

MEMO			
TO:	Board of Directors	FROM:	Peter Carey
CC:		DATE:	5 July, 2001
SUBJECT : Technical Committee Report on Objections to Proposed Decision – Reg. No. 73-1.			

Application Details	
Applicant:	Roscommon County Council.
Location of Activity:	Roscommon Landfill Facility, Killarney Townland, Roscommon.
Proposed Decision issued:	16/03/01
Objections received:	12/04/01
Circulation of objections:	17/05/01
Submissions on objections received:	15/06/01
Inspector:	Mr. Donal Howley

Objections received:

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| Objection by Applicant: | A. Roscommon County Council. |
| Objections by Third Parties: | B. Jack O’Sullivan (Environmental Management Services), on behalf of Killarney Dump Action Group. |
| | C. Mr. Noel Hoare, Roscommon Environmental Alliance. |

Submissions on objections received:

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| Submissions on Objections: | 1. Roscommon County Council. |
| | 2. Jack O’Sullivan (Environmental Management Services), on behalf of Killarney Dump Action Group. |
| | 3. Mr. Noel Hoare, Roscommon Environmental Alliance. |

The Technical Committee (TC) notes that a request for an Oral Hearing was received from Jack O’Sullivan (EMS) on behalf of Killarney Dump Action Group and that this request was considered by the Board of the Agency on the 17/05/01 and that the Board’s decision was not to hold an Oral Hearing. The TC considers that this matter is not open to consideration by the TC. The TC notes that the Board Decision was made on the basis of established criteria.

Consideration of the objections and submissions on objections

The Technical Committee (TC) (Peter Carey, Chairperson, Caoimhín Nolan and Damien Masterson, committee members) has considered all of the issues raised and this report details the Committee's recommendations following the examination of the objections. Specific arguments made in Submissions on the Objections relating to the grounds set out in the objections were considered and are discussed where relevant in the Technical Committee's consideration of each ground for objection.

Objection A : Roscommon County Council (12/04/01)

Roscommon County Council refers to BATNEEC. They state that it is the Council's opinion that the Proposed Decision includes some conditions that are not warranted by need or the low level of threat. They state that the implementation of some of the conditions might be impractical and have undesirable consequences upon lands bordering the landfill that are not in the Council's ownership, and that the implementation of some of the conditions would not be cost effective. The following are their grounds of objections to specific conditions.

Ground A.1 - Condition 4.14.2 (iii) - Blocking of culvert running beneath the landfill.

The culvert takes water from the ditch on the north side of the landfill under the landfill to the Jiggy River to the southwest of the landfill. On-going quarterly sampling analysis of the Jiggy River, a short distance downstream from where the discharge from the culvert enters the Jiggy, show that these waters are not contaminated. Condition 4.14.2 (iii) requires that the culvert should be blocked, that surface water be prevented from entering the culvert and that flow in the ditch on the north side of the landfill should be reversed and that all water should drain clockwise around the landfill to the point where water currently leaves the culvert. There is currently no surface water drainage along the eastern boundary of the landfill; therefore a ditch would need to be excavated to connect the northern and southern ditches. The consequences of re-routing of the discharge around the landfill upon drainage of neighbouring lands is not known and it is possible that re-routing of water from the north to the south may not be possible without causing flooding of low-lying neighbouring lands.

It is therefore considered that blocking of the culvert and re-direction of the surface discharge where no environmental impact is in evidence, and which might have a negative impact on neighbouring lands, is unnecessary and would involve excessive cost.

The Council instead proposes that, as an alternative to blocking the culvert, relining of the culvert be considered to ensure that no leachate from the landfill can enter the culvert. And that the practicality and hydrological implications of the re-routing of surface flow around the landfill be assessed with regard to the bed gradient and flow velocity that can be achieved.

Submissions on Objection

The submission from Jack O'Sullivan, Environmental Management System (EMS) on the objection from Roscommon County Council (RCC) states that a recent inspection by EMS shows that flow within the culvert is permanently restricted with waste, and that Condition 4.14.2 (iii) of the proposed decision should remain unchanged. EMS states that a newly excavated drainage ditch was observed along the eastern boundary of the landfill, in lands not owned by RCC. EMS states that land on both sides of the drain has been damaged by machinery. EMS state that they see no reason why the Condition should be changed and that damage done to adjoining land should be undone.

Roscommon Environmental Alliance's (REA's) submission on the RCC objection states that the drains on neighbouring lands, not owned by RCC, have already been polluted by this landfill and that they understand that RCC may be responsible for having dug some of these drains.

Technical Committee's Evaluation:

The TC notes from the licence application that surface waters have been contaminated by the facility. The TC considers that in conjunction with the management of leachate, the management of surface waters at the facility is important to minimise the impact which the facility will have on the environment. The TC notes the concerns by RCC that diversion of surface water away from the culvert may alter drainage patterns in surrounding lands and thereby cause flooding. Therefore, as part of surface water management at the facility, the TC considers that an assessment should be undertaken of the feasibility of blocking of the culvert and diverting the surface water drainage around the landfill. The TC also considers that RCC should obtain agreement with any landowner on whose property works have to be carried out.

Recommendation:

Insert Condition 4.14.1 as follows:

The licensee shall within six months of the date of grant of this licence, submit to the Agency for its agreement, a feasibility report on the impact of blocking the culvert and diverting surface water from the north and east of the facility around the perimeter of the landfill. The feasibility report shall include recommendations on measures to be implemented to manage surface water from the north and east of the facility and at the culvert.

