		MEMO	
TO:	Board of Directors	FROM:	Breege Rooney
CC:		DATE:	13 November 2000

SUBJECT : Donegal County Council, Ballynacarrick Landfill Site - Technical Committee Report on Objection to Proposed Decision - Reg. No. 24-1.

Application Details	
Applicant:	Donegal County Council.
Location of Activity:	Ballynacarrick Landfill Site, Ballintra, Ballyshannon, Co. Donegal.
Reg. No.:	24-1
Proposed Decision issued on:	31/08/00
Objection received:	27/09/00
Objection acknowledged:	13/10/00
Inspector:	Mr. Cormac Mac Gearailt

Objections received

Objection by Applicant One: Donegal Co. Council, County House,

Lifford, County Donegal, Ireland.

Consideration of the objection.

The Technical Committee (Breege Rooney, Chairperson, Margaret Keegan and Malcolm Doak, committee members) has considered all of the issues raised and this report details the Committee's comments and recommendations following the examination of the objection.

Objection: Donegal Co. Council (27/09/00)

Ground 1 (Condition 2.9 - Management of the Activity)

This objection requests that whilst a facility manager will be appointed in charge of the landfill, that he shall not be required to be on site at all times. The reason given by Donegal County Council (DCC) is to enable the facility manager to supervise a number of sites within the county while an experienced deputy will be onsite at all times to oversee any operational works.

Technical Committee's evaluation

The Technical Committee understands that the condition already allows for an experienced and competent deputy to take charge when the facility manager is absent from the site. However the facility manager's primary responsibility should be this facility and he must be based at this facility. Hence, the Technical committee recommends no change.

Recommendation

No change

Ground 2 (Condition 3.10 – Notification and Record Keeping)

DCC requests that cars and cars with small trailers carrying domestic waste be excluded from the full written records as detailed. It proposes that the number of cars and cars with small trailers will be recorded for each working day. The reason given is to facilitate the efficient operation of the site by ensuring minimal delay for vehicles using the landfill facility.

Technical Committee's evaluation

The Technical Committee consider DCC's request to be reasonable and propose that cars and cars with small trailers be excluded from the requirement for <u>a full written record</u> as set out in Condition 3.10. However, the TC considers that it is important to record the type and estimated quantity of waste arriving at the facility from domestic vehicles for the National Waste Database.

Condition 3.11 currently requires a duplication of records required by Condition 3.10, in that it requires a written record of the type and quantity of all wastes recovered or disposed of at the facility. This condition would include domestic vehicles. Hence, in order to clarify the information to be recorded the Technical Committee recommends deleting Condition 3.11 and inserting a new condition. This condition would stipulate the minimum records required for domestic vehicles. The daily number of domestic vehicles arriving at the facility can be use to provide an estimate of the quantity of waste.

The Technical Committee therefore recommends the following changes.

Recommendation

1. Insert the following into the **INTERPRETATION** section of the PD.

Domestic vehicles Non commercial vehicles that carry household waste.

2. Amend Condition 3.10 to read

The licensee shall maintain a written record for each load of waste arriving at the facility. The licensee shall record the following (except for domestic vehicles):

3. Replace existing Condition 3.11 with the following;

Condition 3.11

The licensee shall maintain a written record of the following for each load of waste from domestic vehicles:

- a) a description of the waste including the associated EWC codes; and
- b) an estimated quantity of waste recorded in kgs.

Ground 3 (Condition 4.4.1 – Site Infrastructure)

DCC request the removal of the requirement for site roads to drain to the leachate drainage system. The reason given is that it is proposed to utilise granular constructed site roads which would not allow surface drainage. It is also proposed that hardstandings would be drained to appropriate surface drainage system which incorporate settlement/sampling points to ensure contaminated water is not discharged off site.

Technical Committee's evaluation

The Technical Committee considers that the detail provided, in relation to the site roads, is not sufficient to determine the road surface and drainage arrangements at this stage. However, there is provision in Condition 4.4.1 for agreement on same with the Agency.

