INSPECTORS REPORT WASTE LICENCE REGISTER NUMBER W051

(1) Summary:

Name of Applicant	Limerick County Council	
Facility Name (s)	Solid Waste Transfer Station and Civic Amenity Site	
Facility Address	Bunlicky, Co. Limerick	
Description of Principal Activity	Municipal waste transfer station	
Quantity of waste (tpa)	75,000	
Environmental Impact Statement Required	Yes	
Number of Submissions Received	113 before October 28,1998 (latest date for making submissions)	
INSPECTOR'S RECOMMENDATION	The proposed decision as submitted to the Board be approved	

Notices	Issue Date(s)	Reminder(s)	Response Date(s)
Article 14 (2) (b) (i)	Not Applicable		
Article 14 (2) (b) (ii)	20 July, 1998		21 August, 1998
			24 September, 1998
Article 14 (2) (a) (Application complies with Article 12/13)	29th September 1998		
Article 16	Not Applicable		

Applicant Address	Limerick County Council, County buildings, 79-84 O'Connell St., Limerick
Planning Permission status and date granted (if appropriate)	Not Applicable
Planning Authority	Not Applicable
For Local Authority applicants, is the facility within its own functional area	Yes
Is the facility an existing facility:	No
Prescribed date for application:	1 May 1997
Date Application received:	1 July 1998
For Certified Sites, have matters in the EIS relating to environmental pollution been considered as required by Article 21 of SI 133 of 1997	Not applicable
Location of Certificate in Application	Not applicable
Confidential Information Submitted	No
Location of Planning Documents in Application	Not Applicable
Location of EIS in Application	Four Appendices submitted with application

SITE VISITS:

DATE	PURPOSE	PERSONNEL	OBSERVATIONS
26/8/98	Site visit and check site notice	B Donlon	Site notice complies with Art 8.
18/11/98	Meeting on Site	B Donlon	Meeting on site with LCC personnel.

(2) Class/Classes of Activity

The class(es) of activities for which the applicant has applied are marked below. The principal activity is indicated by (P).

Waste Management Act, 1996				
THIRD SCHEDULE Waste Disposal Activities		FOURTH SCHEDULE Waste Recovery Activities		
Deposit on, in or under land.		Solvent reclamation or regeneration.		
Land treatment, including biodegradation of liquid or sludge discards in soils.		Recycling or reclamation of organic substances which are not used as solvents.		
3. Deep injection of the soil, including injection of pumpable discards into wells, salt domes or naturally occurring repositories.		Recycling or reclamation of metals and metal compounds.		
Surface impoundment, including placement of liquid or sludge discards into pits, ponds or lagoons.		Recycling or reclamation of other inorganic materials.		
5. Specially engineered landfill, including placement into lined discrete cells which are capped and isolated from one another and the environment.		5. Regeneration of acids or bases.		
6. Biological treatment not referred to elsewhere in this Schedule which results in final compounds or mixtures which are disposed of by means of any activity referred to in this Schedule.	X	Recovery of components used for pollution abatement.		
7. Physico-chemical treatment not referred to elsewhere in this Schedule which results in final compounds or mixtures which are disposed of by means of any activity referred to in this Schedule.		7. Recovery of components from catalysts.		
8. Incineration on land or at sea.		8. Oil re-refining or other re-uses of oil.		
9. Permanent storage, including emplacement of containers in a mine.		Use of any waste principally as a fuel or other means to generate energy.		
10. Release of waste into a water body (including a seabed insertion).		 Spreading of any waste on land with a consequential benefit for an agricultural activity or ecological system, including composting and other biological transformation processes. 		
11. Blending or mixture prior to submission to any activity referred to in this Schedule.	X	11. Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule.		
12. Repackaging prior to submission to any activity referred to in this Schedule.	P	 Exchange of waste for submission to any activity referred to in a preceding paragraph of this Schedule. 		
13. Storage prior to submission to any activity referred to in this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.	X	13. Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced.	X	

Class description: Class descriptions provided by the applicant are as follows:

Class 6 of the Third Schedule refers to the holding of washwater and foul sewage generated on the site in a holding tank with limited biological removal. It is intended to tanker this effluent to Castletroy WWTP as an interim measure until a sewer connection is made to the proposed Limerick Main Drainage Scheme.

Class 11 of the Third Schedule refers to the compaction of wastes prior to transportation.

Class 12 of the Third Schedule is the principal activity and refers to the transfer of waste from collection vehicles into containers prior to transportation to landfill.

Class 13 of the Third Schedule refers to the temporary storage of waste, enclosed in compacted containers, prior to transportation to landfill.

Class 13 of the Fourth Schedule refers to the temporary storage of waste, before collection by recycling/recovery companies or transport to landfill.

