 (C)

The applicant requests that the number of three leachate monitoring points be reduced to one monitoring point per cell as previous odour issues at the facility have been partially attributed to infrastructure which punctures the capping system allowing landfill gas to be released. The applicant queries the need for additional leachate monitoring points in relation to the installation of leachate recirculation system as all the cells with proposed leachate recirculation installed will be fully engineered cells and the lining systems are constructed to have a fall to one specific point which is the lowest point in the cell from where the leachate is abstracted and the highest head of leachate is recorded. Furthermore the applicant proposes to install a separate leachate collection pump in cell 11 and in all future cells. These collection sumps will be fitted with level recording and attached to the scada control system.

Technical Committee's Evaluation: The TC notes that with just one leachate monitoring point it will be impossible to assess the working of the leachate recirculation as leachate perching may not be identified. The TC considers that three monitoring points are essential for adequate monitoring of leachate head in the cells, one of these monitoring points may well be the leachate collection sump as proposed by the applicant. It is not possible to calculate a leachate/water table without three points of reference.

Recommendation: No change

A.5. Condition 6.11

The applicant requests that the word "telemetry" be replaced with "automated control" system. An automated control system has been installed at the facility for the control and management of leachate. The system is a "hard-wired" system linked to a PLC control system in the administration block.

Technical Committee's Evaluation: Agreed.

Recommendation: Condition 6.11 should be amended to read as follows:

Automated Control System

Unless otherwise agreed in advance with the Agency **an automated control** system shall be maintained at the facility. All facility operations linked to the **automated control** system shall have a manual control which will be reverted to in the event of break in power supply or during maintenance.

A.6. Condition 6.11.2(II) & Schedule C.2.2

The applicant requests that the condition be deleted as the storm water tanks only discharge to the White River through a pipe and there is no discharge from the tanks to perimeter streams.

Furthermore the applicant queries the requirement for continual level monitoring within the storm water settling tanks. The applicant states overflow of the tanks is prevented due to their weir system.

Technical Committee's Evaluation: The TC considers that continual level monitoring is not needed at the storm water settling tanks due to the weir system. The TC notes that there is no discharge to perimeter streams from the storm water tanks; rather only to White River, and recommends the condition be amended to reflect this. However as part of the routine visual examination required in Condition 6.8.1 the applicant should check the water levels in the tanks to confirm operation of the unit and in particular that the size of the tanks are appropriate to handle storm water run-off from the facility.

Recommendation: Condition 6.11.2(II) should be amended to read as follows:

- (ii) Recording of **flows at the outlet of the storm water settling ponds;**

A.7. Condition 6.11.2(III)

The applicant states that continuous quality monitoring equipment will be installed at the outlet of the storm water settling tanks and queries whether additional quality monitoring equipment is required to be installed at the end of the discharge pipe from the tanks to the White River.

Technical Committee's Evaluation: Condition 6.8 requires that the applicant submit a proposal for the installation and maintenance of continuous monitoring to be carried out at the outlet of the storm water settling tanks.

Condition 6.11 states that the automated control system shall be installed and the system shall include the recording of the surface water quality at the outlet of the storm water settling ponds. The TC notes that no water is being discharged to the perimeter streams from the storm water settling tanks (see A.6 above) and recommends that surface water quality only be recorded at the outlet of the storm water settling tanks.

Recommendation: Condition 6.11.2(iii) should be amended to read as follows:

Quality of the surface water at the outlet of the storm water settling ponds (in accordance with Condition 6.8.3);

A.8. Condition 10.1

The applicant requests that the condition be amended as they see difficulties in installing a final cap at the set time frame of twelve months after filling of the cells has ceased.

Technical Committee's Evaluation: The TC notes the concern of the applicant in relation to the possibility of constructing a final cap within the set time frame and amend the condition as set out below which would be in line with current requirement for landfill facilities licensed by the Agency.

Recommendation: Condition 10.1 should be amended to read as follows:

The licensee shall restore the facility on a phased basis. Unless otherwise agreed, filled cells shall be permanently capped within **twenty-four** months of the cells having been filled to the required level.

A.9. Condition 11.7 and Schedule E

The applicant requests that the condition be amended as the dates for submittal of the AER varies.

Technical Committee's Evaluation: Agreed.