Renumber Conditions 4.14.1 & 4.14.2 to 4.14.2 & 4.14.3 respectively

Amend Condition 4.14.3 (iii) (previously 4.14.2 (iii)) as follows:

The recommended measures agreed with the Agency under Condition 4.14.1 shall be carried out. Where works are required outside the facility boundary, they shall be subject to the agreement of the landowner.

Ground A.2 - Condition 4.14.2 (vi) – Construction of sub-surface leachate toe drain around all of the landfill apart from the halting site.

The Waste Licence Application proposes that toe drains be constructed around the northern, eastern and southern sides of the eastern part of the landfill where waste disposal has been carried out since 1981. Placement of waste in the western part of the site, near the N63 public road, ceased over 20 years ago and drilling into this part of the site to install gas monitoring wells has shown that only shallow depths of waste are contained in the area. There is no evidence of environmental impact from the western part of the landfill either to the agricultural land to the north or the Jiggy River to the south, and no toe drains are proposed around this area in the Waste Licence Application.

In view of the above it is considered that the construction of sub-surface leachate toe-drains around all of the landfill, excluding the halting site, is unnecessary and would involve excessive cost.

Submissions on Objection

EMS states that leachate from the western part of the facility was observed on 8/5/01 emerging from several places, and that this leachate entered the boundary stream which flows southwards to join the Jiggy River. The submission argues that the proposed toe drains are essential to prevent the lateral migration of leachate.

In the submission from REA on the RCC objection, it is argued that without the construction of sub-surface toe drains there is no mechanism for the collection and subsequent safe disposal of leachate.

Technical Committee’s Evaluation:

The TC considers that the requirement for the installation of toe drains as outlined in Condition 4.14.2 (vi) is necessary for the management of leachate and for the protection of surface waters. The TC considers that the leachate toe drains should encompass the western part of the facility, excluding the halting site.

Recommendation:

No Change.

Ground A.3 - Condition 4.14.2 (vii) – Construction of silt pond(s) to provide retention and settlement for suspended solids prior to flow into the Jiggy River

It is considered that this condition is unnecessary in view of the low level of need and threat. In addition, any silt pond would need to be constructed on land that would not be owned by the Licensee and would involve excessive cost.

Submissions on Objection

In the submission from EMS it is argued that due to the deposition of large quantities of clay on the site, the probability will increase that silt-laden surface water will find its way to the Jiggy River, causing pollution and damage to fisheries downstream. Furthermore, this submission requests that an additional condition should be imposed, specifying a maximum allowable concentration of suspended solids in the water to be discharged.

The submission from REA maintains that without a silt pond/s, there is no containment of the silt, which instead flows into the river and pollutes it. REA states that the Council does not appear to take the cost of this pollution into account when asserting that “excessive cost” would be involved.

Technical Committee’s Evaluation:

The TC notes the concerns of EMS and REA. The TC also notes that this is an existing facility and based on information submitted has a limited remaining life span. The TC considers that with proper management on site, as required by Condition 2, that the storage or placement of large quantities of clay at the facility should not pose a risk to surface waters. The TC therefore considers that a silt pond is not necessary.

Recommendation:

Delete part (vii) of subcondition 4.14.2:

(vii) installation of a silt pond(s) to provide retention and settlement for suspended solids prior to flow into Hind tributary (Jiggy River) to the south-west of the facility.

Ground A.4 - Condition 5.3 – No wastes shall be accepted after the 30th June 2002 unless all occupation or habitation of the halting site ceases.....

It is suggested that a cessation date of 30th December 2002 be imposed to allow the Licensee sufficient time to establish an alternative halting site.

Submissions on Objection

EMS states that it is a poor reflection of the landfill operator's concern for human beings that people are living in a County Council halting site within 150m of the active landfill. EMS states that traveller families have been discriminated against and cite a number of facts to support this opinion, which include:

- *The halting site for travellers was constructed on a thin and poor quality layer of tarmac on top of the waste; no base or foundation was seen beneath the tarmac layer, which was broken in places. The tarmac could be penetrated with a stick indicating very poor quality.*
- *Strong smell of offensive odours around the halting site and possibility that landfill gases were being generated and emitted.*
- *The observations of the EPA that significant levels of methane had been recorded by Agency personnel at the landfill site on 17 November 1998, such that the Agency was compelled to write to the manager of RCC pointing out that there was an unacceptable health risk to the residents of the halting site, and that they should be relocated unless appropriate remedial works were carried out.*
- *The failure of RCC to carry out monitoring of the methane levels at the halting site, or to make any proposals for remedial works necessary to protect the health of residents (no evidence has been provided by the applicant that any proposals were subsequently made, nor were any remedial works carried out).*
- *The condition under which the traveller families were living appeared to be more or less unchanged between September 1989 and the more recent site inspections by EMS on 27/1/01 and 8/5/01.*
- *It is very likely that the traveller families living at the halting site for various periods of time will have suffered low level morbidity and other adverse effects on human health caused by proximity of the landfill.*

EMS strongly recommends the following in order to lessen the degree of health risk and adverse effects on the halting site residents:

- *Any further deposit of waste should be prohibited by the EPA until all occupation or habitation of the halting site ceases and all infrastructure relating to the halting site has been removed;*
- *Steps are taken immediately by RCC to monitor the levels of methane present at the halting site, and to check the health of residents;*

- *A new halting site should be selected and constructed by RCC as a matter of urgency; and*
- *In the interim before the new halting site is ready for occupation, remedial works should be undertaken (as recommended by the EPA) to protect the health of the residents, and to reduce the concentration of methane and noxious odours.*

EMS further states the condition should be retained and preferably strengthened so that any further deposit of waste should be prohibited until all occupation of the halting site has ceased.

