

This Report has been cleared for
 submission to the Board by
 Programme Manager Patrick Nolan
 Signed Patrick Nolan Date: 13/11/08



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

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

TO:	Directors	
FROM:	Technical Committee	ENVIRONMENTAL LICENSING PROGRAMME
DATE:	13 th November 2008	
RE:	Objection to Proposed Decision for a waste licence review from Donegal County Council, for Ballynacarrick Landfill Site, Ballintra, Co. Donegal. Licence Register: W0024-03	

Application Details

Class(s) of activity:	3 rd Schedule: 5 (P), 6, 13 4 th Schedule: 2, 3, 4, 13
Location of activity:	Ballynacarrick Landfill Site, Ballintra, Co. Donegal
Licence application received:	5 th December 2007
PD issued:	26 September 2008
First party objection received:	23 rd October 2008
Third Party Objection received	None
Submissions on Objections received:	None

Company

Donegal County Council has operated a landfill at Ballynacarrick since 1980. This is a well established facility and operates as a low intensity landfill. The entire facility occupies an area of 9 hectares. The facility is operated by a contractor on behalf of Donegal County Council.

The existing rural landfill is surrounded on all sides by drumlin hills and agricultural land and lies on an inter-drumlin hollow running east west. Up to eight occupied dwellings are located within 500 metres of the landfill site, the nearest dwelling is a mobile home located across the road from the northeast boundary of the existing site.

The purpose of this review is to accommodate an increase in the annual intake from 24,000 tonnes to 35,000 tonnes per annum, but not an increase in the total permitted intake.

Consideration of the Objection

The Technical Committee (TC), comprising of Yvonne Furlong (Chair) and Ewa Babiarczyk, 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 licensing inspector, Dr. Jonathan Derham, who also provided comments on the points raised.

This report considers a valid first party objection submitted by RPS Consulting Engineers on behalf of Donegal County Council.

First Party Objection

A.1. Condition 3.29

The applicant objects to the requirement to provide a Wastewater Treatment Plant at the facility for the treatment of sanitary effluent, drainage from the truck wash, ramp and weighbridge areas. The applicant objects to this condition as the sewage from the toilet block is dealt with by a Klargestor BioDisc BC treatment system and the effluent is then pumped to the leachate system. The applicant also states that the water from the wheelwash is recirculated through the wash and the sludges pumped directly to the leachate tank. The objection also states that the surface water from the site roads including weighbridge is directed to gullies and passes through an oil interceptor prior to discharge to an area to the east of the site.

Technical Committee's Evaluation:

The TC considers that the sanitary effluent is currently being treated in a Wastewater Treatment Plant, namely the Klargestor BioDisc BC treatment system. There is no percolation area associated with this treatment plant.

The TC recommends a change of wording to Condition 3.24 to ensure that all storm water discharges from facility pass through a silt trap and to ensure that all storm water discharges from yard areas, the weighbridge and site roads pass through an oil separator prior to discharge.

The TC considers that Condition 3.16 'Surface Water Management' and a newly worded Condition 3.24 'Silt Traps and Oil Separators' are adequate to deal with storm water runoff on site and provide protection to surrounding surface waters.

Recommendation: Replace current Condition 3.29, below

3.29 The licensee shall provide and maintain a Wastewater Treatment plant at the facility for the treatment of sanitary effluent, as well as drainage from the truck wash, ramp and weighbridge areas. Any percolation area shall satisfy the criteria set out in the *Wastewater Treatment Manual, Treatment Systems for Single Houses*, published by the Environmental Protection Agency.

With the following Condition 3.29:

3.29 The licensee shall provide and maintain a Wastewater Treatment plant at the facility for the treatment of sanitary effluent.



Replace current Condition 3.24, below

3.24 **Silt Traps and Oil Separators**
The licensee shall install and maintain silt traps and oil separators at the facility to ensure that all storm water discharges from the facility pass through a silt trap, and oil separator (yard areas only), in advance of discharge. The separator shall be a Class I full retention separator and the silt traps and separator shall be in accordance with I.S. EN 858-2:2003 (separator systems for light liquids).

