

MEMO			
TO:	Board of Directors	FROM:	Brendan Wall
CC:	Gerry Carty, Ted Nealon	DATE:	17 th May 2001
SUBJECT: Donegal County Council, Muckish Landfill (Reg. No. 126-1)			

Application Details	
Applicant:	Donegal County Council
Location of Activity:	Muckish Landfill, Falcarragh, Co. Donegal
Reg. No.:	126-1
Proposed Decision issued on:	3 rd January 2001
Inspector:	Cormac Mac Gearailt

Objections Received	Date Received
One objection by Applicant: Donegal County Council, County House Lifford, Co. Donegal	29 th January 2001

Consideration of the Objection.

The Technical Committee (Brendan Wall, Chairperson, Dave Shannon and Malcolm Doak) has considered the objection and this report details the Committee's comments and recommendations following examination of the objection.

One objection was received from Donegal County Council.

Ground 1 : Condition 1.3 (note that the objection states section 1.2)

The Council object to the proposed decision to restrict the acceptance of wastes to inert waste only. Information provided in the waste licence application indicated that the extent of contamination arising from the facility was limited. No specific pollution incidents have occurred in the adjacent water courses and analysis demonstrated that List 1 substances were not evident in the groundwater system.

The Muckish landfill site was operated as a geographically important landfill for the Council, a role which has been reinforced since the closure of the Churchtown landfill site at Lifford. This site has adequately serviced a northern region of the County and will be difficult to replace. Furthermore the sudden closure of this site will not provide the Council with adequate time to set in place arrangements for the replacement of this site.

The Council Waste Management Plan adopted in October 2000, indicated that existing Landfill sites should be considered for extension in order that the capacity of the sites be maximised and in order to provide adequate time to implement replacement landfill facilities.

The proposed closure of this site from accepting municipal wastes will severely obstruct the implementation of this aspect of the plan and will bring additional pressures on the Council prior to the implementation of replacement landfill facilities.

Given that future cells at the facility could be developed and operated on a containment basis and that the site is to receive a leachate management system, it is anticipated that the ongoing operation of the facility on a municipal waste basis would not present a significant additional environmental impact when compared to closure of the site.

Furthermore the Council may be prepared to provide suitable improvements to the road network if this were considered a key aspect in determining the licence conditions.

In relation to the surface water, the Biological Survey of River Quality carried out by the Agency on the Duvowen showed a marked decrease in quality in comparison with past surveys. This drop in quality was attributed solely to Muckish Landfill. However, it should be noted that there is a large operational quarry up-stream, which may be contributing to the unsatisfactory condition of the Duvowen. Silt and suspended solids washed into the river would have an adverse effect on the macroinvertebrates inhabiting the substrata of the stream. This quarry has expanded greatly over the last few years which is in line with the deterioration reported by the EPA (1990 Q5, 1997 Q3). This illegal quarry has been under investigation by Donegal County Council since 1995.

Whilst it is accepted that the long term operation of this site may present certain difficulties, it is requested that at least a period of 3 to 5 years to be considered prior to the cessation of municipal waste acceptance at the site. This will facilitate the Council in implementing the crucial aspect of long term and replacement high quality facilities and to implement its Waste Management Plan.

Technical Committee's Evaluation

The TC note that the most recently published biological monitoring results (*Interim Report on the Biological Survey of River Quality 2000, page 190*) shows that the biological quality rating (Q Value) of the Ray (Duvowen) River has deteriorated from a Q value rating of 5 in 1990 to a Q Value rating of 3 in 2000. The report states that “*Although the range of taxa has increased somewhat since 1997, the Duvowen River was again significantly polluted in late August 2000: Muckish landfill site is upstream of the location surveyed. Quality remained significantly lower than 1990 and 1994*”.

The TC note that the council have not provided any monitoring results to back up their argument that silt and suspended solids are washed into the river from the quarry. The TC considers that the council has not demonstrated that the landfill has not been the cause of the deterioration in water quality over the last few years. In fact Donegal County Council in their Measures Report submitted to the Agency [compiled under the Local Government Water Pollution Act 1977 (Water Quality Standards for Phosphorous) Regulations, 1998] states that *the leachate from Muckish Landfill is having a detrimental effect at this location* (i.e. the monitoring point used).

The Technical Committee (TC) note that ammonia levels in the Ray (Duvowen) River indicated a 15 to 90 fold increase downstream of the landfill as compared to upstream. Ammonia is a good indicator of leachate pollution, and such elevated ammonia levels are

unlikely to be attributable to the quarry up-stream of the site. The TC suggests that action should be taken by the council to deal with any concerns they have about pollution caused by silt and suspended solids from the quarry.

The TC note that one of the main reasons why the Inspector recommended the facility for closure is that it is considered that the “*disposal activity (Class 1 - 3rd Schedule) applied for would cause environmental pollution as it will adversely affect the countryside or places of special interest*”. The site is located in a scenic area between Muckish Mountain and Cloghernagh Bog & Glenveagh National Park (pNHA/pCSAC). The approach road is designated in the Donegal County Development Plan as a “scenic road” and “tourist road”. The objection from the applicant contains no information to dispute the Inspectors view that the facility will “adversely affect the countryside or place of special interest”.