The submission by REA states the 'dump should be closed immediately until an alternative halting site has been established'

Technical Committee's Evaluation:

In considering this ground, the TC also notes the comments in the objections by EMS (Ground B3) and by REA (Ground C1) on the location of the travellers' halting site.

The TC notes that no information was provided by EMS in support of the objection/submission to suggest that this facility has, or is likely to cause, adverse human health affects such as those listed in the objection.

The TC considers that there is a significant risk of landfill gas migration/accumulation. The TC considers that based on evidence of high methane levels recorded in the past, the risk of landfill gas migration/accumulation is such that the residents of the travellers' halting site should be relocated immediately. However, having regard to the logistics involved in the relocation of the residents of the halting site, a timeframe of three months is considered appropriate for this relocation.

The TC also notes that RCC, in their submission on the EMS objection, states *'that during the last two years and eight months since an application for this site was made to the Agency, the volume of incoming waste has increased beyond the levels expected. This was because the site effectively operated as a regional landfill. The site is now running out of space and it is anticipated that it will be full by the end of December 2001.*

We therefore intend to cease the acceptance of waste at the site by the end of December and to carry out a Restoration and Aftercare Plan'.

Based on this information, the TC recommends that Condition 5.2 be amended to state that no waste shall be accepted for disposal to the landfill at the facility after 31 December 2001 and that Condition 5.3 be amended to require the removal of the halting site within three months of the date of grant of the licence.

The TC also notes that Condition 9.3 requires the submission to the Agency for agreement of the details of the permanent gas monitoring system to be installed in the site office and any other enclosed structures at the facility, within three months from the date of grant of the licence. The TC recommends that at a minimum, a gas monitoring device/alarm should be installed in any inhabited structures on the facility. This should be done as soon as practicably possible from the date of grant of the licence. Until such time as this device is in place, weekly monitoring should be carried out at any inhabited structures on the facility.

Recommendation:

Amend Condition 5.2 as follows:

5.2 Subject to Condition 5.1, only those waste types and quantities listed in Schedule G: Waste Acceptance shall be recovered or disposed of at the facility unless the prior agreement of the Agency has been obtained. **Notwithstanding this, no waste shall be accepted for disposal to the landfill at the facility after 31 December 2001.**

Replace existing Condition 5.3 with the following:

5.3 **Within three months of the date of grant of this licence, all occupation or habitation of the halting site shall cease and all infrastructure relating to the Halting Site shall be removed.**

Insert Condition 9.3.2 as follows:

9.3.2 **The licensee shall, as soon as practicable from the date of grant of this licence, provide and maintain a gas monitoring or alarm system in all inhabited structures on the facility. This system shall be capable of detecting those parameters and those levels specified in Schedule F.2. Until such time as this device is installed the licensee shall carry out weekly monitoring of any inhabited structures on the facility.**

Add the following gas concentration limit to Schedule F.2:

Carbon dioxide ^{Note 1}

0.8 % v/v

Note 1: Not to be exceeded over an 8-hour period.

Ground A.5 - Condition 9.7 – The Licensee shall..... provide for three additional groundwater monitoring boreholes

The bedrock underlying the landfill is argillaceous bioclastic limestone. An outcrop 100 metres to the east of the landfill is tightly jointed and it was concluded that the rock has a low permeability.

Six groundwater monitoring boreholes have been installed around the landfill to monitor materials of glacial or fluvioglacial origin that underlie more recent peat and marl. Quarterly sampling and analysis of these boreholes since 1997, as reported to Roscommon County Council, has shown that the groundwater is not contaminated and it is concluded that the underlying bedrock is also uncontaminated.

In view of the above it is considered that monitoring of the bedrock is unwarranted and would involve excessive cost.

Submission on Objection

The submission from EMS on the RCC objection requests that the Condition as proposed should be retained.

Technical Committee's Evaluation:

The TC notes the current absence of any bedrock groundwater monitoring locations at or adjacent to the facility and consider that the provision of three such boreholes (one upgradient and two downgradient) is necessary to assess the impact of this facility on groundwater in the bedrock aquifer.

Recommendation:

No Change.

Objection B: Jack O’Sullivan, Environmental Management Services on behalf of Killarney Dump Action Group

The objection by Jack O’Sullivan, Environmental Management Services, (EMS) on behalf of Killarney Dump Action Group consists of a cover page and a report with six appendices. A number of the grounds for objection set out in the report are supported by photographs included in the objection as Appendix 1.