With the following Condition 3.24:

3.24 Silt Traps and Oil Separators

The licensee shall install and maintain silt traps and oil separators at the facility to ensure that all storm water discharges from the facility pass through a silt trap, and oil separator (**yard areas, the weighbridge and site roads only**), in advance of discharge. The separator shall be a Class I full retention separator and the silt traps and separator shall be in accordance with I.S. EN 858-2:2003 (separator systems for light liquids).

A.2. Condition 6.6.1

The applicant objects to the requirement under Condition 6.6.1 to effectively seal leachate holding tanks/lagoons/sumps and the requirement to vent the headspace gases to an appropriate odour abatement system prior to release to atmosphere. The applicant objects on the grounds that Ballynacarrick Landfill Site does not have an odour problem. The applicant considers that the installation of a sealed roof is an unnecessary requirement for the site. A surface aerator aerates the leachate tank.

Technical Committee's Evaluation: The TC believes that the inclusion of the wording 'Unless otherwise agreed in writing' provides the licensee the opportunity to apply to the Office of Environmental Enforcement to set aside the requirements of this condition, should the site circumstances support the case.

Recommendation: No Change

A.3. Condition 8.1

The applicant objects to the requirements of Condition 8.1 as the infrastructure necessary for the treatment of black bin or mixed municipal waste by mechanical means and to biologically pre treat waste to comply with the requirements of Condition 8.1 is not available within the county. The applicant also outlines that due to the timescales for the statutory processes and subsequent construction period it is not viable to deliver the necessary infrastructure prior to the anticipated closure date for Ballynacarrick (late 2010).

Technical Committee's Evaluation:

The Ballynacarrick Landfill Site is an existing landfill for the purposes of the Landfill Directive (i.e. operational in July 2001). In 2002 the facility submitted, as required by the Landfill Directive, a Conditioning Plan. This plan stated how the applicant would operate the site in compliance with the requirements of the Landfill Directive. One of these requirements relates to waste pre-treatment, these being captured in Condition 8.1 of the PD. This new condition updates an existing condition (in current licence W0024-02) which the applicant has been complying with over the last few years (see Condition 11.3 of W0024-02). This condition required the licensee to submit a report on how they would comply with the Landfill Directive biowaste and pre treatment obligations by September 2005. The applicant cannot now say this requirement is new.

The first compliance date under the Landfill Directive is July 2009 where the licensee must demonstrate adequate pre treatment (e.g. two bin system). The objection comments that Donegal County Council don't have the appropriate infrastructure, however the applicant has been aware of this obligation since 2001, committed to these requirements in the Conditioning Plan in 2002, operated these obligations under the terms of their existing licence and moreover it is a legal requirement.

In relation to biowaste treatment the deadline under the Landfill Directive as negotiated by Ireland is 2010 for the first biowaste target. Again this requirement was well flagged both in the Landfill Directive and the National Biowaste Strategy (Draft 2004, Final 2006). If the facility closes in 2010 as suggested in the objection it is unlikely the biowaste treatment obligations will have any significant obligations for the licensee. It is recommended the condition should remain as it reflects legal obligations and will be necessary if operation of the facility extends beyond 2010.

Recommendation: No Change

A.4. Schedule C.1.2 Monitoring of Emissions to Air

The applicant objections to the requirement in the PD to measure the Residence Time of the landfill flare stack. The objection states that the flare at the site was installed in 2005 and was designed to comply with licence conditions at that time. The applicant states that the retention time is a design calculation and cannot be measured in situ.

Technical Committee's Evaluation: Residence time is an important parameter to show that the gases have spent adequate time in the flare unit, i.e. it shows if there has been complete combustion of gas (destruction of methane and odorous compounds). The demonstration of residence time is also considered BAT.

Residence time is a calculation based on the design and calibration of the plant. The PD does not require a direct measurement but a technique to be agreed with the Agency.

Recommendation: No Change

A.4. Schedule C.1.3 Monitoring of Landfill Gas Emissions

The applicant objections to the requirement in the PD to install two monitoring points per landfill cell. The applicant states that the landfill gas within the engineered cells is monitored from the gas extraction system at the respective manifolds.