(3) Site Location

A location plan showing the shaded outline of the site to which the application relates is provided in Appendix 1.

The facility is proposed to be located on a site of approximately 2.46 hectares at Bunlicky in the environs of Limerick City adjacent to the N69, the main Limerick to Foynes road.

(4) Waste Types and Quantities

The total quantities and types of wastes expected to be accepted at the transfer station facility (Table B.8.1 of the waste licence application) are shown below.

Transfer Station Facility

Year	Non- Hazardous Waste (tpa)		Hazardous Waste (tpa)	Total Quantity of Waste (tpa)	
	Expected	Maximum		Expected	Maximum
1999	40,000	75,000	Not Applicable	40,000	75, 000
2000	41,000	75,000	Not Applicable	41,000	75,000
2001	42,000	75,000	Not Applicable	42,000	75,000

Annual waste quantities accepted at the facility are expected to be in the range of 40,000 to 50,000 tonnes. The waste types accepted and their expected tonnages include household (35,000 tpa), commercial (10,000 tpa) and industrial non-hazardous solids (5,000 tpa). Condition 5.8 restricts the tonnage to be accepted at the facility to 75,000 tpa.

Civic Waste Facility

The total quantities and types of wastes to be accepted at the civic waste facility are shown below.

Year	Non-hazardous waste (tpa)	Hazardous waste (tpa)	Total quantity of waste (tpa)
1999	4,900	100	5,000
2000	4,900	100	5,000
2001	4,900	100	5,000

Annual waste quantities accepted at the civic waste facility are expected to be approximately 5,000 tonnes with maximum values predicted to be 10,000 tonnes per annum. The maximum annual hazardous waste quantity to be accepted is 30 tonnes. These wastes are removed off-site by agreed waste recovery/disposal contractors.

It is expected that the total waste to be accepted at the entire facility (transfer station & civic waste facility) would be less than 50,000 tpa while the maximum total waste quantity under this licence would be 85,000 tpa.

(5) Site Design

• Infrastructure;

The site boundary will be surrounded by a 2.4m high palisade fence. There is one weighbridge to weigh vehicles using the transfer station. Diesel fuel storage and waste oils will be fully bunded. Waste inspection and quarantine are provided for within the main building. The following site accommodation is provided; control building (which includes office, canteen, toilets and education centre), main transfer station building and civic waste facility. The main transfer station building has a total height of 17 metres. A car/coach park area has been included for vehicles bringing visitors to the proposed education centre.

Glass bottles, cans, textiles, paper/cardboard, ferrous metals, tyres, garden waste, white goods and C&D waste will be accepted at the civic waste facility. The civic waste facility also provides for the collection of a number of hazardous wastes including the following; waste oil, oil filters, paint and ink, batteries, fluorescent light bulbs, medicines, household solvents.

Facility Operation

The compaction plant consists of an elevated, enclosed platform 3m high from which collection vehicles tip waste loads from the elevated platform into a compaction chamber on ground-level via a hopper. The system consists of a twin bay hopper into which two collection vehicles can tip at a time. The compacting unit itself consists of a twin side ram compactor. Approximately 12 tonnes can be compacted into each container.

The filled containers are arranged on a track system adjacent to the compactor to facilitate the interchange of containers. When a container has been filled and sealed it moves along the track and is replaced at the compactor by an empty container. Following compaction the containers are removed from the track by means of a lifting device attached to the back of the transport vehicle and then stored in areas designated for this purpose.

(6) Site Operation/Management

• Waste Acceptance Procedures

Only household, commercial and industrial non-hazardous solid waste collected by local authority collection vehicles or private collectors is accepted at the facility.

During hours of operation of the facility there will be one staff member with specific responsibility to ensure that only authorised wastes are accepted. The type of verification used will be similar to the "Level 3: On-site Verification" outlined in the EPA draft waste acceptance manual. It will consist of a visual inspection of waste before unloading and at least 1 out of 10 loads delivered by private contractors will be required to tip their loads into the inspection bunker for a more thorough inspection. In this case the waste will then be transferred to the hopper by a front loader. Unacceptable materials will be isolated from the waste stream and disposed of, or recovered, in the appropriate manner.

Waste Handling

The waste handling will be as described in Facility Operation. In the event where waste is deposited in the inspection area prior to compaction then the transfer to the hopper will be done by a front loader.

• Nuisance Control

It is envisaged that there will be no nuisance associated with birds, vermin or litter at the transfer station facility for the following reasons:

- (a) there will be no open storage of waste, all storage will be in sealed containers;
- (b) there will be no long term storage of waste on the site;

(c) all tipping of waste will be either into (i) the hopper or, (ii) in the case where inspection is required, onto a designated tipping area.

Both these areas are contained within the transfer station building and so will not be exposed to the wind or serve as an attraction for vermin or birds.