Recommendation: For the purposes of clarity the text in Schedule E: AER should be amended to read as follows:

Annual Environment Report (AER)	Annually	By 31 st March of each year.
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A.10. Schedule B.3

The applicant requests that the condition be amended so a maximum rate of 5 m³/hour be applied subject to the minimum river flow of 50 l/s and minimum 40 dilutions of effluent at all times. The pump installed at the leachate lagoon is variable speed pump which uses the SCADA system to check and regulate the flow from the pump every fifteen minutes. According to the applicant the pump is dependant on

the head of leachate above it and cannot be set to run on a continual flow rate. If this is not acceptable the applicant proposes the insertion of "unless agreed otherwise with the Agency".

Technical Committee's Evaluation: Agreed.

Recommendation: Amend Schedule C.6 *Emission Limits for Treated Leachate Discharged to Surface Water* as follows:

Emission Point Reference No.:	Treated leachate discharge point
Volume to be emitted:	Maximum in any one day: 120m ³ /day Maximum rate per hour: 5 m³
Time of emission:	No discharge below a minimum river flow in White River of 50 l/s, and must be greater than 40 dilutions of effluent at all times.

A.11. Schedule C.3

The applicant requests that the parameter "Flow (pumped water from interceptor) be deleted as there is **no** pumped groundwater interceptors installed at the facility.

Technical Committee's Evaluation: The TC notes that in Section 3.8.4 Potential Impacts of the EIS submitted with the application, the applicant states that: *The groundwater will be locally lowered during construction of the new cells This will be of temporary nature and the groundwater conditions will equilibrate after cell completion. Due to the naturally high groundwater levels control measures such as interceptor drains and/ or sub cell drainage system will be required to locally control the high water table.* The TC considers it appropriate to monitor the flow of the water pumped from interceptors during the cell construction phase at the facility.

Recommendation: For the purposes of clarity a note should be added to the parameter *Flow (pumped water from interceptor)* in Schedule C.3 as follows:

Note 5: Flow (pumped water from interceptor) only to be measured during the operation of the dewatering/groundwater control system.

A.12 Schedule C.2.3

The applicant requests that note 5 attached to the parameter Ammoniacal Nitrogen be amended. Note 5 refers to analysis using a Spectrophotometer. The applicant proposes the insertion of "or alternative method as agreed with the Agency" to allow research to be carried into the cost and practical impacts of this method of analysis.

Technical Committee's Evaluation: The TC considers the requirement of note 1 in Schedule C.2.3 adequate in relation to the method used for analysis of Ammoniacal Nitrogen. The note requests that all the analysis shall be carried out by a competent laboratory using standard and internationally accepted procedures. Note 5 can be thus amended.

Recommendation: Note 5 should be amended to read as follows:

Note 5: A grab sample shall be taken at the inlet and the outlet of the storm water settling ponds on a daily basis.

Third Party Objections

Gortadroma Action Group

One Third Party Objection submitted by Tim Mullane & Others, Gortadroma Action Group, Carnagh Ballyhahill County Limerick (dated 19 May 2005) is considered.

The objection contains a cover letter as well as a six page objection letter divided into four sections:

1. Objection
2. Objection 1: Geology/Hydrology
3. Objection 2
4. Conclusion

Mr Mullane writes on behalf of the members of the Gortadroma Action Group (GAG). In the cover letter, Mr Mullane states that the group is strongly opposed to the further extension of the landfill due to the impact on the landscape and the potential effect it may have on the water supplies from wells depending on the groundwater under or near the proposed extension site. Furthermore the group objects to the conditions which they consider would allow the local authority to reduce its efforts at management of the facility to the ultimate detriment of the local community

B.1 Objection

Mr Mullane states that the main reason for the objection is that the facility is located in an area that is fundamentally unsuited for such an operation and continues to cause on-going problems for the local residents. According to the objector the only way to adequately address this issue is to refuse to revise the licence.

The second ground for objection is that according to the objector the Agency has reduced the standards progressively from the issuing of waste licence 17-1 and thereby reduce the protection afforded to the local community. The objector states that the reduction/omission of standards would lead to the local authority dropping their standards to match the requirements of the licence and give the local community nothing with which to defend themselves.

