# INSPECTORS REPORT WASTE LICENCE REGISTER NUMBER 27-1

### (1) Summary:

The facility consists of an existing landfill facility for the disposal of household, commercial and non-hazardous industrial waste in a peatland area. Since the licence application was received in February 1998, a number of improvements have been made to the design and running of the facility. Although the facility is owned and operated by Ballinasloe Urban District Council, it accepts waste from the hinterland of Ballinasloe, elsewhere in County Galway and Galway Corporation's area. The attached PD takes account of the agreement reached between local residents and the UDC on the future operation of the facility.

Name of Applicant	Ballinasloe Urban District Council
Facility Name (s)	Pollboy Landfill
Facility Address	Pollboy, Ballinasloe, Co. Galway
Description of Principal Activity	Landfill
Quantity of waste (tpa)	120,000
Environmental Impact Statement Required	Yes
Number of Submissions Received	23
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 <sup>th</sup> April 1998	Not Applicable	3 <sup>rd</sup> June 1998	
	16 <sup>th</sup> June 1998	Not Applicable	16 <sup>th</sup> July 1998	

			30 <sup>th</sup> November 1998 (EIS) 1 <sup>st</sup> December 1998 (EIS)
Article 14 (2) (a)	3 <sup>rd</sup> December 1999		
Article 16	Not Applicable	Not Applicable	Not Applicable

Applicant Address	Bridge Street, Ballinasloe, Co. Galway
Planning Permission status and date granted (if appropriate)	Not Applicable
Is the facility an existing facility:	Yes
Prescribed date for application:	Prior to 1 <sup>st</sup> March 1998.
Date Application received:	27 <sup>th</sup> February 1998
Confidential Information Submitted	No
Location of EIS in Application	Volumes I, II and III (Separate Volumes)

### **FACILITY VISITS:**

DATE	PURPOSE	PERSONNEL	OBSERVATIONS
30/6/97	Initial inspection for annual report	D. Howley B. Wall	Facility in general was very unsatisfactory
20/7/98	Check site notice	S. Duffy D. Howley	Site notice complies with Article 8
20/5/99	Site visit	T. Nealon	

### (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), other activities by (X).

Waste Management Act, 1996				
THIRD SCHEDULE Waste Disposal Activities		FOURTH SCHEDULE Waste Recovery Activities		
Deposit on, in or under land (including landfill).	P	Solvent reclamation or regeneration.		
Land treatment, including biodegradation of liquid or sludge discards in soils.	X	2. Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).	X	
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.	X	
Surface impoundment, including placement of liquid or sludge discards into pits, ponds or lagoons.	X	Recycling or reclamation of other inorganic materials.	X	
5. Specially engineered landfill, including placement into lined discrete cells which are capped and isolated from one another and the environment.	X	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 paragraphs 1 to 10 of this Schedule.	X	6. Recovery of components used for pollution abatement.		
7. Physico-chemical treatment not referred to elsewhere in this Schedule (including evaporation, drying and calcination) which results in final compounds or mixtures which are disposed of by means of any activity referred to in paragraphs 1 to 10 of this Schedule.	X	7. Recovery of components from catalysts.		
8. Incineration on land or at sea.		8. Oil re-refining or other re-uses of oil.		
Permanent storage, including emplacement of containers in a mine.		Use of any waste principally as a fuel or other means to generate energy.	X	
10. Release of waste into a water body (including a seabed insertion).		<ol> <li>The treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system,</li> </ol>	X	
11. Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule.	X	11. Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule.	X	
<ol> <li>Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.</li> </ol>		12. Exchange of waste for submission to any activity referred to in a preceding paragraph of this Schedule.	X	
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:

The applicant described the classes as follows;

#### Third Schedule:

Class 1	Describes the principal activity carried out on the site i.e. landfill of
	waste.
Class 2	Sludges are deposited on the site.
Class 4	Sludges are deposited on the site.
Class 5	Future deposition will be in lined cells.
Class 6	Composting of sludges/wastes may be carried out on site.
Class 7	To allow for the possibility of leachate treatment.
Class 11	Sewage sludge or construction demolition waste may be mixed with
	other material.
Class 13	To allow recycling/recovery activities.

#### Fourth Schedule;

Class 2	Composting may occur on the site in the future.
Class 3	Recycling may occur on the site in the future.
Class 4	To permit recycling activities.
Class 9	Possibility of landfill gas utilisation.
Class 10	Composting/sludge recovery.
Class 11	Use of incoming waste for site management.
Class 12	As part of waste recovery/recycling.
Class 13	As part of waste recovery/recycling.

