

MEMO			
TO:	Board of Directors	FROM:	Michael Henry
CC:		DATE:	28/05/01
SUBJECT: Technical Committee Report on Objections to Proposed Decision Reg. No. 77-1.			

Application Details	
Applicant:	Cavan County Council
Location of Activity:	Corranure Landfill, Cootehill Road, Cavan
Reg. No.:	77-1
Licensed Activities under Waste Management Act 1996:	Third Schedule: Classes 1, 4, 5, 11, 12, 13 Fourth Schedule: Classes 1, 2, 3, 4, 10, 11, 13
Proposed Decision issued on:	18/01/01
Objections received:	14/02/01
Submissions on objections received:	None
Notable correspondence received:	14/02/01; 08/05/01
Inspector:	Eamonn Merriman

Consideration of the objections

The Technical Committee (Michael Henry, Chairperson, Kealan Reynolds and Kevin McDonnell committee members) has considered all of the issues raised and this report details the Committee's comments and recommendations following the examination of the objections.

Objections

One objection to the proposed decision was received from Cavan County Council.

Objection No.1: Cavan County Council

Ground 1 (Condition 3 – Notification and Record Keeping)

It is requested that all references to maintaining "written" records included in Conditions 3.10 to 3.13 inclusive are replaced with "written or computer" records

Technical Committee's evaluation

The technical committee consider that Conditions 3.10 to 3.13 should be amended to include records which are generated by computer.

Recommendation

**Amend Condition's 3.10, 3.11, 3.12 and 3.13 to include the following after the words 'written records':
(or records in electronic format)**

Ground 2 (Condition 4 - Site Infrastructure)

The Co. Co. have instructed consultants to design and prepare the relevant contract documents for the proposed works as required by Condition 4 of the Proposed Decision. However, the completion of such works may conflict with the closure date of 31st October 2001 for the existing landfill (as specified in Condition 1 of the Proposed Decision). Cavan County Council will ensure that all works shall be completed.

Technical Committee's evaluation

The issues raised here in relation to the timeframes for completion of the proposed works are dealt with under the relevant grounds below.

Recommendation

No change.

Ground 3 (Condition 4.13 - Specified Engineering Works)

The submission of written proposals for all Specified Engineering Works at least two months prior to the intended date of commencement of the works would result in delaying such works and this may conflict with the closure date of 31st October 2001 for the existing landfill. Cavan County Council request that the time period of two months be reduced to one month.

Technical Committee's evaluation

The technical committee note the timeframe for submission of proposals for Specified Engineering Works (i.e. two months prior to the intended commencement date). In order to prevent any delays in commencing the works and having regard to the closure date for the existing landfill, the technical committee consider that Condition 4.13 should be amended as recommended below.

Recommendation

Amend Condition 4.13.1 as follows:

The licensee shall submit written proposals for all Specified Engineering Works, as defined in *Schedule D: Specified Engineering Works* of this licence, to the Agency for its agreement at least **one month** prior to the intended date of commencement of any such works. No such works shall be carried out without the prior agreement of the Agency.

Ground 4 (Condition 4.15.2 - Leachate Management)

The date of 31st August 2001 for the installation of a leachate interception drain around the existing landfill is unreasonable. It is intended that the existing landfill will be remediated in an integrated manner and the provision of the leachate interception drain is part of the overall plan. It is requested therefore that the installation of the leachate interception drain is amended to allow it to be completed within twelve months of the cessation of filling at the existing landfill.

Technical Committee's evaluation

The technical committee notes the presence of contamination in the Corranure Stream downstream of the facility and this is most likely as a result of leachate contamination from the existing unlined landfill. The installation of the leachate interceptor drain will minimise the impact which leachate is having on surface waters and this work should be completed at the same time as the surface water management works required by Condition 4.19.2 (i.e. within six months of the date of grant of the licence).

