

MEMO			
TO:	Board of Directors	FROM:	Kealan Reynolds
CC:		DATE:	09-Sept-03
SUBJECT : Technical Committee Report on Objections to PD – Reg. No.17-2			

Application Details	
Applicant:	Limerick County Council
Location of Activity:	Gortnadroma, Ballyhahill, Co. Limerick.
PD issued:	27 th June 2003
Objections received:	24 th July 2003 (Applicant)
Inspector:	Regina Campbell

Consideration of the Objection

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

Objection to the Proposed Decision received from Thomas Tarpey, Senior Engineer, Environment Section, Limerick County Council.

Ground No. 1 (Condition 2.1.3 - Management of the Facility)

Condition 2.1.3 of the Proposed Decision requires that the Facility Manager, Deputy Facility Manager and any replacement manager or deputy shall have completed the FAS Waste Management Training Programme within 12 months of appointment. Limerick County Council consider that difficulties may be encountered with any new appointments at the facility as the said course only runs once a year and it may be difficult to complete the course within 12 months of appointment. It is requested that the timeframe for completion of the course should be extended to 18 months.

Technical Committees Evaluation:

The Technical Committee considers that it is not unreasonable to expect that any new facility manager/deputy would complete the FAS Waste Management Training Programme within 12 months of their appointment. Gortnadroma Landfill has been operating as a licensed facility since November 1999 and therefore there has been ample opportunity for staff to complete the FAS training where required.

Recommendation:

No Change

Ground No. 2 (Condition 3.12.1 b) - Leachate Abstraction Wells

Leachate abstraction wells have recently been provided in each of the four cells that are located inside the bentonite cut-off wall. It is requested that the requirements of the Proposed Decision to have three such wells be amended to a minimum of three wells.

Technical Committees Evaluation:

The Technical Committee considers that the requirements of the condition have been addressed in so far as three leachate abstraction wells have been provided. However the Technical Committee agree to amend the condition as suggested by the applicant.

Recommendation:

Amend Condition 3.12.1 (b) as follows:

b) A minimum of three leachate abstraction wells inside the bentonite cut-off wall (Cell 1-4);

Ground No.3 (Condition 3.12.1 f) – Telemetry System)

An automated control system has been installed at the facility for the control and management of leachate and it is not a telemetry system as such but it is operated as a “hard-wired” system linked to a PLC control system. It is requested that the term “Telemetry” be removed and be replaced with “automated control”.

Technical Committees Evaluation:

The Technical Committee considers that the requirements of the condition have been addressed in so far as an automated control system has been installed. The Technical Committee agrees to amend the condition as suggested by the applicant.

Recommendation:

Amend Condition 3.12.1 f as follows:

f) An automated control system for the control of leachate flow and monitoring.

Ground No.4 (Condition 3.12.2 – Leachate Storage)

There are a number of leachate storage tanks and leachate treatment tanks at Gortnadroma landfill, all of which are secure enclosures, however they are not fully enclosed (not covered). The leachate tanks at the facility were designed, installed and operated under the conditions of Waste Licence 17-1. It is requested that the requirement to ensure all leachate tanks are fully enclosed be removed, as it is neither practical nor beneficial to retrofit covers to any such tanks.

Technical Committees Evaluation:

The Technical Committee considers that the leachate treatment system at the facility is made up of a number of elements (including storage, aeration and anoxic tanks, etc). All structures for the storage and/or treatment of leachate were constructed in accordance with EPA guidelines, and relevant specified engineering works approved by the EPA. It is considered that the full enclosure of leachate treatment/storage plant is not warranted.

Recommendation:

Delete Condition 3.12.2

“All Structures for the storage and/or treatment of leachate shall be fully enclosed except for inlet and outlet pipes.”

Ground No. 5 (Condition 5.7.4- Capping of Cells)

The design and procurement of a capping and restoration scheme for the facility together with seasonal constraints would make it very difficult to ensure a cell is capped within 12 months of the cell being filled. The local authority is bound by procurement procedures and in addition it is the case that some cells cannot be capped until other areas are also filled. It is therefore requested that Condition 5.7.4 of the Proposed Decision be amended to read; “Filled cells shall be permanently capped within eighteen months of the cells having being filled to the required level unless otherwise agreed with the Agency.”

Technical Committees Evaluation:

The Technical Committee considers that the time limit imposed by the condition is adequate. The preparation of design/contract documents and the procurement of a contract can begin prior to the cells being filled to the required level. The visual impact of the facility requires that filled cells be permanently capped within a twelve-month period.

Recommendation:

No Change

Ground No. 6 (Condition 5.8.1 – Sludge Acceptance)

It is considered that the covering of any sludge immediately with waste is not practical and may not be the safest means of handling this waste type. It is proposed that the sludges should be accepted and spread in even layers across the working face. It is requested that the condition be amended to read “ Industrial and Sewage Sludge shall only be accepted at the facility between the hours of 8.00am and 2.00pm Monday to Friday inclusive. All sludges shall be covered by the end of the working day”.

Technical Committees Evaluation:

The Technical Committee considers that the covering of sludges immediately with waste is required as a means of minimising the risk of the sludge creating a nuisance at and around the facility. It is considered that waste acceptance procedures for the acceptance of sludge should be developed to ensure that sludges are covered immediately and that the safety of facility staff is not compromised.