Technical Committee's Evaluation: The first waste' licence (WL 17-1) and the second waste licence (WL 17-2) were issued on 26/11/99 and 25/9/03 respectively. The second licence was subsequently amended (WL 17-2/A) on 9/8/05 to provide for provisions in accordance with the WEEE Regulations (SI340 of 2005). The Proposed Decision, subject of this objection, has been updated/ revised to take into account the POE Act and the IPPC Directive. The layout of the proposed decision may vary from previous issued licences but

contains the same key measures/controls as licences issued in the past for this facility. Furthermore the TC has reintroduced conditions from the existing licence (WL 17-2) (see recommendations below).

Recommendation: No change

B.2 Objection 1 Geology/Hydrology

The objector states that the main issue is the question of the effect of the proposed extension on the wells supplying drinking water to the local residences/farms. The extension of the facility brings it closer to residences to the north, east and south of the boundary than the existing licensed facility. The objector states that all these residences have private wells and are possibly supplied from the same underground source or aquifer. The objector notes that the information submitted by the applicant does not establish whether there is an aquifer supplying these houses.

The objector questions the whole reason for the necessity for the production of the EIS if it does not take the issue of human habitat seriously and states that no development should be permitted until the impact on human beings are clear. The objectors disagree with the applicant's assessment of the likely effects on groundwater being minimal. The fact that the applicant proposes to gather additional information in relation to the overburden deposits constituting an aquifer during the site investigation for the detailed design of the proposed cells could cause irreparable damage to the local water supplies with no adequate safe alternative supply. The objectors question whether the approach and preparatory investigations of the applicant meets the requirements set out in Landfill Site Investigation Manual and whether the Agency's standards have been applied to the reports in the **EIS**.

The objectors note the decision of An Bord Pleanála to refuse permission for the development of the southern section of the proposed extension.

Furthermore the objectors state that the continuous dewatering suggests that the applicants know it is dealing with an area generously supplied with underground water.

Technical Committee's Evaluation: The DoELG-EPA-GSI Groundwater Protection Response Matrix for the proposed site is R2¹ resulting in the site being considered suitable for the development of a landfill site subject to guidance in the EPA Landfill Site Design Manual or the conditions of a waste licence. The hydrogeological survey shows that the groundwater flow at the facility is in a south-westerly direction.

Groundwater monitoring results from the existing landfill show an impact of landfilling along the western boundary of the site, west of cells 1-4, which are unlined cells. A bentonite cut off wall has been installed around cells 1-4 which prevent uncontrolled leachate discharge from the cells. Groundwater monitoring carried out in 2003, of private wells 500m upgradient and 1000m downgradient of the site show microbial contamination in 31 of 33 wells monitored. According to the applicant this can be contributed to septic tanks and agricultural sources. The applicant states that there is no indication that the landfill is impacting on the groundwater quality at any of these wells.

The nearest private dwelling to the facility is located 90m from the southern boundary of the facility. The TC recommends that additional groundwater monitoring boreholes are installed down gradient of the proposed landfill cells and the residences south of the boundary of the extension and that monitoring of private wells downgradient of the landfill is carried out (see section B.3.4.3 Monitoring of private wells below).

The TC considers that having regard to the groundwater flow, the aquifer response matrix, and groundwater monitoring, the underlying aquifer is not at risk from the existing landfill or the proposed extension. Furthermore measures are in place to monitor the groundwater quality in boreholes downgradient of the facility as well as any downgradient private wells, and Condition 11.1.4 requires that any possible environmental contamination of groundwater be treated as an incident and notified to the Agency in accordance with the Condition.

In relation to the adequacy of the assessment of groundwater impact carried out by the applicant and detailed in the EIS submitted with the application, the TC notes that the Inspector's Report accompanying the Recommended Decision states the Agency acknowledged that the EIS complied with the requirements of the EIA and Licensing Regulations in the Article 14(2)(a) letter issued to the applicant on 08/03/05.

The objection regarding "continuous dewatering" at the facility is dealt with in Section A. 11 of this report.

Recommendation: Note 5 should be added to Schedule C.3 Groundwater Monitoring as set out below:

Groundwater Monitoring

Location: Groundwater Wells [SA1, SA2, GW5, SA4, BH2, BH10, BH13, Collins Well (new)] ^{Note 5}

Note 5: And any additional groundwater monitoring boreholes downgradient of the proposed extension to be agreed by the Agency.

6.3 Objection 2

B.3.1 Condition 1: Scope

Hours of Operation

The objectors object to the opening hours at the facility. GAG states that the hours of work for construction has not been included in the licence which the group feels leads to situation that can be exploited by the Local Authority, contractors and subcontractors. The objectors state that the hours of work should not start earlier than 8:00 on any morning and specific mention should be made of Construction or maintenance work in this condition. The objectors propose that work should cease at 18:30 at the latest each day of the working week except in emergency.