EMS state that they are objecting to the proposed licence on the following principal grounds:

- Lack of compliance with European and national waste management policy;
- Unsuitability of the site, and failure to comply with the requirements of the EU Landfill Directive;
- Poor management of the landfill to date, and the resulting serious on-going nuisances experienced by local residents;
- Proximity of dwellings, proximity of agriculture and horticulture, and use of local streams for stock watering;
- Lack of leachate control, absence of an impermeable barrier, potentially serious effects on groundwater, and pollution of surface waters;
- Contamination of adjacent drains and streams, some of which flow through lands owned by local residents;
- Failure to control the escape to atmosphere of landfill gas;
- Inadequate information in the waste licence application; and,
- Significant grounds for believing that the Agency should have refused a waste licence for this landfill.

The objector uses different headings from those above in supporting material. The TC have summarised the grounds of EMS objection as follows:

Ground B.1 - Failure to take account of EU and national waste management policies, the precautionary principle and of waste minimisation activities in other countries

EMS lists a number of EU Directives and policies together with how they are reflected in this country. Roscommon Co. Co. and the EPA should be aware of waste minimisation practices taking place in other countries. By granting a licence, this would be a strong disincentive to the development of a more appropriate waste management policy for the County and would be a misuse of public funds. This money would be better spent on more sustainable forms of waste management.

The objector also states that, while it may be argued that the EU Landfill Directive will not be transposed into Irish legislation for another two years, the principles underlying it and the waste management policy which it seeks to implement have been in existence for ten years; and yet these policies are largely ignored by the proposal to continue operating a poorly managed landfill in an agricultural and residential area.

Technical Committee's evaluation

The TC considers that in reaching a decision on the application for this facility, the Agency has had regard to all relevant waste management legislation, directives and policies and this includes the Government's policy document 'Changing Our Ways' and the Draft Waste Management Plan for the Connaught Region. The Agency was satisfied that Section 40(4) of the Waste Management Act 1996 will be complied with. The Draft Waste Management Plan for the Connaught Region states that the landfill at Roscommon will provide interim capacity for Co. Roscommon (subject to EPA licensing). The plan also provides for a range of waste recycling/recovery facilities. The proposed decision requires the submission of a report, which examines ways and means of increasing waste recovery provisions at the facility.

Recommendation:

No Change.

Ground B.2 - Poor management of the landfill to date and resulting serious on-going nuisances.

The objection states that local residents have experienced nuisances including wind blown litter, birds, flies, vermin, rats, fires, odours and other adverse impacts resulting from the poor management and operational practices at the facility. The objection outlines the local resident's experience relating to the different nuisances and quotes the extent of the working area, lack of compaction or covering of wastes and the failure to operate the landfill on a cellular basis as contributing factors to the ongoing nuisances.

In relation to facility management, the objection states that no attempt was being made by the operator to manage the landfill according to normal good practice, or to reduce or eliminate the nuisances being caused. Neither was it apparent that control was exercised over the types of waste accepted at the landfill, with the resulting risk that toxic substances have been (and are being) landfilled, and that groundwater and surface waters are contaminated.

It also states that, within the last 5 or 6 years, such impacts were attributed to the increasing quantity of waste being deposited at the facility. The objection states that a video cassette showing the state of the landfill is enclosed in support of the objection.

Technical Committee's Evaluation:

The TC notes that no video cassette was included with this objection, so it was unable to consider its contents. The TC does however note the concerns of the residents in relation to the nuisances that have been associated with the facility. The TC considers that adherence of the licensee to the requirements of Conditions 2 and 5 of the proposed decision will ensure that the facility is operated in a controlled manner and that the control of potential nuisances is provided for under Condition 6. These conditions include requirements for the adoption of waste acceptance procedures, the inspection of wastes prior to disposal, the proper management of difficult wastes, and the daily compaction and covering of deposited wastes. The management of the facility is controlled under Condition 2.

Condition 5 of the proposed decision restricts the types of waste that can be accepted at the facility, and the acceptance of untreated sewage sludge is not permitted. Condition 6.10 specifically requires the licensee to apply the vermin and fly control measures outlined in Attachment F.7 of the licence application. The use of only one working area and the application of daily cover in

accordance with Condition 5 will minimise the potential for vermin nuisance and litter. Condition 6 of the proposed decision requires the licensee to implement litter control measures including the provision of litter netting.

Recommendation:

No Change

Ground B.3 - Impact on the Travellers' Halting Site and human health concerns

The following issues were raised: health concerns to the occupants/habitants of the halting site and to those of local residents; risk from landfill gas emissions and migration.

The objection states that a halting site for travellers was constructed on top of the accumulated waste mass in 1982. After 2.4 metres of waste had been deposited, this area of the landfill was levelled and a thin layer of tarmacadam was laid on top of the waste and a halting site was developed. A number of travelling families have expressed concern that it was an unhealthy place in which to live. EMS carried out an appraisal of the travellers' halting site in 1989 and this is appended to the objection. The tipping of domestic and municipal refuse continued on the remaining land immediately to the south of the halting site. The objection also asserts that Low-level morbidity and other adverse effects on human health may also be expected in the vicinity of the Roscommon town landfill, and arising out of EMS's previous discussions with persons living near many other landfills, the types of health effects experienced are likely to include upper respiratory tract infections, increased incidence of asthma and related conditions, mild influenza-type symptoms, nausea, headaches and stress-related effects from the near continuous exposure to noxious odours, contaminated dust, aerosols and flies and to long term worry about living near the landfill.

