


This Report has been cleared
for submission to the Board by
the Programme Manager P. Nolan
Signed: N. Kearey Date: 17/07/08.

	OFFICE OF THE LICENSING & RESOURCE USE	
	INSPECTORS REPORT ON A LICENCE APPLICATION	
TO:	DIRECTORS	
FROM:	Dr J Derham	- Licensing Unit
DATE:	15 July 2008	
RE:	Application for a waste licence review from Donegal County Council, for Ballynacarrick Landfill Site, Ballintra, Co Donegal. Licence Register W0024-02	

Application Details	
Licence Review Register Number:	W0024-03
Type of facility:	Non-Hazardous Materials Recovery Facility
Class(es) of Activity (P = principal activity):	3 rd Schedule: 5 (Principal), 6, 13 4 th Schedule: 2, 3, 4, 13
Quantity of waste managed per annum:	35,000 tonnes
Type of Waste:	Municipal
Location of facility:	Ballynacarrick Landfill Site, Ballintra, Co Donegal
Completed Licence application received:	22 April 2008
Third Party submissions:	None
EIS Required:	No

1. Facility & Review Request

This report relates to an application received from Donegal County Council for a review of the existing waste licence (Reg. No. W0024-2) at Ballynacarrick Landfill (issued 10 December 2004). The review is straightforward; the County Council wish to increase the annual intake from 24,000 tonnes to 35,000t per annum. The main reason is to accommodate Donegal's waste given that the application for the proposed second Donegal landfill at Meenaboll was refused planning permission, and to comply with the concerns articulated by EPA OEE in relation to compliance with authorised intake limits. An amendment to the final contours of the site is included in the

review request, the effect of which yields a modest increase in overall capacity (increase of 70,000m³). The accelerated fill will result in the facility reaching consented capacity by end of 2010 (previously due to close in 2013). An Bord Pleanála have concluded that the variation in waste acceptance rates does not require an EIS (letter received 22-4-2008).

Donegal has operated a landfill at Ballynacarrick since 1980, originally filling into an unlined peat depression (Area 1), and expanding into a lined cell (Area 2) on issue of Waste Licence W0024-01. Filling at Area 2 is complete. Area 3, a 225,000m³ capacity extension, was the subject of Waste Licence Review W0024-02 granted on 10 December 2004. Areas 1 and 2 are closed and capped. See Figure 1. The entire facility occupies an area of 9 ha which is unchanged as a consequence of this review application. 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.

Operational hours are unchanged (08:00 to 18:00hrs Mon – Fri, 08:00 to 13:00hrs Sat.). There are no proposed substantive changes to existing infrastructure provision as a consequence of this review.