Recommendation

Amend Condition 4.15.2 as follows:

Within six months of the date of grant of this licence, the licensee shall install a leachate interceptor drain around the Existing Landfill as shown on Figure 3.4 of the Environmental Impact Statement, Volume 2.

Ground 5 (Condition 4.15.3 – Leachate Management)

It is requested that the time period "within 12 months of the date of grant of the licence" is amended to "within twelve months of cessation of filling" in relation to the installation of an active leachate extraction system at the existing landfill. The installation of such works will be completed in conjunction with the capping programme.

Technical Committee's evaluation

The installation of a leachate abstraction system at the existing landfill will minimise the impact which leachate is having on groundwater beneath the facility. The technical committee consider

that the timeframe of 12 months from the date of grant of the licence for completion of such works should remain.

Recommendation

No change

Ground 6 (Condition 4.15.4 – Leachate Management)

It is requested that the time period “within six months of the date of grant of the licence” in relation to the installation of monitoring boreholes is amended to “within twelve months of cessation of filling” for the reasons given in ground 5.

Technical Committees Evaluation

The technical committee consider that the leachate monitoring boreholes should be provided at the same time as the leachate extraction system required by Condition 4.15.3. The leachate monitoring boreholes could also be used for extraction of leachate. Therefore, the timeframe should be amended from 6 months to within 12 months of the date of grant of the licence.

Recommendation

Amend Condition 4.15.4 as follows:

Four leachate monitoring boreholes shall be provided in the Existing Landfill within **twelve** months of the date of grant of this licence. Each cell in the Landfill Extension shall have a minimum of two leachate monitoring points. These boreholes shall also be capable of monitoring landfill gas. The boreholes in the Existing Landfill shall also be designed to provide for the active extraction of leachate.

Ground 7 (Condition 4.15.8 – Leachate Management)

Condition 4.15.8 requires that (unless otherwise agreed) leachate shall be pumped via a 50mm pipeline to Cavan Wastewater Treatment Plant. However a 63mm pipeline currently exists and Cavan County Council requests that the Condition be amended to reflect this

Technical Committees Evaluation

The technical committee consider that it is not necessary to specify the diameter of the pipeline through which leachate will be pumped. Condition 4.15.8 should be amended to reflect this change.

Recommendation

Amend Condition 4.15.8 as follows:

Unless otherwise agreed with the Agency, leachate stored in the leachate storage lagoon shall be pumped to Cavan Waste Water Treatment Plant as shown on drawing number CORR/REPL/02. The leachate lagoon shall also be designed to facilitate removal of leachate by road tanker.

Ground 8 (Condition 4.15.12 – Leachate Management)

Clarification should be provided as to what component of the sewer line is required to be integrity tested.

Technical Committees Evaluation

The technical committee consider that the licensee should only be required to test the integrity of the pumped sewer from the landfill to its connection with the main sewer network. Condition 4.15.12 should be amended to reflect this.

Recommendation

Amend Condition 4.15.12 as follows:

All leachate management structures on-site shall be inspected and certified fit for purpose on an annual basis by an independent and appropriately qualified chartered engineer. Any remedial works recommended in this report must be implemented within a time-scale to be agreed with the Agency. Within three months of the date of grant of this licence, the licensee shall demonstrate the integrity of the pipeline **from the landfill to the existing sewer network.**

Ground 9 (Condition 4.19.2 –Surface Water Management)

The timeframe for diversion of the Corranure Stream should be changed from “within six months of the date of grant of the licence” to “within twelve months of the cessation of filling” for the reasons outlined in ground 5 above.

Technical Committees Evaluation

See response to Ground 4 above.

Recommendation

No change.

Ground 10 (Condition 4.19.3 – Surface Water Management)

Clarification should be provided as to what surface water management works will be required at the landfill extension.

Technical Committees Evaluation

Condition 4.19.3 requires the submission of proposals for the management of surface water from the landfill extension and other infrastructure at the facility. It is likely that the works will involve the installation of a surface water drainage and collection network and a system for the control of all surface water arising at the extension. As the licensee is required to agree all surface water management works as part of Specified Engineering Works (Schedule D), the technical committee consider that Condition 4.19.3 duplicates this requirement. Therefore Condition 4.19.3 should be deleted.