#### **Activities recommended for licensing:**

It is recommended that all the above activities, for which the applicant has applied for a waste licence, be licensed subject to the conditions contained in the attached Proposed Decision.

#### (3) Facility Location

# Appendix 1 contains a location drawing and a layout drawing showing the significant features of the facility.

The facility, comprising some 32 hectares, is situated approximately 1.5 km to the south of Ballinasloe, and is located on an area of cutover bog. The site is mostly bounded by scrub, coniferous forestry and non-intensive agricultural pasture, although turbary also takes place in the area. The nearest residential properties are located to the north of the facility, about 350m from the northern boundary of the facility. The southern boundary of the site extends to a stream which eventually flows into the River Suck. There are approximately 55 occupied houses located on either side of the roads

in the general vicinity of the landfill. An unserviced halting site which periodically contains up to 26 caravans has also been noted to the north of the landfill.

#### (4) Waste Types and Quantities

The total quantities and types of wastes accepted by the facility are shown below.

YEAR	NON-HAZARDOUS WASTE (tpa)	HAZARDOUS WASTE (tpa)	TOTAL QUANTITY OF WASTE (tpa)
1999	120,000	Not Applicable	120,000

The total quantities of waste deposited at the facility and the amount to be deposited prior to closure are shown below.

	NON-HAZARDOUS WASTE	HAZARDOUS WASTE	TOTAL QUANTITY OF WASTE
Already deposited (up to Feb. 1998)	260,000 tonnes	Not Applicable	260,000 tonnes
To be deposited (from Feb. 1998)	375,000 tonnes	Not Applicable	635,000 tonnes*

<sup>\*</sup>Total quantity of waste to be deposited over the lifetime of the facility. *Condition 1.7* of the attached draft PD requires the applicant to submit figures for the amount of waste deposited at the facility during 1998 and 1999.

The expected life of the facility and the expected maximum annual tonnage are indicated below.

Expected life of the facility, (in years)	2
Maximum Annual Tonnage	120,000

#### (5) Activity Summary

Pollboy Landfill has been in operation since 1975, and has been mainly used for the disposal of municipal waste from the Ballinasloe area. Due to the closure of Carrowbrowne Landfill in 1999, waste arising from elsewhere in County Galway and Galway Corporation's area were disposed of at Pollboy.

Remediation will be carried out on the existing landfilled area (covering an area of ~6ha), and further waste disposal will be carried out in three phases, each of which will utilise a single lined cell. A new entrance will be developed, and the reception area will include an administration building, garage, wheel wash facility, weighbridge, civic waste facility and waste inspection area, in addition to a leachate collection and handling facility and fuel storage facility. Infrastructure will be installed (i.e. an interceptor drainage system) to collect leachate produced from the new cells, and this will be tankered off-site to Ballinasloe waste water treatment plant. Clean surface water run-off from the existing waste disposal area (which will be capped) will be prevented from entering the new cells by means of a perimeter surface water drain. Following capping of the existing waste disposal area, a network of gas wells will be installed through the waste to allow the landfill gas to vent safely. As sufficient quantities of landfill gas are generated, a gas collection network will be installed incorporating both the existing and new areas of the landfill and gas will be flared. The facility will be restored and planted with locally abundant tree and shrub species to achieve a profile and appearance similar to the surrounding area.

Condition 8.1 requires that the reshaping, capping and other remediation measures specified in the licence application to be carried out on the existing landfill area. It was proposed to carry out further waste disposal activities on top of waste already deposited (i.e. phase 4), however this will not be allowed, in light of the fact that the total capacity of the site will remain at the level which was specified in the original application. Condition 8.2 requires that the final profile of the facility be as shown in Figure 6.1 of Vol. 2 of the EIS, and that proposals for the final height of the restored facility (which takes account of the total tonnage of waste to be deposited at the facility) be submitted to the Agency within 6 months of the licence being issued.

#### (6) Facility Operation/Management

#### • Waste Acceptance Procedures

The facility accepts household and non-hazardous commercial and industrial waste, including sewage sludge, arising from Ballinasloe Urban District and County Galway. The current waste acceptance procedures will be improved through the implementation of a number of measures. These include the development of a new access route to the facility, the provision of a weighbridge, civic waste facility and inspection area on-site, and the better recording of waste characteristics (e.g. origin and type). Specific details on procedures for rejecting loads, providing appropriate staff training and the provision of a waste quarantine area are still required. *Condition 5* requires the licensee to implement detailed waste acceptance procedures.