Technical Committee's Evaluation: Point monitoring is a useful source to determine if excess gas is not being captured by the existing system or to determine if air is being drawn into the cell. However, the existing network as identified in the objection appears acceptable. The TC recommends to accept the existing monitoring system but to retain the ability to add additional monitoring points if necessary.

Recommendation: Replace current Schedule C.1.3, below

C.1.3 Monitoring of Landfill Gas Emissions

Location: LG1 to LG9
 And
 At least two monitoring points per cell (to be agreed)
 And
 Other selected locations as may be specified

Parameter	Monitoring Frequency ^{Note 1}		Analysis Method/Technique ^{Note 3}
	Boreholes ^{Note 2} vents and wells	Facility Office	
Methane (CH ₄)	Monthly	Continuous	Standard method
Carbon Dioxide (CO ₂)	Monthly	Continuous	Standard method
Oxygen (O ₂)	Monthly	Continuous	Standard method
Atmospheric Pressure and Trend	Monthly	Continuous	Standard method
Temperature	Monthly	Continuous	Standard method

Note 1: Subject to amendment in post-closure phase by agreement with the Agency.
Note 2: All perimeter monitoring boreholes must be installed to the standards specified in the Agency Guidance on Landfill Monitoring.
Note 3: Or other method agreed by the Agency.

With the following Schedule C.1.3,

C.1.3 Monitoring of Landfill Gas Emissions

Location: LG1 to LG9
 And
 As per existing monitoring system
 And
 Other selected locations as may be specified

Parameter	Monitoring Frequency ^{Note 1}		Analysis Method/Technique ^{Note 3}
	Boreholes ^{Note 2} vents and wells	Facility Office	
Methane (CH ₄)	Monthly	Continuous	Standard method
Carbon Dioxide (CO ₂)	Monthly	Continuous	Standard method
Oxygen (O ₂)	Monthly	Continuous	Standard method
Atmospheric Pressure and Trend	Monthly	Continuous	Standard method
Temperature	Monthly	Continuous	Standard method

Note 1: Subject to amendment in post-closure phase by agreement with the Agency.
Note 2: All perimeter monitoring boreholes must be installed to the standards specified in the Agency Guidance on Landfill Monitoring.
Note 3: Or other method agreed by the Agency.

A.4. Schedule C.1.5 Control of Leachate Treatment

The applicant objects to Schedule C.1.5 as it makes reference to three surface aerators. The applicant specifies that there is only one surface aerator at Ballynacarrick Landfill Site and no further aerators are required.

Technical Committee's Evaluation: The TC accepts this objection. However the TC recommends retaining the ability to add additional aerators if so required.

Recommendation: Replace current Schedule C.1.5, below

C.1.5 Control of Leachate Treatment

Emission Point Reference No: Leachate Treatment Tank
Description of Treatment: Aeration

Equipment:

Control Parameter	Monitoring	Key Equipment ^{Note 1}
Effluent Transfer	DO in aeration basin	Lift Pumps
Dissolved Oxygen		Three surface aerators Fixed DO Meter

Note 1: The licensee shall maintain appropriate access to standby and/or spares to ensure the operation of the abatement system.



With the following Schedule C.1.3,

C.1.5 Control of Leachate Treatment

Emission Point Reference No: Leachate Treatment Tank
Description of Treatment: Aeration

Equipment:

Control Parameter	Monitoring	Key Equipment ^{Note 1}
Effluent Transfer	DO in aeration basin	Lift Pumps
Dissolved Oxygen		Surface aerator ^{Note 2} Fixed DO Meter

Note 1: The licensee shall maintain appropriate access to standby and/or spares to ensure the operation of the abatement system.

Note 2: Having regard to ongoing monitoring results, compliance record, impact and the principals of BAT, the Agency may require additional aeration capacity.



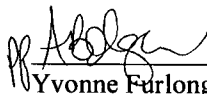
Overall Recommendation

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



Yvonne Furlong

for and on behalf of the Technical Committee