Recommendation

Delete Condition 4.19.3

Ground 11 (Condition 4.20.1 –Groundwater Management)

The Co. Co. object to the requirement to install additional boreholes upgradient and downgradient of the proposed extension as required by Condition 4.20.1.

Technical Committees Evaluation

The technical committee note that it may be possible for the licensee to utilise one of the existing wells as a downgradient monitoring point but it will still be necessary to install a well upgradient of the facility. Condition 4.20.1 should be amended to reflect the requirements of the Landfill Directive in relation to specifying the locations of groundwater monitoring. Such monitoring points should be provided one month before the commencement of waste disposal in the proposed landfill extension.

Recommendation

Amend Condition 4.20.1 as follows:

At least one month prior to the commencement of waste disposal in the proposed Landfill Extension, **the licensee shall provide one monitoring point in the groundwater inflow region and two monitoring points in the groundwater outflow region of the facility.** These boreholes shall be designed to also facilitate landfill gas monitoring.

Ground 12 (Condition 4.21.1 – Surface Water Management)

The provision of a Civic Waste Facility could be affected by the overall plan of works and in particular the remediation of the existing landfill. It is requested that the time period of nine months from the date of grant of the licence be amended to take account of such works.

Technical Committees Evaluation

The provision of a civic waste facility will enhance the recovery of waste at the facility and reduce the deposition of waste at the landfill. The technical committee consider that the installation of the civic waste facility will not be adversely affected by other works being undertaken at the facility and the timeframe of nine months should remain.

Recommendation

No change.

Ground 13 (Condition 5.1.3 –Waste Acceptance Procedures)

The inspection of 1 in 10 loads of waste at the waste inspection area is excessive. This requirement should be replaced with the requirements of the draft EPA waste acceptance manual i.e “waste loads shall be inspected at regular intervals in the waste inspection area”.

Technical Committees Evaluation

The technical committee consider that the requirement to undertake inspection of 1 in every 10 waste loads accepted at the waste inspection area is too onerous. The frequency of such inspections should be at regular intervals and as specified in the waste acceptance procedures required by Condition 5.1.1

Recommendation

Amend Condition 5.1.3 as follows:

Waste loads shall be inspected at regular intervals in the Waste Inspection Area and the frequency of such inspections shall be specified in the waste acceptance procedures. A record of all inspections shall be maintained.

Ground 14 (Condition 5.5 (f) –Waste management)

The timeframe for covering of all wastes (other than cover material or material suitable for SEW's) at the existing landfill should be amended in order to coincide with the overall remediation programme.

Technical Committees Evaluation

The application of cover/capping material serves to decrease the possibility of windblown debris, significantly reduce access to the waste by birds, insects and vermin, diminish odours and fire risk and improve the overall appearance of the landfill. It is the first stage in the restoration of the facility and the restoration is necessary to bring the facility back into a purposeful end use. The proposed decision requires the application of cover at the end of each working day together with a requirement to ensure the existing landfill is covered within three months of the date of grant of the licence (Condition 5.5.(f)). Condition 5.5(f) should be amended to exclude the working face from this requirement as this is addressed in Condition 5.5(d) – application of daily cover.

Recommendation

Amend Condition 5.5(f) as follows:

within three months of the date of grant of this licence, cover material shall be placed across the Existing Landfill (**other than the working face**) so that no waste other than cover material or material suitable for specified engineering works is exposed; and,

Ground 15 (Condition 5.12.2 –Waste Recovery)

Clarification is requested regarding the report required by Condition 5.12.2 of the proposed decision in relation to the recovery of wastes.

Technical Committees Evaluation

Condition 5.12.2 requires the licensee to submit a report which shall examine the recovery of wastes at the civic waste facility. This should focus on increasing the recovery capacity at the civic waste facility and minimising the overall quantities of waste disposed of at the landfill.