Technical Committee's Evaluation:

The TC notes that the operational hours allowed in the proposed decision are as set in the existing licence (WL 17-2):

- (c) The landfill at the facility may be operated only during the hours of 7.30am to 8.00pm Monday to Friday inclusive, 7.30am to 6.30pm on Saturdays and 8.00am to 4.30pm on Sundays and Bank Holidays.
- (d) Operations on Sundays and Bank Holidays are limited to essential maintenance and fly spraying activities only.

The TC considers the objectors point to be reasonable, particular as the applicant states in Section 3.5.6 of the EIS submitted with the application that the impact of construction noise will be significant, albeit temporary. Based on this, the TC recommends that the hours for construction be included in the Proposed Decision as proposed by the objectors.

Recommendation: For the purposes of clarity delete Condition 3.18. Insert Condition 1.6.1.(e) to read the following :

Construction activities at the facility is allowed only during the hours 8:00am to 18:30pm Monday to Friday inclusive. No construction activities are allowed on Sundays and Bank Holidays.

B.3.2 Condition 3: Infrastructure and Operation

The objectors notes that the conditions of the licence does not seem to apply contract works or to contractors except for Conditions 3.17 and 3.18 meaning that the same control measures in relation nuisances does not apply to contractors.

Technical Committee's Evaluation:

Condition 2.1.1 of the Proposed Decision requires that the applicant shall ensure that that personnel performing specifically assigned tasks are qualified on the basis of appropriate education, training and experience, as required and shall be aware of the requirements of the licence. Furthermore Condition 2.2.2.6 requires the applicant to establish/maintain procedures for training and provide training for all personnel whose work can have a significant effect upon the environment. The TC considers that this will ensure that the same control measures in relation to nuisances does apply to all contractors working at the facility. The licence conditions speak to all operators/activities carried on within the site regardless of whether by a contractor or not.

Recommendation: No change

B.3.2.1 Condition 3.19

The objectors points out that that the depth of the composite liner has decreased from 1.0 m to 0.5m and states that this should be reverted to 1.0m as set in the existing licence WL 17-2.

Technical Committee's Evaluation:

Condition 3.11.1(a) of the existing licence (WL 17-2) requires a composite liner consisting of a 1 m layer of compacted soil with a hydraulic conductivity of less than or equal to $1 \times 10^{-9} \text{ m/s}$, (or equivalent to be agreed with the Agency) overlain by a 2mm thick high density polyethylene (HDPE) layer.

In the Proposed Decision the applicant is required to install a composite liner consisting of 0.5 m of Bentonite Enhanced Soil (BES) with a hydraulic conductivity of less than or equal to $1 \times 10^{-9} \text{ m/s}$, overlain by a 2mm thick high density polyethylene (HDPE) layer. The EPA Landfill Site Design Manual notes that the 1 m clay liner (@ $k = 1 \times 10^{-9} \text{ m/s}$) may be replaced with a 0.5m thick enhanced soil liner of equivalent performance (i.e. a BES). Estimated leakage rate is one of the most efficient and defensible methods of comparing mineral liner performances.

To determine whether 0.5m BES will provide the equivalent protection to 1 m clay layer the leakage rate has been calculated for both type of liners as set out below.

$Q = k (i)$, where $Q =$ leakage rate

$k =$ permeability

$i =$ hydraulic gradient (h/d)

$h =$ height of liquid (to base of liner, so 1 m head on top of a 1 m liner gives a 2m height to base)

$d =$ depth of liner

with a permeability $k = 1 \times 10^{-9} \text{ m/s}$ the leakage rate for the two types of liner are:

0.5m BES: $Q = 1 \times 10^{-9} (1.5/0.5) = 3 \times 10^{-9} \text{ m}^3/\text{m}^2/\text{s} = 0.095 \text{ m}^3/\text{m}^2/\text{year}$

1 m clay: $Q = 1 \times 10^{-9} (2/1) = 2 \times 10^{-9} \text{ m}^3/\text{m}^2/\text{s} = 0.063 \text{ m}^3/\text{m}^2/\text{year}$

This shows that the 0.5m BES with $K = 1 \times 10^{-9} \text{ m/s}$ is less effective in controlling leakage (by a factor of 0.032 $\text{m}^3/\text{m}^2/\text{year}$), i.e. the protection provided by the two types of liner is not equivalent.