As the activity occurs within a fully enclosed, purpose-built building, it is not expected that any odour nuisance will be caused. However, the applicant has modelled odour emissions using the Dutch LFTD model using estimates of odour units at the tipping area and the hopper area. The resulting contour line for which 1 odour unit per m³ as a 99.5% ile value (i.e. less than 44 hours per year) has a maximum diameter of 70m. There are no residential properties within 225m of the site. It should be noted however that the model does not reliably predict within 100m from the source.

An odour assessment (Condition 6.9) is required within four months from the date of commencement of activities on site to provide for the control of odour nuisance. In addition there shall be weekly inspections for odour nuisance (Condition 6.2).

• Hours of Operation

Monday to Friday 8:00 to 20:00 inclusive, Saturday, 8.00 to 13.00 for the Transfer Station.

The civic waste facility may accept waste between the hours 8:00 to 20:00 on a daily basis.

(7) Decommissioning and Aftercare

A proposal for a Decommissioning and Aftercare Plan for the facility shall be submitted to the Agency within six months of the date of grant of the licence.

(8) Emissions to Air

No impact on the quality of the air in the vicinity of the site is expected as a result of this activity. Odour will be minimised as the activity is carried out within an enclosed building and because incoming waste will be compacted and removed within a short time. The emissions of vehicles servicing the facility are not expected to impact on air quality due to the small increase in vehicular movements that these represent over existing levels.

Dust deposition at the boundary was measured at four site boundary locations and indicated elevated background dust emission levels due to traffic and to its proximity to a nearby facility. Dust monitoring at the site boundary on an annual basis is requested and dust emissions emanating from the facility shall not exceed the normal dust nuisance levels (240 mg/m²/d). It is very unlikely that dust emissions from this

facility will be significant as these will be controlled due to the operation of water sprinklers in the hoppers, which are located within the enclosed transfer station building, if and when required.

(9) Emissions to Groundwater

No emissions to groundwater should occur as all fuel and oil tanks are to be fully bunded.

(10) Noise Emissions

The source of any noise emissions will be from trucks using the transfer building, the operation of the compacting unit itself and the changing of filled and sealed containers. A survey of the existing background noise at the site and a study of the expected noise emissions from the facility show that there will be no significant noise impact due to existing levels in the area. As the compactor will be contained within an insulated concrete enclosure, the estimated noise impact at the nearest receptor (225 m distant) will be less than 40 dB(A). The daytime and night time noise limits of 45 dB(A) and 55 dB(A) at the site boundaries have been included.

(11) Emissions to Sewer

Liquid emissions from vehicle and other washing, foul sewage and contaminated firewater are directed to a holding tank. As an interim measure this foul water will be tankered off site to Castletroy WWTP. Upon completion of the Limerick Main Drainage Scheme foul water shall be discharged from the facility using a foul sewer connection. Consent for such a discharge has been obtained from the Sanitary Authority in accordance with Section 52 of the Waste Management Act 1996.

The holding tank will be tested for integrity when initially constructed and annually thereafter. The tank will be equipped with a level indicator which will alert staff on the site if any fall in level occurs other than during tank emptying.

(12) Emissions to Surface Water

Surface water run-off from the open area of the site discharges to a drain to the west of the site. Discharges to surface water are required to be monitored under Condition 9.1 of the Proposed Decision.

(13) Other Significant Environmental Impacts of the Development

None.

(14) Waste Management, Air Quality and Water Quality Plans

No relevant plans exist.

(15) Submissions/Complaints

Appendix 2 contains a list of all submissions received relating to the application. The dates received and the details of the individual, department, group or organisation making the submission are provided.

An overview of all submissions received in relation to the waste licence application is provided. This includes a summary of all issues raised in the submissions and clearly shows how these issues are dealt with in the proposed decision.

Standard Submission Letter

In all 109 submissions were made by persons living in a nearby residential area. The major concerns expressed by those persons were control of vermin, flies, odours. They are also concerned about littering in the area, adequate security to ensure that the baling station does not become habitated by scavengers.,

RESPONSE

Vermin, odour and dust control measures are specified in the licence conditions. The site is effectively secured by a security fence and gates. Condition 6.6 of the Proposed Decision requires that any waste illegally placed in the vicinity of the facility be cleared immediately it is discovered and in any event by 10.00am of the next working day.

Submission from Mr. John Hickey (Submission No. 81- Date Received 27/10/98)

Mr Hickey attached a letter to the standard submission letter and detailed further concerns. He states that the proposed site is only 500 metres from estates with population of c.15,000 people which are above the ground level of the proposed transfer station. He notes that the effluent from the proposed site will link up with the Limerick main drainage scheme with the potential for greater emissions and effluent and that the proposed station may incorporate waste from neighbouring counties to service an annual 300,000 tonnes of waste. He also notes that close proximity to rail links to the proposed site was a key factor in its location and he suggested a more remote site with rail connections would be preferable.