Muckish Landfill was previously closed by the council and then re-opened on the 27th April 1999. The re-opening of Muckish landfill has been the subject of a complaint to the European Commission. A waste application was received on the 5th October 1999 after the Agency threatened legal proceedings for contravention of Section 39(1) of the Waste Management Act, 1996. The application was received after the prescribed date as set out in the Waste Management (Licensing) Regulations 1997. The Technical Committee understands that disposal of waste is continuing at the landfill and this is in effect constitutes a breach of Section 39 of the Waste Management Act, 1996. Because of the late application, the facility is not considered an existing facility and therefore has to meet the more stringent BATNEEC standards.

Recommendation

No change

Ground 2: Condition 2.1.1

If the nature of infilling operations will continue to be limited to inert waste, the Council considers that it is appropriate to review the extent of the management structure. It is anticipated that the structure associated with an inert facility will be less intensive than those for a municipal operation.

Technical Committee’s Evaluation

The TC note that Condition 2.1.1 already allows for changes to the management structure to be agreed with the Agency.

Recommendation

No Change.

Ground 3: Condition 4.7.1

It is requested that a period of 12 months is provided for the implementation of a leachate management approach at the site. This is to ensure that the Council is provided with

adequate time to allow procurement of services, design and construction in line with public procurement procedures.

It is also requested that the specific requirement to provide a leachate treatment system and a toe drain is removed. The aspect of the toe drain would indicate that pumping may be requested to remove collected leachate. Long term pumping is recognised as an unsustainable practice and this would require electricity supplies. The nature of the site would indicate that connection to the national grid may not be possible and therefore electricity could only be provided from generators. This practice is considered unsatisfactory for the Council and therefore it is preferred that alternatives be considered whereby leachate could be managed in a more energy efficient manner.

Technical Committee's Evaluation

The TC note that the condition does not specify that pumping may be requested, and for long term maintenance and operation we would encourage the design of a system that does not require electricity or pumping. The TC considers that the condition could be reworded to allow the applicant scope to develop an alternative system which meets the same level of environmental protection. The timeframe should also be increased to nine months from six months.

Recommendation

Change Condition 4.7 as follows;

4.7 Within **nine** months of date of grant of this licence, the licensee shall implement a leachate management programme. This shall consist *inter alia* of the following:

(i) Provision of an appropriately sized leachate treatment system.

(ii) Separation of clean and contaminated surface water, and discharge of contaminated surface water to the leachate treatment system.

(iii) Installation of a gravel leachate collection toe drain, **or a system with the same level of leachate collection performance.** The leachate collection toe drain **or equivalent if appropriate** shall be keyed into and covered by the capping layer, once the capping layer is installed.

Ground 4: Condition 4.7.2

It is requested that 12 months post implementation of the leachate management plan is provided prior to reporting on the effectiveness of the system. This is to allow a full season to have passed thus ensuring that the most severe conditions are encountered.

Technical Committee's Evaluation

The TC consider that an initial report should be provided within twelve months of the date of grant of the licence (this will be within three months of installing the system). A full report as described in the Condition 4.7.2 should be submitted within 12 months of installing the system. We note that under Condition 3.1 the applicant is required to report to the Agency as an incident any leachate emission which does not comply with the limits in Table E.2.

Recommendation

Change Condition 4.7.2 as follows;

4.7.2 Notwithstanding Condition 4.7.1, within **twelve months of the date of grant of this licence, the licensee shall provide a report on the installation of the leachate management system, and within twenty one months of the date of grant of this licence the licensee shall provide a report** examining the effectiveness of the leachate capture and control measures in operation on-site. This report should provide recommendations to improve the effectiveness of the leachate capture, control and collection measures, if necessary. **This report may be requested earlier by the Agency if results show that emission limits in Table E.2 are being exceeded.**

Ground 5: Condition 8.1

The levels referred to in the restoration and closure plan have been detailed using an arbitrary datum (i.e. the height of 101mOD (Malin Head) specified in Condition 8.1). Therefore it is requested that the Council provide the relevant height to the Malin Head datum in due course.

Technical Committee's Evaluation

The TC note that Figure C.7/04 "Restoration Proposal" and Drawing No. 3026.27/A10 "Restoration Contours" of the application are referenced to site datum and not Malin Head datum. The TC considers that (a) the final height specified in the PD should be converted to Malin Head datum and (b) that a revised drawing showing the final contours referenced to Malin Head datum should be submitted as part of the revised Restoration and Aftercare plan. The TC note that there is a reference to the final height in the *Introduction* to the PD and consider that this reference should be removed to avoid confusion.

Recommendation

Change Condition 8.1 as follows;

8.1 A revised Restoration and Aftercare Plan for the facility shall be submitted to the Agency for agreement within six months of the date of grant of this licence. This plan should also incorporate landscaping proposals for the facility. The final height of the facility shall not exceed **101m referenced to the datum used for Drawing No. 3026.27/A10 "Restoration Contours"**. **A revised drawing showing the proposed final height referenced to Malin Head datum shall be submitted to the Agency along with the revised Restoration and Aftercare plan.**

Change the Introduction as follows; delete the reference to the final height of the facility.

Signed: _____
Brendan Wall