The objection also states that at the time of an inspection of the site by EMS on 27 January 2001, it appeared that the halting site was still occupied by traveller families living in caravans, though a number of the "tigeens" were in a very poor condition. Views 18 and 19 (Appendix I) taken by one of the local residents (Mr. Paul Cunningham) on 19 January 2001 give an indication of the present state of the halting site.

With respect to landfill gas, the objection states that on 19 November 1998 the EPA wrote to the manager of RCC pointing out that significant levels of methane had been recorded by Agency personnel at the landfill site on 17 November 1998. It states that the letter strongly suggested that the County Council should consider relocation of the residents of the halting site unless appropriate remedial works were carried out, as there is an unacceptable risk to them at present. The objection also states that in the same letter, the Agency also noted that the further information received from the County Council on 17 November 1998 did not include any further monitoring results or proposals for such remedial works.

Technical Committee's evaluation

This objection has been considered in the TC evaluation to Ground A4. Refer to the TC recommendations for Ground A.4.

Recommendation

No Change.

Ground B.4 - Proximity of dwellings, proximity of agriculture and horticulture, and the use of local streams for stock watering including animal health concerns

There are approximately 70 to 80 residences within 2 km of the facility, and the nearest residences (excluding the travellers' halting site) are around 350 to 400 metres from the landfill.

The objection states that the Killarney Dump Action Group is concerned about the continuing risks to animal health and human health caused by air and water pollution from the poorly managed landfilling activities at the site.

The objection states that the main uses of the lands surrounding the dump are agriculture (sheep, dairying, fattening and some tillage) and horticulture (root crops, fruit) and the objector states that during EMS's brief site inspection on 27 January 2001, considerable evidence was given to them that agricultural activities have been damaged or curtailed by the presence of the landfill. Waterlogging of adjacent fields on the north side of the landfill as a result of the natural drainage pattern being impeded and altered, and the presence of large amounts of litter blown by winds and dropped by birds, bird carcasses, bird damage to plastic wrapped silage bales, rats and the risk of crow attacks on new born lambs are quoted as the main risks to agriculture associated with the operation of the landfill. The objection states that according to local information, the culvert at the facility frequently becomes blocked by litter, causing the water level in the drain to rise, and to flood the adjacent fields. It is stated that the need to remove litter and bird carcasses from fields before allowing animals into them for grazing, or before attempting to make silage, also adds to the effort and cost of farming near the landfill. It also refers to the indirect poisoning risks arising from the use of poisons for the control of pests.

It is also stated that the escape of leachate from the landfill to contaminate adjoining drains which flow towards the River Hind is also a cause of additional danger to farming, as it is understood that on some farms the livestock drink from surface waters.

Technical Committee's Evaluation:

The TC considers that compliance with the conditions of the waste licence should minimise the impact which the facility will have on surrounding farms, residents, and the environment. The TC notes the comments regarding flooding and waterlogging of adjacent land and have considered these in evaluating Ground A.1 and Ground A.2. The TC considers that control of litter is provided for under Condition 6. In relation to pest control and concerns regarding indirect poisoning, the TC notes that Condition 6 provides for pest control and control of other nuisances, and also requires that any method used by the licensee to control any nuisance shall not cause environmental pollution. The TC also considers that Condition 4.14 provides for appropriate leachate and surface water Management.

Recommendation:

No Change.

Ground B.5 - Devaluation of Property

The objection states that properties were devalued as a consequence of the proximity of the landfill. It is also stated that some devaluation of property is also likely to be experienced in the vicinity of the landfill, arising not only from the visual intrusion caused by the landfill, but also from the general untidy appearance of the surrounding countryside as a result of the accumulation of windblown litter.

Technical Committee's Evaluation:

The TC considers that the conditions in the licence are such that they will prevent environmental pollution and reduce the impact outside the boundary of the facility.

Recommendation:

No Change.

Ground B.6 - Visual impact

Because of the relatively low lying aspect of the surrounding countryside, and because of the height to which refuse has been deposited, the landfill is clearly visible from the N63 to the north, and from lands and houses to the east, south and west of the site. The objector asserts that many of the nearby residents consider the appearance and visual intrusion of the landfill to be a serious nuisance, especially one landowner considers that the development value of part of his landholding, which is approximately 0.8 km from the centre of Roscommon town, is being very significantly reduced by the proximity of the landfill. The objectors disagree with statements in the waste licence application that "from the N63 Roscommon to Lanesborough Road and adjacent properties, the roadside hedgerows and trees effectively screen views of the site" and that "the landfill site compliments and is absorbed within the surrounding mosaic of colour" and states that they are fundamentally at variance with their own observations and with those of surrounding residents. The objection states that the proposal to raise the elevation of the site by adding further layer of wastes must be viewed with the utmost concern, especially as the proposed licence appears to contain no provision to control or reduce the existing intrusive height of the deposited wastes.

The objection also states that it appears that the only way in which further deposits of waste can be accommodated is by raising the height of the existing refuse mound which is already well above the height of the surrounding countryside (Views 2, 3, 6, 28 and 19 in Appendix I). It notes that the Inspector's Report, in its opinion, described the facility more appropriately as a "landraise" rather than a landfill, which, it is claimed, confirms the objector's observations that the height of the deposited waste is a noticeable feature of the facility.

Submission by RCC on Objection

In their submission on the objection, RCC rejects the claim by EMS that the facility is visually intrusive and state that the imposition of a maximum final height of 60mAOD is too restrictive. They suggest that a more suitable limit would be 62mAOD.