Recommendation:

No Change

Ground No. 7 (Condition 5.12.2 - Maintenance)

The two leachate lagoons at the facility are both lined with clay and HDPE and the surface water lagoon is concrete. The certification of the leachate lagoons is based on the results of a leak detection survey that is not generally carried out by a chartered engineer. It is requested that the condition be amended to read “All lagoon structures on the facility shall be certified fit for purpose every three years by an independently and appropriately qualified body as approved by the Agency”.

Technical Committees Evaluation:

The Technical Committee considers that it is preferable for a chartered engineer to carry out any lagoon certification at the facility, however it is recognised that there may be some personnel/bodies capable of doing the task whom may not necessarily be chartered engineers.

Recommendation:**Amend Condition 5.12.2 to read:**

All lagoon structures on the facility shall be certified fit for purpose every three years by an independently and appropriately qualified person or body as approved by the Agency
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Ground No. 8 (Condition 6.3.1 – Landfill Gas Trigger Values)

1. *There are landfill gas and leachate management systems in place at Gortnadroma Landfill. Components of both systems which will be carrying either raw leachate or landfill gas, include service ducting and manholes, and it is considered that these parts of the facility should be excluded from Condition 6.3.1*
2. *In addition the existing waste licence requires that action be taken if methane and CO₂ trigger levels are exceeded, however the proposed decision states that action must be taken if methane or CO₂ trigger levels are exceeded. It is requested that the condition be rewritten as follows:*
“The following are the trigger levels for landfill gas emissions from the facility measured in any service duct or manhole outside the body of the waste excluding those associated with the gas collection system and leachate collection and recirculation system:-
 - a) *Methane, greater than or equal to 1.0% v/v; or*
 - b) *Carbon dioxide, greater than or equal to 1.5% v/v.”*

Technical Committees Evaluation:

1. The Technical Committee considers that, for the safety of personnel working at the facility, the gas and leachate collection system should not be giving rise to landfill gas emissions that may exceed the trigger levels. If it is the case that the trigger levels are being exceeded on an ongoing basis then this issue may be dealt with in the enforcement of the waste licence.

- Because of the risk associated with elevated levels of methane or carbon dioxide the Technical Committee considers that the reference to Methane OR Carbon dioxide trigger levels should remain.

Recommendation:

No Change

Ground No. 9 (Schedule A1 – Waste Acceptance)

It is requested that the quantity of soil and stones to be accepted at the facility for recovery be increased from 30,000tpa to 50,000tpa to allow for sufficient quantities of such material to be brought in as weekend and temporary cover. In addition it is requested that Note 5 to Table A.1 be amended as follows:

*“**Note 5:** These may be accepted for recovery for use as daily cover, weekend cover, in site construction works and landfill restoration.”*

Technical Committees Evaluation:

The Technical Committee notes that the applicant did not apply for 50,000 tpa for soils and stone and at this stage the technical committee cannot increase the quantity of waste soil and stones to be recovered at the facility. Note 1 allows for the variation of waste types once the total tonnage is not exceeded. The technical committee considers Note 5 should be amended as requested.

Recommendation:

Amend Schedule A Waste Acceptance as below;

A.1 Waste Acceptance

TABLE A.1 WASTE CATEGORIES AND QUANTITIES FOR DISPOSAL/RECOVERY AT THE FACILITY.

Waste Type	Maximum (tonnes per annum) ^{Note 1}
Household	72,000
Commercial	39,000
Sewage sludge	4,770
Industrial non-hazardous sludge	1,200
Industrial non-hazardous solids ^{Note 2}	11,000
Water treatment sludge	2,030
TOTAL FOR DISPOSAL	130,000
Green waste for composting	^{Note 3}
Wood chippings	2,000
Automobile shredder residue ^{Note 4}	20,000
Soil/stones ^{Note 5}	30,000
Wastes accepted for storage at the civic waste facility prior to recycling, reuse or reclamation	5,000
TOTAL FOR RECOVERY	57,000

Note 1:	The quantities of the individual waste types may be adjusted only with the prior agreement of the Agency subject to the total waste quantity remaining the same.
Note 2:	The once-off disposal of 3,000 tonnes of 'calcium phosphate/sand mixture or bonedust' shall be included in this waste type subject to the material being tested and proven to be non-hazardous to the satisfaction of the Agency.
Note 3:	Limited to 1000m ³ of compost and waste at any one time.
Note 4:	This may be used as weekend cover subject to the material being tested and proven to be non-hazardous to the satisfaction of the Agency.
Note 5:	These may be accepted for recovery for use as daily cover, weekend cover, in site construction works and landfill restoration

Ground No. 10 (Schedule D.1 – Monitoring Locations)

Two locations for the monitoring of leachate levels have been provided in cells 5-13 and there are 4 within the cut-off wall. Cells 1-10 are now capped and it would be unwise to drill through the cap to provide the additional monitoring locations. It is requested that the two existing level monitoring points be sufficient for cells 5-13 and four points for cells 1-4.

Technical Committees Evaluation:

The Technical Committee considers that the number of existing leachate level monitoring wells is adequate.

Recommendation:

Amend Table D.1.1 Monitoring Locations as follows;		
Leachate Monitoring Locations		
Treated Leachate Discharge (see Table D.6.4)	Raw leachate storage lagoon (see Table D.6.1)	Level monitoring only – two locations in each of cells 5 to 13 & three locations within bentonite cut-off wall (cells 1-4).

Signed: _____
 Kealan Reynolds
 Technical Committee Chairperson