If the permeability is set at $1 \times 10^{-10} \text{ m/s}$ the calculated leakage rate Q for 0.5m BES is:

$$Q = 1 \times 10^{-10} (1.5/0.5) = 3 \times 10^{-10} \text{ m}^3/\text{m}^2/\text{s} = 0.0095 \text{ m}^3/\text{m}^2/\text{year}$$

This leakage rate for 0.5m BES ($K = 1 \times 10^{-10} \text{ m/s}$) is smaller than the rate calculated for 1 m clay (with $K = 1 \times 10^{-9} \text{ m/s}$) and the protection is therefore at least equivalent.

The TC considers that 0.5m of BES with a permeability of $K = 1 \times 10^{-10}$ will provide equivalent protection as required in the Agency's Landfill Manual Landfill Site Design.

Recommendation: Condition 3.19(a) should be amended to read:

- (a) A composite liner consisting of a 0.5m layer of BES with a hydraulic conductivity of less than or equal to 1×10^{-10} m/s, overlain by a 2mm thick high density polyethylene (HDPE) layer;

B.3.3. Condition 5: Emissions

B.3.3.1 Condition 5.5

The objectors states that the condition has been reduced to almost a meaninglessly general statement by comparison with the presentation of the same issues in previous and existing licences (WL 17-1 and WL 17-2). The objectors request that the following conditions from the existing licence (WL 17-2) be reinstated in the proposed decision: Conditions 7.7, 7.8 and 8.11.

Bird Control

The objectors request that Condition 7.7 from the existing licence (WL 17-2) be reinstated in the proposed decision.

Technical Committee's Evaluation:

The TC notes that control of nuisances in relation to birds is covered in Condition 6.18 of the Proposed Decision. However the restrictions in relation to use of gas guns are not present in the condition of the Proposed Decision.

Recommendation: The TC recommends that the wording of Condition 6.18 of should be as Condition 7.7 of the existing licence (WL 17-2). Insert the following text after the last sentence of Condition 6.18:

The use of gas operated bird scaring devices is prohibited at the facility.

Noise Control

The objectors request that Condition 7.8 from the existing licence (WL 17-2) be reinstated in the proposed decision.

Technical Committee's Evaluation:

The TC notes that Condition 7.8 of the existing licence (WL 17-2) has not been included in the Proposed Decision. However, control of noise emission should be adequately controlled by Condition 4.5 and Schedule 8.5 which negates the need to include the above mentioned condition. Furthermore the applicant is required to carry out an annual noise survey in accordance with Condition 6.9 of the Proposed Decision to ensure that they operate within the set noise limit values.

Odour Control

The objectors request that Condition 8.11 from the existing licence (WL 17-2) be reinstated in the proposed decision.

Technical Committee's Evaluation:

The TC recommends the inclusion of Condition 8.11 (of WL 17-2) in relation to odour control at the facility, as there have been several complaints in relation to odour nuisances at the facility. Further requirement for odour monitoring shall be included in Schedule C.3 Ambient Monitoring of the Proposed Decision. The TC notes that the applicant has stated in the Attachment F.8 of the application that odour monitoring in accordance with Schedule D.3 of the existing licence (WL 17-2) is being carried out at the facility, and sees no reason why this should not continue.

Recommendation: Insert the following text as Condition 6.16 and renumber the conditions accordingly. Furthermore add the column with text detailed below to Schedule C.3 *Ambient Monitoring*, below the column in relation to dust deposition and include note as detailed:

8.16 Odour monitoring

8.16.1 The licensee shall inspect the facility, its environs and odour sensitive locations daily for nuisances caused by odours.

8.16.2 As part of the odour control programme in place at the facility, the licensee shall carry out a monthly review of odour control measures in place at the facility. This shall include:

- (i) consideration of odour complaints received (including details and nature of the complaints, times and weather conditions);
- (ii) details of any monitoring carried out (including to validate complaints and identify the source of the complaint and actions taken, where relevant); and
- (iii) recommendations to deal with odour problems and implementation of these recommendations.

The licensee shall maintain these reports on site and forward them to the Agency on request.