Technical Committee's Evaluation:

The TC notes that the final height and appearance of the landfill is controlled under Conditions 8.1 and 8.2 of the proposed decision. Condition 5.12 requires the applicant to apply cover material across the whole landfill prior to 30th June 2001 and this will reduce the visual impact of the present facility. Since the licensee cannot now practically meet the date specified in this Condition, the TC recommends that it should be amended. The daily covering of waste (Condition 4.16) and the implementation of litter control measures (Condition 6.3) will also keep to a minimum the visual impact of waste disposal activities. Regarding the height of the facility, the TC notes that the applicant stated in Attachment G.1 (c) & (d) of the waste licence application that "*the maximum final level will be approximately 60m OD*". RCC's request for a final height of 62m AOD is not supported by any technical information or any information on the environmental

impact including an assessment of the visual impact. Therefore, the TC do not consider that the final height should be amended.

The TC notes that Condition 6.8 and Condition 6.10 have specific dates,.

Recommendation:

Amend the date in Condition 5.12 as follows:

Any cover material at any location within the facility which is eroded, washed off or otherwise removed shall be replaced by the end of the working day. **Within three months of the date of grant of this licence**, unless otherwise agreed with the Agency, the licensee shall place permeable cover material which does not prevent the venting of landfill gas to atmosphere across the whole landfill so that no waste other than cover material or material suitable for specified engineering works is exposed.

Ground B.7 – Access and site security.

In relation to facility security, the objector describes the internal site road as an unpaved and semi-waterlogged access track and that access to the facility is easily obtained from the halting site and through inadequate fencing around the boundaries of the facility.

Technical Committee’s Evaluation:

In relation to the security of the facility, Condition 4.3 requires that security fencing and gates shall be installed within eighteen months of the date of grant of the licence. However, the TC considers that the timeframe for the installation of this infrastructure should be amended to nine months.

Recommendation

Amend Condition 4.3.1 as follows;

Within **nine** months of the date of grant of this licence the licensee shall install and maintain security fencing and gates described in Attachment D.1.a, but including and surrounding the existing Halting Site. The security fence and gates shall be at the locations shown on Drawing No. D.1.a – Existing Infrastructure & Proposed Perimeter Fence. The base of the fencing shall be set in the ground.

Ground B.8 – Remaining landfill capacity and limit on the total quantity of waste not specified in the proposed licence.

The objection states that the total quantity of waste to be accepted at the facility is not specified in the proposed decision. Based on the assessment of information contained in the waste licence application, the opinion is expressed that more than 80% of the existing landfill capacity has been taken up, and that scope for further deposits of waste is very limited.

Submission by RCC on Objection

RCC states in its submission on the objection that during the last two years and eight months they have taken more waste at the facility than they had originally anticipated, and that the facility will be full by the end of December 2001. RCC states that it therefore intends to cease the acceptance of waste at the site by the end of December and to carry out a Restoration and Aftercare Plan and requests that the Agency reconsider the terms of its licence to take account of this. The submission comments further that the imposition of a maximum final height of 60 metres AOD is too restrictive, particularly given the likely settlement of the waste and suggests that a more suitable limit would be 62m AOD.

Technical Committee's Evaluation:

The waste types and annual quantities of waste to be accepted at the facility are detailed in Schedule G: Waste Acceptance of the proposed decision. The TC notes that Condition 8.2 of the PD specifies a final maximum height of 60m OD (Malin Head) for the facility. The TC considers that these requirements limit the total quantity of waste that may be deposited in the landfill.

The TC also notes RCC submission on the objection and recommends that the facility cease acceptance of waste for disposal to the landfill at the facility by 31 December 2001 (*Refer to TC's recommendation for Ground A.4*). In relation to the final height for the facility see TC's evaluation of Ground B6.

Recommendation:

No Change.

Ground B.9 - Waste Types Accepted

The objection states that quantities of industrial waste, including drums which had contained solvent had been tipped near the end of the access track and some sludges had been tipped and left uncovered nearby. The objector states that it is understood that around 300 tonnes of sewage sludges from the waste-water treatment plants at Roscommon town and Monksland near Athlone are deposited annually on site. Covering of these sludges is important to reduce the emission of noxious odours, but this is not being done. According to the objection, the County Council is reported to have taken in 400 loads of fly ash from the power station at Lanesborough and this does not appear to be part of the original proposal. The objection states that the peat fly ash is classified as a hazardous (Category II) waste.

Technical Committee's Evaluation:

The TC notes that the waste types and annual quantities of waste to be accepted at the facility are detailed in Schedule G: Waste Acceptance of the proposed decision. It also notes comments regarding the recent disposal of fly ash from Lanesboro power station and the TC is not aware that fly ash has been accepted at the facility in the past. The TC considers that Condition 5.1 specifies wastes which shall not be disposed of at the facility including hazardous waste, septic tank waste and untreated sludges, among others. The acceptance of treated sewage sludge at the facility is controlled under Condition 5.13 of the proposed decision.

Recommendation:

No Change.

Ground B.10 - Leachate Management and Pollution of Surface Waters and Groundwater – Absence of an Impermeable Barrier

The objection states that the landfill is not a containment facility, and is not lined by any form of impermeable or semi-permeable barrier, which would control or restrict the escape of leachate. The objector believes that under these circumstances, the Agency should not have granted a waste licence, or should have obtained firm evidence of the presence of an adequate barrier or that there is sufficient attenuation capacity to prevent contamination of soil and groundwater

before making a decision on the licence application. The objector also states that the PD does not require the licensee to install a liner beneath the area planned for future waste disposal.