Conditions 5.1 and 5.2 restrict the waste types to be disposed of at the facility to non-hazardous household, commercial and industrial wastes. The disposal of animal waste will only be permitted in lined cells (Condition 5.3.2). A record of all waste

inspections carried out in the waste inspection area shall be maintained (*Condition 3.12*).

#### Waste Handling

Following the provision of a weighbridge on-site, all vehicles bringing waste to the facility will be weighed at the weighbridge (*Condition 5.5*) and brought to the working face of the operational cell. Deposited waste will be spread and compacted. The size of the working face will be kept to a minimum (*Condition 5.9*) and waste will be covered at the end of each working day (*Condition 5.10*). Stockpiling of cover material should be carried out in order to ensure that there is an adequate supply for daily use (*Condition 4.18.5*). *Condition 5.13* governs the provisions for acceptance and disposal of treated sludges at the facility.

#### Nuisance Control

Potential nuisances are controlled by *Condition 6 Environmental Nuisances*. The use of daily cover, as required by *Condition 5.10*, minimises potential odour nuisance, the attraction for birds and vermin, nuisance caused by insects and litter problems. The licensee also has an annual contract with a pest control company to control vermin on-site. Litter emanating from the facility will be controlled by the erection of a 2m high perimeter fence and the employment of litter pickers (*Condition 6.3.1*). Dust emissions from the facility will be controlled by a number of means including the use of a wheelwash and a mobile water sprayer in dry weather. Scavenging will not be allowed at the facility and this will be enforced by security measures such as the erection of appropriate fencing (*Condition 4.3.1*). Fire extinguishers shall be provided on site at all times (*Condition 10.5*).

#### • Hours for Waste Acceptance

The hours for waste acceptance at the facility will be Monday to Friday 8.30 to 17.00 inclusive and Saturdays 9.00 to 16.00. The site is closed and locked on Sundays and Bank Holidays. Any changes in these hours are subject to the prior written agreement of the Agency.

#### (7) Facility Design

#### • Infrastructure;

The provision and maintenance of the infrastructure described in section 5 of this report is required by *Condition 4: Site Infrastructure*.

#### • Liner System;

The lining system to be incorporated into new cells is specified by *Condition 4.15.1* and will consist of a basal drainage layer (0.2m thick) of sand/gravel which will be covered by 1.0m clay layer, with a layer of geotextile separating the two. The clay layer will have a permeability of less than  $1 \times 10^{-9}$  m/s. The clay layer will be overlain by a 2.0mm thick High Density Polyethylene (HDPE) flexible membrane liner (FML) and a 0.5m thick drainage layer incorporating leachate collection pipework. New cells will be constructed below the piezometric level to ensure that there will be an inward pressure gradient towards the waste.

#### • Leachate Management;

Leachate generated within newly constructed cells will drain by gravity through a network of collection pipes to an upriser, from which the leachate will be removed from the cells (*Condition 4.16.1*). The leachate will be tankered for disposal at the Ballinasloe Sewage Treatment Works. Within eighteen months of the issuing of the licence, pre-treatment of the leachate will be carried out on-site prior to its removal to the Waste Water Treatment Works (*Condition 5.14*). An interceptor drain will be constructed around the existing landfilled area, in order to reduce the amount of leachate originating from this area that could contaminate the local groundwater (*Condition 4.16.3*). In addition, leachate production from existing parts of the landfill will be reduced following the capping of these areas (*Condition 4.18.1*), the installation of surface drains to collect rainwater (*Condition 4.19.1*), and the installation of boreholes to remove leachate from the waste (*Condition 4.16.2*). *Condition 4.16.10* requires that any leachate collected on-site will only be recirculated through waste contained within lined cells (and not through existing waste in unlined areas).

#### • Landfill Gas Management;

Condition 4.17.2 requires the installation of landfill gas collection wells within the facility, and that the gas be flared. ELVs for the emissions are set out in *Schedule G: Emissions. Condition 4.17.3* requires that the licensee submit proposals to the Agency within 12 months of the grant of this licence for the utilisation of landfill gas as an energy source.

### • Capping System;

The capping system that will be used for the existing landfill and future cells is set out in *Condition 4.18.3* and is as follows;

- top soil (150 -300mm);
- subsoils, such that total thickness of top soil and subsoils is at least 1m;
- drainage layer of 0.5m thickness having a minimum hydraulic conductivity of  $1x10^{-4}$  m/s;
- compacted mineral layer of a minimum 0.6m thickness with a permeability of less than 1x10<sup>-9</sup> m/s or a geosynthetic material (e.g. GCL) or similar that provides equivalent protection; and

• gas collection layer of natural material (minimum 0.3m) or a geosynthetic layer.