Recommendation

No change.

Ground 16 (Condition 8.3 –Final Profile)

A topographical survey which was completed as part of the waste licence application was carried out to local datum only. A revised survey was completed in 2000 and indicated a current height of 127 mOD at the existing landfill. It is requested that the height of the existing landfill be amended to 132 mOD to allow for filling until 31st October 2001 and for final capping. The proposed final profile of the extension is 126 mOD.

Technical Committees Evaluation

The technical committee note the information provided in relation to the current height of the existing landfill (127 mOD) and the request to increase the height of the existing landfill to 132 mOD to allow for the completion of filling and for final capping. The technical committee consider that, in order to provide for the final capping of the existing landfill, the final height of the facility should be specified at 129.5 mOD. Any increase in the height of the facility above 129.5m OD may result in adverse visual impacts.

Recommendation

Amend Condition 8.3 as follows:

The height of the landfill shall not exceed 129.5mOD (Malin Head).

Ground 17 (Condition 9.2 –Monitoring)

Clarification is sought on the types of environmental monitoring required by Condition 9.2

Technical Committees Evaluation

Condition 9.2 refers to the monitoring specified in the waste licence.

Recommendation

No change.

Ground 18 (Condition 9.9.2 – Slope Stability)

Clarification is sought on whether slope stability assessments are required at the existing landfill only. It is also requested that the time period of three months specified in this condition be extended to coincide with the overall remediation programme.

Technical Committees Evaluation

The technical committee note the presence of particularly steep slopes along the boundary of the facility which runs adjacent to the main road. Condition 9.9.2 requires the licensee to undertake a slope stability assessment and submit this report to the Agency within three months of the date of grant of the licence and annually thereafter. Stability monitoring is important in assessing the structural integrity of a landfill and slope failure may pose a potential hazard to the environment and also to humans. This should apply to the existing landfill and to the future development of the landfill. The technical committee consider that the timeframe for submission of the first assessment should be extended from 3 months to 6 months from the date of grant of the licence.

Recommendation

Amend Condition 9.9.2 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 and provide a report on that assessment to the Agency. In relation to the Existing Landfill, the first stability assessment shall include recommendations on the integration of the capping/restoration layer required by this licence so as to ensure side slope stability following restoration.

Ground 19 (Condition 9.10.1 –Surface Waters)

It is excessive to carry out two baseline surveys on the Analee River. The facility does not impact on the Analee River and all surface waters in the vicinity of the landfill will drain to the Corranure Stream (as was indicated in the application).

Technical Committees Evaluation

The technical committee note that surface water from the landfill extension is likely to be discharged to a tributary of the Analee River which lies to the north of the facility. Such discharges will be controlled as part of the licence requirements. The technical committee considers that the requirement to carry out two baseline surveys of the Analee tributary (as specified in Condition 9.10.1) is excessive and not necessary. Regular monitoring of this surface water course is already specified in Table E.4.3 and such monitoring is considered adequate. It is recommended that the reference to the Analee monitoring stations in Table E4.1 be amended to reflect this change.

Recommendation

Delete Condition 9.10.1

Amend Table E.4.1 as follows:

STATION
K1 (The suitability of this upstream monitoring location shall be re-examined as per Condition 9)
K2
K3
Analee monitoring stations to be agreed with the Agency
Any surface water run-off discharge points agreed by the Agency through Condition 4.13 ^{Note 1}

Note 1: At minimum, surface water discharges shall be monitored monthly (unless flow in that month does not allow such monitoring) for parameters denoted by Note 6 in Table E.4.3.

Ground 20 (Condition 9.10.2 –Surface Waters)

Clarification is sought as to whether Cavan County Council should map and subsequently monitor the Corranure watercourse upstream of the facility where it consists of a series of field drains.