And

C.3 Ambient Monitoring

Odour ^{Note 1}	Quarterly	See ^{Note 2}
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Note 1: Odour monitoring to be carried out at four noise sensitive locations agreed by the Agency

Note 2: Analysis for organics, mercaptans, organic acids and hydrogen sulphide.

B.3.3.2 Condition 5.6

The objectors state that there is no mention of adequate requirement to check the water quality and the flow in the river prior to emptying the pond for maintenance purposes. The requirement allowing the applicant to submit it's own conditions to the Agency without the need to publish them and include them in a printed schedule in the proposed decision is considered a significant weakness by the applicant. Furthermore the objectors note that daily/periodic visual inspection does not specify the parameters to be observed and this is further weakened by lack of mention of details of instruction/training required to carry out these inspections.

Technical Committee's Evaluation:

Condition 5.6 requires that a trigger level for the concentration of ammonia from the storm water settling ponds to be discharged to the White River shall be submitted for agreement by the Agency within one month of the date of grant of this licence. The trigger level will have to meet any legislative criteria and any agreed proposal will be available for viewing by the public.

In relation to the visual inspection to be carried out, the TC notes that as specified earlier the applicant shall ensure that all personnel performing specifically assigned tasks are qualified and are aware of the requirements of the licence as detailed in Condition 2.1 of the PD.

Recommendation: No change

B. 3.4 Condition 6: Control and Monitoring

The objectors state that Condition 6 should contain a specific condition clarifying the responsibility of the applicant to ensure that all contract work and those who carry it out adhere to the strict conditions of the proposed decision for all their activities for example Condition 6.14 in relation dust control.

Technical Committee's Evaluation:

The conditions of the PD apply to all personnel working at the facility as detailed above.

Recommendation: No change

B.3.4.1 Condition 6.16

GAG objects to attachments C7 and H1 referred to in Condition 6.16 not being an integral part of the PD.

Technical Committee's Evaluation:

The TC notes that it is general practice to refer to attachments of the licence application for further details. The PD provides the following interpretation for Attachments: any reference to Attachments in this licence refers to attachments submitted as-part of this licence application. Also Condition 1.3

reinforces the binding to the licence of programmes included in an application and cited in the licence.

Recommendation: No change

B.3.4.2 Condition 6.18

GAG objects to the omission of prohibiting bird control by use of noise polluting means.

Technical Committee's Evaluation:

This issue was dealt with in Section 3.31 Bird Control.

Recommendation: See recommendation above in Section 3.3.1 Bird Control.

B.3.4.3 Condition 6.20 & 6.20.2

The objectors states that the conditions of the PD have been diminished by not including Condition 5.4.1(b) of the existing licence (WL 17-2) relating to the maximum length of the working face in the proposed decision.

Technical Committee's Evaluation:

The TC notes that the requirement in relation to the maximum length of the working face has been omitted from Condition 6.20.2.

Recommendation: Amend Condition 6.20.2 to read:

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 no more than 50 metres horizontal depth** and have a slope no greater than 1 in 3....

Cell Cover

GAG objects to the omission in the PD of Condition 6.7 of the previous licence (WL 17-1) relating to cell cover at the end of the working week.

Technical Committee's Evaluation:

Conditions 5.4 and 5.5 should adequately address the need for cover of the working face and any other landfilled areas within the facility.

Recommendation: No change

Monitoring of private wells

GAG objects to the omission of Condition 8.6 of the existing licence (WL 17-2) relating to monitoring of private wells.

Technical Committee's Evaluation:

The TC considers it appropriate to include monitoring of private wells 500m downgradient of the landfill facility.

Recommendation: Insert the following Condition after Condition 6.16 and renumber accordingly.

Subject to the agreement of the well owners, all private wells within 500m downgradient of the facility shall be included in the monitoring programme set out in *Schedule C.3 Groundwater Monitoring*, of this licence.

B.4 Objectors' Conclusion

The objectors state that the proposed decision lacks any conditions that require the applicant to address more environmentally friendly alternatives to landfill. According to GAG, a severe weakness of the proposed decision is lack of progressive reductions in waste intake to bring the applicant's performance into line with EU and National waste management targets and objectives.

Technical Committee's Evaluation:

The TC notes that this issue was addressed in the Inspector's Report accompanying the recommended decision.

Recommendation: No change

Overall Recommendation

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

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

Signed

p.p. Joelen Keavey

Pernille Hermansen, Inspector

for and on behalf of the Technical Committee