#### (8) Restoration and Aftercare

The facility will be restored to grassland and scrub/woodland. The final profile of the facility, its restoration and aftercare are controlled by *Condition 8 Restoration* and *Aftercare*.

#### (9) Hydrogeology

The facility is located in an area of cutover peat. The remaining layer of peat in the area is generally 2 to 3m in thickness. However underneath the landfilled area, the peat becomes compressed and compacted, being of the order of 0.3m thick. Beneath the layer of peat, silty clay/marl, sandy gravel and boulder clay occur on top of the Lower Carboniferous Calp Limestone bedrock. The sandy gravel is generally 1.0 to 3.0m thick to the south and underneath the landfill. The bedrock itself dips to the north and west of the site, and the aquifer has been classified as poor (Pl). The thickness of the overburden correspondingly varies from 6m in the south of the site to in excess of 15m to the north. The low permeability units underlying the site (i.e. peat and silty clay) are 5 to 8m thick implying a groundwater vulnerability rating of moderate, however this may become high towards the west of the site, where the silty clays are thinner and the gravels are close to the surface. The site lies within those zones of the Groundwater Protection Scheme Response Matrix for Landfills which are acceptable for landfill development subject to the conditions of a waste licence.

The groundwater flow direction in the gravel/bedrock is from west to east, and the sandy gravel represents the unit where the majority of groundwater flow is likely to occur. Due to the limited thickness of these deposits underlying the site (<2.6m), and its moderate to low permeability status (1.2 E-05 to 1.8 E-06 m/s), the sandy gravel here does not have significant groundwater resource potential. The results of the geophysical study, surface water conductivity measurements and water sampling indicate shallow leachate plumes to the south, west and north of the site. Leachate contamination is moving through the upper layers of the overburden and discharging to the streams to the north and south of the site.

Capping of the present landfilled area, as required under *Condition 8.1*, will reduce the amount of leachate generated and thereby reduce the contamination of groundwater emanating from the site. In addition, an interceptor drain will be constructed around the existing landfilled area, in order to reduce the amount of leachate originating from here that could contaminate the local groundwater. Further waste disposal activities at the facility will require the use of lined cells, as required

under *Condition 4.15.1*, and this will prevent any further contamination of the groundwater. Groundwater monitoring is required by *Condition 9.8*.

#### (10) Emissions to Air

Emissions to air include landfill gas and dust. In addition there is potential in the future for emissions of the combustion products of landfill gas. *Schedules G.2 and G.4* set emission limits for landfill gas detected in buildings and for dust deposition. *Condition 7.4.1* sets trigger levels for landfill gas detected on or in the immediate vicinity of the facility. Landfill gas management is required by *Condition 4.17*. Dust monitoring has been carried out at three locations, two of which are situated along the site boundary, and the other is in the north-east of the facility. Data obtained from this baseline sampling indicates that typical monthly average dust deposition rates near the existing landfill site boundary are <100mg/m²/day. Dust control is required by *Conditions 6.6.1* and *6.6.2*. Dust and landfill gas monitoring requirements are established under *Condition 9.1. Condition 10.9* requires further action, including investigations and remedial action to be taken if trigger levels or emission limits are exceeded. The emission of malodours from the facility will be reduced by the compaction and covering of waste on a regular basis (*Condition 5.9* and *Condition 5.10*).

#### (11) Noise Emissions

There are two main sources of noise at the facility; site machinery and/or vehicles depositing waste. Noise monitoring was carried out at the nearest noise sensitive location (i.e. a local residence located about 500m from the site), and also at boundary locations. The nearest noise sensitive location is a traveller halting site which is situated about 200m away from the facility. No monitoring has been undertaken at this location but is required under the licence. The halting site was found to be abandoned during a recent visit to the facility. The noise monitoring results taken during operational hours at location NSL1, a residence on the Beechlawn Road were between 45 and 58 L<sub>eo</sub>dB(A) (30 mins). The majority of this noise is derived from road traffic. In the absence of traffic the activity on the site is just audible. It is expected that noise from the development of the landfill will be 6 dB higher due to the reduced distance between the noise sensitive location and the operations of the facility, and the presence of more on-site machinery. However, it is expected that the noise emissions will comply with the limits established by Condition 7.1. Noise monitoring of the facility is required by Condition 9.1. Condition 4.23 requires the construction of a bund in order to minimise both noise emissions and visual intrusion around the waste disposal area.