Technical Committees Evaluation

The main reason for mapping the Corranure watercourse upstream of the facility is to decide the most appropriate locations for monitoring this surface water course. Thereafter, monitoring will be required to be carried out at the agreed locations.

Recommendation

No change.

Ground 21 (Condition 9.10.3 –Surface Waters)

Cavan County Council consider that it is excessive to require biological monitoring of the Annalee Stream for the reasons outlined in ground 19. Clarification is also required as to why biological monitoring is to be carried out twice in one year and whether an assessment needs to be completed on an annual basis.

Technical Committees Evaluation

The technical committee do not consider it necessary to undertake biological monitoring of the Annalee water course (See also response to Ground 19 above). However, in order to accurately monitor the changes in diversity and density of macroinvertebrates which inhabit the substrata of the Corranure Stream, biological monitoring should be undertaken during the months of May and September. Condition 9.10.3 should be amended to clarify the frequency of this monitoring and the locations should be those submitted in the EIS.

Recommendation

Amend Condition 9.10.3 as follows:

A biological assessment of Corranure Stream at the locations specified on Map 3, Appendix I of Vol. 3 of the EIS shall be undertaken **each year** during the months of May and September. This assessment shall use appropriate biological methods such as the EPA Q-rating system for the assessment of rivers and streams. The report shall include a drawing showing the location of monitoring points each identified by a unique number and a twelve figure grid reference.

Ground 22 (Condition 9.11.1 –Ground Water)

It is considered that the baseline data for the existing groundwater boreholes has been provided to the Agency as part of the licence application. It is requested that Condition 9.11.1 be amended to take account of the existing data.

Technical Committees Evaluation

The technical committee note that information on the groundwater quality was submitted as part of the waste licence application process. It considers that one baseline survey for the parameters specified in Table E.4.1 will provide adequate information on the groundwater quality and Condition 9.11.1 should be amended to reflect this.

Recommendation

Amend Condition 9.11.1 as follows:

Prior to the commencement of waste activities in the proposed Landfill Extension, a baseline survey shall be undertaken in the boreholes specified in Condition 4.20.1 for all the groundwater parameters listed in Table E.4.3 of *Schedule E: Monitoring* of this licence, as well as piezometric maps for the sampling occasion. The results of this monitoring shall be submitted to the Agency upon completion.

Ground 23 (Condition 9.12.2 –Landfill Gas)

Clarification is sought as to the provision of additional landfill gas monitoring locations for off-site migration in terms of type of monitoring, equipment, etc.

Technical Committees Evaluation

It is considered that the monitoring locations referred to in Condition 9.12.2 will require the installation of landfill gas monitoring wells and this should provide useful information on the nature and extent of off-site migration of landfill gas. Condition 9.12.2 as written, provides for the agreement of the monitoring with the Agency.

Recommendation

No change.

Ground 24 (Condition 11.2.1 –Financial Provision)

It is not necessary to establish and maintain a fund given that the licensee is a local authority and that revenue generated from gate fees will be available for funding the implementation of the restoration and aftercare plan.

Technical Committees Evaluation

The requirement to maintain a fund or a written guarantee as specified in Condition 11.2.1 is necessary to ensure the licensee is capable of implementing the restoration and aftercare plan for the facility. This condition can be satisfied by the submission of a letter stating that the Co. Co. is financially capable of implementing this plan. The issue of how the licensee generates revenue for this fund is a matter for Cavan Co. Co.

Recommendation

No change.

Ground 25 (Schedule C –Recording and Reporting)

The date for submission of reports regarding landfill gas, surface water, ground water, leachate, dust and emissions to sewer should be amended from “ten days after end of the quarter being reported on” to “within ten days of obtaining results”

Technical Committees Evaluation

The technical committee consider that the requirement to submit the results of environmental monitoring ten days after each quarter should remain. The licensee should ensure that the sampling, monitoring and analyses are planned well in advance and this will ensure that the results are submitted within the timeframe specified.

Recommendation

No change.

Signed: _____

Michael Henry
Technical Committee Chairperson