In relation to the surface water drainage management, Condition 4.17 and Schedule D allows for agreement with the Agency on same and it would be premature at this stage to make a decision in the absence of such details. Material deposited on the roads may contaminate the surface water and hence runoff must be directed to storage rather than discharged directly to surface waters.

Recommendation

No change

Ground 4 (Condition 4.6 – Site Infrastructure)

DCC proposes that a mobile phone be made available on site at all times during operation instead of a telephone and facsimile machine in the office in order to allow contact with the operator at all times when on site. The objection did not detail whether a telegraph line was close to the facility or not. However, the Technical Committee noted that the Inspector's Report states that "The nearest dwelling is a mobile home approximately 50 m from the site entrance, while the nearest permanent dwelling is approximately 350m to the north."

Technical Committee's evaluation

The Technical Committee considers that it is essential to have a telephone and facsimile machine on site for urgent communications and in particular written communication. It is imperative that the telephone and facsimile is fixed to the facility.

Recommendation

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Ground 5 (Condition 4.13.1 – Landfill Lining)

This objection requests that the specific requirement for the basal mineral layer to be 1m thick be removed for the reason that the secondary basal mineral lining could be achieved through the installation of artificial layers, e.g. bentonite enhanced soils, that are normally provided at a thickness of 300mm. DCC states that it should also be noted that the Landfill Directive indicates that artificial layers should be at least 0.5m in thickness and not 1m as proposed in the conditions.

Technical Committee's evaluation

The Technical Committee acknowledges that the Landfill Directive allows for artificial layers of no less than 0.5m in thickness. However, best practice for clay liners is to install a minimum thickness of 1.0m. Bentonite Enhanced Soil, which is pre-mixed to ensure homogeneity, may be used as an alternative and provides equivalent protection at a minimum thickness of 0.5m. The Technical Committee agrees that an alternative basal layer may be installed provided that there is equivalent protection as provided in the Landfill Directive.

Recommendation

Amend Condition 4.13.1 as follows;

Condition 4.13.1

All landfill liners installed on site shall be a composite liner consisting of the following:

- a) a basal mineral layer of at least 1m in thickness, with a permeability of less than or equal to 1×10^{-9} m/s overlain by a 2mm thick high density polyethylene (HDPE) layer, OR
- b) a 0.5m artificial layer of bentonite enhanced soil giving similar protection to the foregoing.

The side walls shall be designed and constructed to achieve an equivalent protection.

Ground 6 (Condition 4.14.1 – Leachate Management)

This objection requests that the specified treatment system on site is not part of the licence conditions as the Council may wish to collect the leachate and deliver to a storage lagoon before tankering it off site for treatment.

Technical Committee's evaluation

The Technical Committee considers that a particular leachate treatment system is not specified in Condition 4.14.1. Rather this condition requires a leachate management programme to include item (iv) Provision of an appropriately sized leachate treatment system, and where appropriate, adequately sized leachate storage provisions to facilitate final tankering off-site. In addition to this the treatment system shall be agreed with the Agency under Specified

Engineering Works (Condition 4.12) and Schedule D. Hence, the Technical Committee recommends no change to the condition.

Recommendation

No change

Ground 7 (Condition 4.16.2 - Capping)

This objection requests that the daily capping layer shall not specify the use of clayey/subsoil, the reason given being that granular material may be used as daily cover to improve the surface water management of the site and facilitate movement of vehicles over the waste.

Technical Committee's evaluation

The condition allows for a daily capping of clayey subsoil <u>or an alternative material</u> to be agreed with the Agency.

Hence, the Technical Committee recommends no change.

Recommendation

No change

Ground 8 (Condition 4.16.5)

This objection requests that within the final capping layer, the total thickness for the topsoil, subsoil and drainage layers be reduced to provide an overall thickness above the low permeability layer of 1m. DCC states that whilst it is accepted that the EPA Landfill Manuals indicate the same details for capping layers as outlined in the proposed conditions, it is proposed that 1m above the drainage layer is more than required given that the end use of the site is likely to be rough grazing. It is proposed that the drainage layer thickness and depth above this layer is agreed before installation and would be dependent on the end use of the site.