Leachate Management Plan - The objection states that according to the waste licence application, no leachate management plan has been prepared.

Leachate Contamination of Surface Water & Groundwater - The objector indicates that surface water analyses included in the waste licence application show the landfill is contaminating surface waters, and more recent analyses of surface waters obtained by local residents confirm that pollution is continuing. Samples of surface water collected in February 2001 from drains flowing through land adjacent to the landfill facility show elevated levels of ammonia and biochemical oxygen demand. Ammonia concentrations ranged from 0.52 to 15.6 mg/litre, and BOD ranged from 4.5 to 56 mg/litre, suggesting significant contamination by leachate. The objector also states that all three groundwater wells which are sited in adjoining landowner's property show low levels of contamination.

Leachate Control Requirements - The objector states that it is difficult to see how leachate control measures as required by Condition 4.14.2 (e.g. construct toe drains and divert surface water around the perimeter of the landfill) can be done without the applicant acquiring additional land around the perimeter of the site, especially as most of the drains and streams already polluted lie outside the landfill boundary.

Capping Details – The objector states that no details have been provided in the application about how the landfill will be capped and sealed after completion. The objector asserts that daily cover and intermediate capping as specified in condition 4.16.1 of the proposed waste licence would appear to be inadequate to control the ingress of water to the waste mass, and the final capping proposed in Condition 4.16.2 does not appear to be required until the landfill is about to be closed.

Technical Committee's Evaluation:

The TC notes that the proposed decision relates to an existing unlined facility. Monitoring results provided indicate contamination of surface water and slight contamination of groundwater. The TC note from the Inspector's report that waste has been deposited on all parts of the facility during the course of landfilling activities, and therefore the deposition of waste allowed for under Condition 5.7 will only take place on previously deposited waste. The TC considers that in reaching its decision on the application for a Waste Licence for this facility, the Agency is satisfied that it will comply with Section 40(4) of the Waste Management Act, 1996. The proposed decision contains a number of requirements and control measures, which will ensure that the activities carried out at the facility will not cause environmental pollution. A leachate and surface water management system is required under Condition 4.14 of the proposed decision. This includes measures to provide for the collection/abstraction of leachate (Condition 4.14).

The daily cover and the intermediate cover specified in Condition 4.16.1 is free draining so that it does not prevent venting of landfill gas to atmosphere as stated in Condition 5.12. The timing given in Condition 4.16.2 for the placement of the final cap takes into account the risk posed to the habitants of the halting site from landfill gas migration. The risk of lateral landfill gas migration would be increased if the facility was capped which would prevent landfill gas venting to atmosphere.

Recommendation:

No Change.

Ground B.11 - Landfill Gas Management/Failure to control the escape to atmosphere of landfill gas

The objector states that according to the waste licence application, no landfill gas management plan has been prepared and the applicant has submitted no proposals for utilisation or flaring of gas, and the only provision made is for passive venting of the estimated total quantity of 31.3 million cubic metres of gas to be produced during the planned life of the landfill. The objection notes that the proposed waste licence requires the installation of a system for the active collection and flaring of landfill gas, but that this will not be in place until at least 18 months after the final licence has been granted.

Technical Committee's Evaluation:

The TC notes that Condition 4.15 requires landfill gas management at the facility. Having regard to previous landfill gas monitoring results at the facility, the TC considers, taking into account the potential risk of landfill gas migration/accumulation, that the timeframe given in Condition 4.15.1 for the installation of a system for the active collection and flaring of landfill gas should be shortened from eighteen months to twelve months.

Recommendation:

Amend Cond 4.15.1 as follows:

The licensee shall install a system for the active collection and flaring of landfill gas at the facility, such that within **twelve** months of the date of grant of this licence landfill gas shall be collected and flared (using an enclosed flare unit). Until the installation of the landfill gas flare passive landfill gas management at the facility shall be carried out.

Submission on Objection

The REA submission on the EMS objection states that it has their full support.

Objection C: Mr. Noel Hoare, Roscommon Environmental Alliance (12/04/01)

Ground C.1 - Location of Halting Site

The siting of a landfill site adjacent to a halting site for travellers is discriminatory.

Technical Committee's Evaluation:

The provision of suitable accommodation/halting sites for travellers is not a matter for consideration by the Agency.

Recommendation:

No Change.

Ground C.2 - Poor Management of the Facility

The landfill site has been very badly managed in the past.

Technical Committee's Evaluation:

See TC's evaluation of Ground B.2 above.

Recommendation:

No Change.

Ground C.3 - Odours

The objector states that odours from the site have reached appalling levels due to methane emissions, dumping of sewage sludge and dumping of huge quantities of organic waste. This is not tolerable for adjacent residents and from time to time the entire town is polluted by strong and noxious odours.

Technical Committee's Evaluation:

See TC's evaluation of nuisances under Ground B.2 and waste types under Ground B.9.

Recommendation:

No Change.

Ground C.4 - Water Pollution

Water pollution is inevitable due to seepage of highly toxic leachate caused by dumping of organic and toxic waste.