RESPONSE

Conditions 6.2, 6.8 and 6.9 require that steps be taken to ensure that odours do not give rise to public health nuisance or be prejudicial to health. Landscaping proposals are required under Condition 4.14.

Limits on foul water effluent (6m³ per week) and on annual tonnage throughput (75,000tpa) at the facility will ensure that the size and scale of the proposed development are controlled.

Detailed site selection criteria were presented in the EIS by the applicant and account has taken of the information submitted in the EIS relating to this matter.

Submission from John and Catherine Lahiff (Submission No. 106 -Date Received 28/10/98)

John and Catherine Lahiff made a submission in respect of the application. Their concern is in relation to odours and flies from a smaller compacting station on the Dock Road. They are also concerned about indiscriminate dumping in the area.

RESPONSE

- The transfer station proposed is an enclosed facility with no open or long term storage of waste
- Conditions 6.2, 6.7, 6.8, 6.9 and 6.10 specifically provide for the control of odour and fly nuisances.
- Conditions 6.5, 6.6 and 6.7 deal with indiscriminate dumping in the vicinity of the facility.

Submission from Oliver Jennings (Submission No. 109- Date Received 28/10/98)

Oliver Jennings made a submission in respect of the application. His concern is in relation to smells, vermin, flies from a smaller compacting station on the Dock Road. He is also concerned about scavengers and indiscriminate dumping in the area.

RESPONSE

- As stated above Conditions 6.2, 6.7, 6.8, 6.9 and 6.10 specifically provide for the control of odour, vermin and fly nuisances.
- Conditions 6.5, 6.6 and 6.7 deal with indiscriminate dumping in the vicinity of the facility.
- Condition 5.18 states that scavenging shall not be permitted at the facility.

Submission from the Crescent Environmental Protection Group (CEPG) (Submission No. 113- Date Received 28/10/98)

The (CEPG) made a submission in respect of the application.

1. Site selection criteria and the site assessment reports presented by LCC in respect of the EIS were questioned.

RESPONSE

• See reply to Submission No. 81.

2. Site Map

A number of inaccuracies on the site map submitted (Drawing no. 010016/01/251) as part of the waste licence application were noted and the CEPG included a revised map in Appendix III of their submission. These relate to a school, housing estates and a mid 19th Century Tudor Gothic house which were omitted on Drawing no. 010016/01/251.

RESPONSE

The inaccuracies on the site map have been noted and I am satisfied that proposed conditions relating to the control of noise emissions at the boundary, landscaping proposals etc. have been included in the proposed decision.

3. Site Geology

The geology of the proposed site raise questions regarding the sites suitability as the site has a high water table and was formerly filled by a waste disposal company.

RESPONSE

• The applicant has made reference to the site geology in the EIS and waste licence application. The fill material (2m in thickness) was predominantly inert material and the proposed development involves the placement of concrete foundations thereby reducing significantly the likely emissions of dust from any previously filled material. The findings of the dust monitoring in the waste licence application has indicated that the predominant source of dust are from traffic and from a nearby facility. Condition 6.4 provides for control of dust emissions from the facility.

Submission from the Mid-Western Health Board (submission No. 79)

The Mid-Western Health Board made a submission in respect of the application The foul-water holding tank to be serviced frequently.

RESPONSE

 A condition relating to holding tank integrity testing and any maintenance or remedial work arising upon construction and annually thereafter is included in the proposed decision. (Condition 4.12).

An oil-petrol interceptor to be provided in the surface water run-off system

RESPONSE

• All oil tanks in both the transfer station and the civic waste facility are required to be bunded as per Condition 4.13. Condition 7.9 of the proposed decision also requires the surface water drainage system to pass through an oil interceptor.

Noise level to comply with EPA guidelines (day/night)

RESPONSE

• Noise limits set for site boundary in Condition 7.4.

All necessary steps taken to ensure that odours do not give rise to public health nuisance or be prejudicial to health.

RESPONSE

• Covered in Conditions 6.2, 6.8 and 6.9.

Dust suppression measures to be provided at the station in the event that dust is problematic

RESPONSE

• Covered in Condition 6.4.

Litter and preventative pest control programme to be put in place.

RESPONSE

• Covered in Conditions 6.2, 6.5, 6.6 and 6.10.

Applicant should be required to carry out a monitoring programme in the vicinity of the site to determine odours, noise and dust after the plant becomes operational.

RESPONSE

• Covered in Conditions 6.9, 7.4 and 9.1.

Signed	Dated:
Name Dr Brian Donlon	

APPENDIX 1 LOCATION PLAN

APPENDIX 2 LIST OF PERSONS MAKING SUBMISSIONS