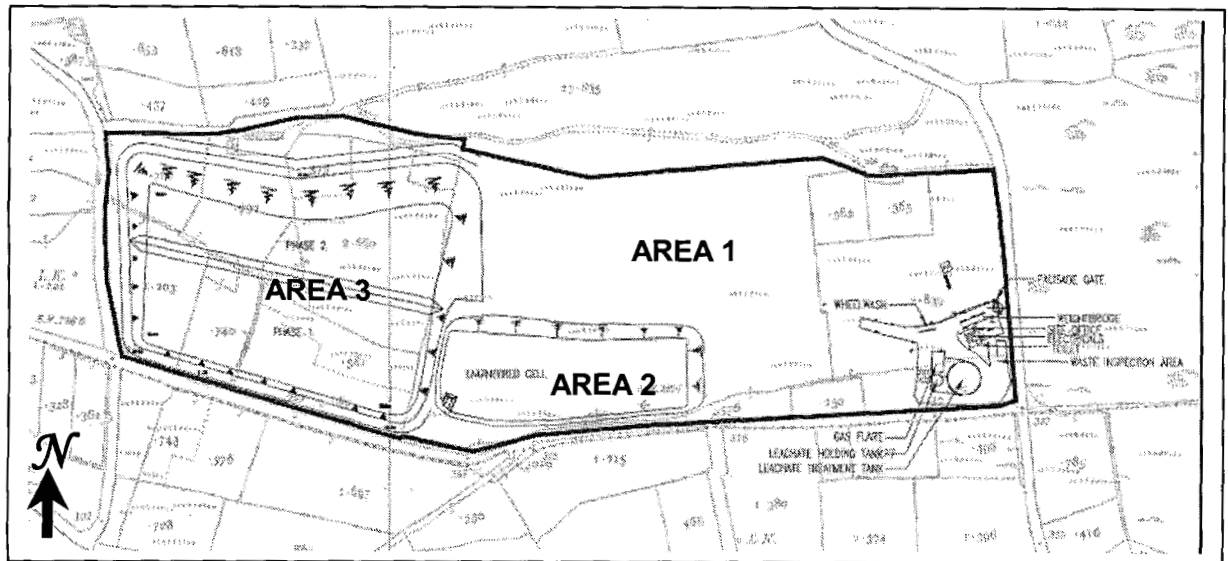


Figure 1: Site layout

2. Operational Description

This well established facility operates as a standard low intensity landfill. Gas extraction with flare is in operation on site (old and current areas). Leachate is collected, aerated, recirculated and/or tankered off-site for treatment/disposal. The site containment and capping engineering is BAT. A previous licence review (W0024-02) introduced the possibility of small scale

composting on site (<1000m³ capacity), this aspect of the operations has to date not been activated, but remains included as an authorised process. A small Civic Amenity waste operation is also included as part of the operation as a service to the public.

3. Use of Resources

The site consumes an oil and electricity equivalent of 875,802kW per year, in a ratio of 80 : 20 respectively. The operators have completed an Energy Audit; the Recommended Determination (RD) conditions the implementation of the findings of this report (condition 7).

4. Emissions

In relation to the nature of the review, there is no anticipated significant change to air, surface water, trade effluent, or noise emissions. The operators have recently installed a gas flare. The recently completed Energy Audit recommends the installation of a gas fired generation unit: the operator is required to assess this possibility under Condition 7.1.

There was some evidence of gas migration from the unlined area and the operator has constructed an interceptor trench linked to the extraction unit to address this risk.

Monitoring to date suggests there is evidence of landfill leachate type emissions in the surface water and groundwaters immediately adjacent to the site. These emissions are likely related to the unlined historical fill area. Conditions 6.12 and 6.13 are specifically drafted to require assessment and remediation of these emissions. Underlying the landfill area in general is the following subsoil sequence – blanket peat – gravelly sand/clay till – limestone bedrock, as described in inspectors report on original licence application. Rockhead is very shallow ranging from 0.5m to 10m. The landfill in the past was placed directly (unlined) onto the thin peat or occasional rock outcrop.

5. Restoration

The EIS for Area 3 development included detailed restoration plans. The application for this review (W0024-03) outlines the restoration objectives, which are BAT. The amended contours have been incorporated in new restoration drawings. An Bord Pleanála have concluded that the minor amendment to the finished profile subject of this review does not require planning approval (incl. EIS).

The historical unlined area has been recently successfully capped. This work has greatly reduced the uncontrolled infiltration of rainwater into the unlined area with the consequent reduction in production, and loss, of leachate to the subsoils beneath the site.

6. Cultural Heritage, Habitats & Protected Species

The review will not alter the relationship of this facility to the ecology of the area or protected habitats/species.

7. Waste Management Plans

The proposed change is not in conflict with the published waste management plan for the Donegal Region.

8. Environmental Impact Statement

An EIS was not required in relation to the proposed increase in annual waste intake.

9. Best Available Techniques (BAT)

I have examined and assessed the application documentation and I am satisfied that the site, technologies and techniques specified in the application and as confirmed, modified or specified in the attached Recommended Decision comply with the requirements and principles of BAT. I consider the technologies and techniques as described in the application, in this report, and in the RD, to be the most effective in achieving a high general level of protection of the environment having regard - as may be relevant - to the way the facility is located, designed, built, managed, maintained, operated and decommissioned.