Technical Committee's Evaluation:

As outlined in the TC's response to Ground B.9 above, the types and quantities of waste to be accepted at the facility are specified under Condition 5 of the proposed decision and only non-hazardous wastes are permitted to be accepted. Leachate generated at the facility will be collected/abstracted and then treated at an agreed wastewater treatment facility under Condition 4.14.

Recommendation:

No Change.

Ground C.5 - Vermin

Vermin population has increased and the County Council does not seem to be able to control it.

Technical Committee's Evaluation:

See TC's evaluation of Ground B.2 above.

Recommendation:

No Change.

Ground C.6 - Litter

Litter pollution around the site of the landfill is uncontrolled.

Technical Committee's Evaluation:

See TC's evaluation of Ground B.2 above.

Recommendation:

No Change.

Ground C.7 - Recommendations by Roscommon Environmental Alliance

Roscommon Environmental Alliance offer the following recommendations:

Regarding any alternative sites, we believe that certain conditions should be attached to the granting of a licence to Roscommon County Council which would be strictly monitored and enforced. These conditions are:

- *Roscommon County Council would immediately put in place either directly or in association with private contractors, a dual bin collection system for all the county which would assist in the separation of waste.*
- *All waste going to Killybegs landfill would be segregated at a transfer station so that all recyclables would be removed thus reducing the volume of waste.*
- *All organic waste would be composted mechanically at an indoor facility thus removing odours and vermin and further pollution of water.*
- *All toxic waste would be removed and treated in an appropriate manner.*
- *A Bring Centre would be established on site in order that people could bring their waste for recycling.*
- *This is the least that the people of Roscommon, and in particular the people living in the vicinity of the landfill deserve.*

Technical Committee's Evaluation:

As detailed in Condition 1, the proposed decision only applies to those waste activities taking place at the Roscommon Landfill facility, and therefore the provision of waste management infrastructure (other than that required for the operation and management of the landfill) within the County as a whole is outside the scope of this report. This issue is dealt with under the Draft Waste Management Plan for the Connaught Region. Condition 5.19 of the proposed decision requires the licensee to submit a report to the Agency on waste recovery provisions at the facility. The TC also notes that the proposed decision provides for the establishment of a Civic Waste Facility infrastructure at the facility (Condition 4.17). The TC also notes that the proposed decision requires that there shall be no disposal of hazardous waste at the facility (Condition 5.1).

Recommendation:

No Change.

Submission on Objection

The EMS submission on the REA objection states that they agree broadly and in principle with the REA objection and further comments. The TC has considered these comments in its assessment.

Additional Grounds arising from Submissions on Objections

D.1 - Slope Stability

In the submission by EMS on the objections, it is stated that an attempt to "tidy up" the flanks or edges of the landfill had resulted in the production of relatively flat "terraces" alternating with steep and unstable slopes of material composed of a mixture of old wastes, dredged silt from nearby drains, and clay: and these slopes had subsided or collapsed in a number of places, resulting in further movement and instability of the landfill mass, and partial reblocking of drains.

Technical Committee's Evaluation:

The TC consider that the side slopes of the landfill should be assessed for stability and recommend that a new Condition be inserted into the proposed decision to reflect this.

Recommendation:

Insert new Condition 9.21 as follows:

Within six months of the date of grant of this licence, and annually thereafter, the licensee shall carry out a stability assessment of the side slopes of the facility.

Add to Schedule C, Table C.1 the above annually recurring report (Slope Stability Assessment).

D.2 – Enforcement of the Waste Management Act, 1996

In the submission by EMS on the objections, it is stated that the failure of the applicant to manage the landfill site is compounded by the Agency's apparent failure to enforce the law and EMS draw the attention of the EPA to the powers of Section 57(1) of the Waste Management Act, 1996.

Technical Committee's Evaluation:

The TC considers that this issue is outside its scope.

Recommendation:

No Change.

D.3 – Reconsider the terms of the Licence to take account of closure date

In the submission by RCC on the objections, it is stated that RCC 'intend to cease the acceptance of waste at the site by the end of December and to carry out a Restoration and Aftercare plan'. RCC therefore request 'the Agency to reconsider the terms of its licence to take account of this.'

Technical Committee's Evaluation:

The TC notes that the cessation of the activity to which the waste licence relates requires, under S46(5) of the Waste Management Act, 1996, a review of the waste licence and the Agency shall at that stage determine such measures as are in its opinion necessary for the closure of the facility.

Recommendation:

No Change.

E – Other items

The TC notes that Condition 6.8 and Condition 6.10 have specific dates, which the licensee cannot now practically meet. The TC recommends that dates specified in these Conditions should be amended.

Recommendation:

Amend the date in the following Conditions:

Condition 6.8:

Within six months of the date of grant of this licence, the licensee shall submit to the Agency, an assessment of the effectiveness of the bird control measures at the facility. This assessment shall

Condition 6.10:

The licensee shall apply the vermin and fly control measures outlined in Attachment F.7 of the application. Notwithstanding these measures and unless otherwise agreed with the Agency, **within six months of the date of grant of this licence,** the licensee shall submit to the Agency a programme for the control and eradication of vermin and fly infestations at the facility. This programme should include as a minimum, details on the rodenticide(s) and insecticide(s) to be used, operator training, mode and frequency of application and measures to contain sprays within the facility boundary.

Signed:

Peter Carey
Technical Committee Chairperson