Technical Committee's evaluation

Condition 4.16.5 specifies a final capping system unless otherwise agreed with the Agency. However, it should be noted that the Draft Landfill Site Design Manual recommends a minimum drainage layer of 0.5m. In addition the Landfill Restoration and Aftercare Manual recommends a minimum thickness of 850mm of subsoil and 150mm of topsoil for restored landfills. Hence, in all cases the total thickness of the topsoil, subsoil and drainage layer should be a minimum of 1.5m. The Technical Committee recommends no change.

Recommendation

No change

Ground 9 (Condition 4.16.7)

DCC requests that the requirement to store capping material onsite be removed. Reason – it is assumed that capping material will be brought onto the site as appropriate to meet the capping needs during various stages of the site closure. It is envisaged that this may be undertaken by contractors at which stage it would be a requirement of the contract to source and supply the capping material. It is thus proposed that the need for prior storage of capping material is inappropriate.

Technical Committee's evaluation

The Technical Committee considers that it is essential that sufficient daily, temporary and final capping materials be stored on site for proper materials management.

In the event that the stockpile does not contain sufficient daily, temporary and final capping material for the next twelve months the Condition 4.16.7 <u>allows</u> for a proposal, for agreement with the Agency, <u>on alternative sources of capping materials and this may include contract arrangements</u>.

The Technical Committee recommends no change.

Recommendation

No change.

Ground 10 (Condition 5.17 - Recovery)

This objection requests the six month time-scale to submit recycling or recovery proposals be extended to 12 months, the reason given being, to allow time for the Waste Management Plan to be implemented and for the Council to further assess the potential for these facilities.

Technical Committee's evaluation

The timeframe of six months relates to the development of proposals for separating and recovery of wastes specified. The proposals must include a timeframe for implementation. The Technical committee considers that the proposals should be submitted within eight months f the date of grant of the licence in order that it be agreed by the Agency and to allow the County Council to start to implement their own waste management plan as soon as possible. The Technical Committee also recommends deletion of "Unless otherwise agreed" from Condition 5.17 as agreement on the content of proposals are subject to Condition 1.3.

Recommendation

Amend Condition 5.17 as follows:

Delete **Unless otherwise agreed,** from start of the Condition 5.17 and amend the time frame from six to eight months to read as follows.

Recovery

Proposals for the following shall be submitted to the Agency within eight months of the date of grant of this licence;

Ground 11 (Condition 8.2 – Restoration and Aftercare)

Condition 8.2 Notwithstanding Condition 8.1, the final maximum height of the facility shall not exceed 104mOD (Malin Head).

This objection requests that reference to Malin Head datum is removed, the reason being that an arbitrary datum and not Malin Head datum was used as basis to produce the restoration drawings previously submitted and it is therefore proposed that closure should be in accordance with Drawing 3026.23/A11 – Restoration Contours and it is proposed that the Malin head datum will be translated onto the restoration drawing for the Agency's approval following issue of the waste licence, at which time a maximum level (Malin head datum) will be agreed.

Technical Committee's evaluation

The Technical Committee assessed the relevant O.S. Sheet 11 (1:50,000) and notes that, in any event, the maximum height should not exceed the adjacent contour height. Hence, as the maximum adjacent contour height is 103m OD (Malin Head) the Technical Committee considers that the maximum final height of the facility should not exceed 104m OD (Malin Head) as this allows for 1 m of settlement to occur. The Technical Committee recommends no change.

Recommendation

N	n	change.	

Ground 12 (Condition 11.2.1 Financial Provision)

DCC requests that as the licensee is a local authority it is their view that the requirement to maintain a fund should be removed from the condition because the Local Authority is a semi state body and as such will always have necessary funds to carry out appropriate works.

Technical Committee's evaluation

The Technical Committee considers that there is specific need to have available finances for the operation of the facility and implementation of the restoration and aftercare plan. However, it should be noted that the Condition 11.2 allows for the type of fund and means of release/recovery to be agreed with the Agency. Hence, the Technical Committee recommends no change.

Recommendation

No change.			
24-1 Donegal County Council	Technical Committee Report		

Signed:	
C	Breege Rooney Technical Committee Chairperson