10. Compliance with Directives/Regulations

The proposed review does not present any significant negative implications for the activity in relation to compliance with the requirements of the Landfill Directive, the IPPC Directive, and the Water Framework Directive. The activity falls within the scope of Category 5.4 of Annex I of the IPPC Directive.

Monitoring at the site suggests some evidence of leachates in surface waters and groundwater wells close to the historical fill. The facility is not located within the groundwater table so these discharges are indirect (within the meaning of the Groundwater Directive). The historical fill area was recently capped to EU BAT standards. This has greatly reduced – but not entirely eliminated it seems – the risks of uncontrolled loss of leachate to adjacent groundwaters/surface waters. Conditions 6.12 and 6.13 and specifically drafted to address any residual risk to surface and groundwaters from the site. The rock type underlying the site is provisionally assigned a resource protection rating by the GSI of 'LI' (Locally important aquifer considered to be moderately productive in local zones - Lower Ballyshannon Limestone Formation). The landfill cells currently in operation at the site (Area 3, Figure 1) are designed and operated on a full containment basis (no discharge) and thus comply with the obligations of the Landfill and Groundwater Directives.

11. Compliance Record

The OEE make the following observations in relation to the licensed activity:

- **Site inspections/audits:** 2 site inspections in 2007 - First inspection in 2007 raised 3 non-compliances for cover, landfill gas management and leachate management. Second inspection in 2007 raised 5 non-compliances for landfill gas management, leachate management, excavation of waste without Agency agreement, cover and labelling of monitoring points. The site was last visited on 3-7-08. and was audited in 2006.
- **Complaints:** One complaint in 2006, None in 2007. The complaint related to transport of leachate to Letterkenny WWTP.

- **Groundwater/Surface Water quality:** Elevated ammonia levels have been recorded in groundwater wells downstream of the facility and also at surface water locations downstream. It is considered that the source of this ammonia is from the unlined area of historical fill at the facility. The recent completion of final capping in this area has assisted in reducing levels. Recent OEE inspections and review of monitoring data have indicated that leachate from the historical unlined fill is still impacting on groundwater and surface waters. More work is required of the operator to prevent such leakage or at the least to reduce it to such an extent as to not represent a significant risk to groundwater and surface water quality. Conditions in the existing licence (W0024-02) regarding management of the historic fill area and emissions there-from have been preserved and reinforced in the proposed revised licence.
- **Landfill gas management:** Odour Monitoring Ireland (OMI) visited the site in Spring 2008 and found issues related to not enough gas being flared and general poor management of landfill gas. This will be documented in a report to be issued by OMI for OEE in near future and OEE are to follow up from there.

The review application comes on foot of an instruction from OEE as the operators in recent years have had difficulty in staying within waste intake limits specified in the current licence.

12. Fit & Proper Person Assessment

The legal & technical standing of the applicant qualifies them to be considered Fit and Proper Persons.

13. Proposed Decision

The OEE have confirmed that they are satisfied with the proposed increased intake plans for the site. The review application was prompted by the OEE in order to regularise matters regarding intake. The PD for this review also includes standard conditions regarding waste pre-treatment arising out of the obligations in the Landfill Directive (July 2009 for no untreated waste to be accepted). The applicants propose to close the facility by the end of 2010; nevertheless a condition requiring diversion of biowaste is also included as this requirement falls due (via national agreement with EU Commission under the Landfill Directive) in January 2010.

14. Submissions

There were no submissions made in relation to this application.

15. Charges

The charges specified in the RD reflect the current charge for the activity under Waste Licence register W0024-02. No increase in enforcement effort is expected on foot of the increased intake.

16. Recommendation

I have considered all the documentation submitted in relation to this application and recommend that the Agency grant a licence subject to the conditions set out in the attached RD and for the reasons as drafted.

Signed

A handwritten signature in black ink, appearing to read 'J Derham', is written over a horizontal line.

Dr J Derham

Procedural Note

In the event that no objections are received to the Proposed Decision on the application, a licence will be granted in accordance with Section 43(1) of the Waste Management Acts 1996-2007.