#### (12) Emissions to Sewer

There are no direct emissions to sewer. Sanitary facilities (i.e. showers and toilets) will be installed in the new administrative building to be constructed to the north of the existing landfilled area, and the discharge will be diverted to the leachate collection system.

#### (13) Emissions to Surface Water

Runoff from precipitation in the vicinity of the landfill enters two small streams to the north and south of the site boundary. These eventually drain into the River Suck, which is located about 2kms to the east. Water quality evaluations of the two streams which border the facility indicate that contamination by leachate is occurring, particularly to the north. The contamination will be reduced following the capping of the existing waste (*Condition 4.18.1*) and the insertion of surface water drains (*Condition 4.19.1*). Surface water monitoring requirements are controlled by *Condition 9.1*.

Condition 4.4.2 requires that surface water collected from the hardstanding areas of the proposed reception and civic waste facility will be diverted to the leachate collection chamber. Surface water accumulating in lined cells prior to waste deposition will be treated as unpolluted water, and as such will be directed to a nearby stream/drain. Condition 4.19.3 requires that surface water accumulating in new cells will cease to be directed to nearby streams/drains as soon as waste deposition commences.

#### (14) Other Significant Environmental Impacts of the Development

#### 14.1 Traffic:

Traffic surveys carried out at the landfill entrance in August and November 1998 found that the facility generated between 118 and 158 vehicular trips during opening hours, of which, 34 and 80 respectively were heavy commercial vehicles. Most of the vehicles currently travelling to and from the facility travel along the N6 National Primary Route between Galway and Ballinasloe, and then along the Pollboy road between the N6 and the landfill. The E.I.S. recommends this as the route to be followed in the future by HGVs using the site. It is estimated that the increased traffic associated with the landfill (i.e. when operating at 120,000 tpa) will result in an increase in traffic flow between the Pollboy Road/Beechlawn Road crossroads and the N6 of 8%, and in the case of HGVs, 28%. This impact will be mitigated by substantial improvements to the Pollboy Road, in addition to improving the signage and layout of the N6/Pollboy Road and Pollboy Road/Beechlawn Road junctions. *Condition 4.24.1* requires that these be carried out.

#### 14.2 Archaeology:

There is a possibility that archaeological soils, finds and/or features may be found beneath the peat when excavation takes place while developing the new lined cells. *Condition 9.16* requires that the removal of peat during the construction of new infrastructure be monitored by a qualified archaeologist under licence from the Heritage Service in the Department of Arts, Heritage, Gaeltacht and the Islands.

#### (15) Waste Management, Air Quality and Water Quality Plans

No relevant air quality plans exist. A draft waste management plan exists for County Galway, and also for the Connaught area. Both of these were considered in the evaluation of this licence application. The Draft Waste Management Plan for Galway City/County 1999-2004 makes reference to Pollboy Landfill as "the most suitable site for short term expansion" and that it "had sufficient capacity to service the short term and medium term needs within the existing ownership boundary".

The requirements of the Water Quality Management Plan for the Upper Shannon Catchment (1990) have been considered in the evaluation of this licence application, the main requirement of which is that the general level of water quality should meet the requirements of salmonid fish species present.

#### (16) Submissions/Complaints

A total of 23 valid submissions were received in relation to the facility. The dates received and the details of the individual, department, group or organisation making the submission are provided. An overview of all of the submissions received is also provided, and includes a summary of the issues raised.

#### **16.1 Summary of submissions:**

Of the 23 submissions that were received concerning the licence application, the majority expressed concern over the past operation of the facility, and questioned the suitability of the site to accept increased quantities of waste (per year), given that leachate contamination from the facility was already evident. Complaints were also expressed about the manner in which queries regarding the licence application were dealt with by the applicant.

#### 16.2 Overview of individual submissions:

### 1. Dr. Harry F. Bugler, Beechlawn House, Ballinasloe, Co. Galway, submission received 25<sup>th</sup> March, 1998.

1) The granting of a waste licence to the applicant should not proceed prior to an agreement by the applicant to carry out essential reconstruction and improvement of the Beechlawn Road. At present, this road is already inadequate to support existing traffic, and would be totally unsuitable for the expected heavy truck traffic increase that will follow the new dump.

#### **Response:**

1) Condition 4.24.2 requires that HGVs travelling between Galway and Pollboy use the route outlined in the E.I.S. as the favoured one, option 3. The HGV traffic to/from Galway will account for the vast majority of that associated with the facility, and the use of the route outlined in option 3 will avoid using the Beechlawn Road. Traffic mitigation measures outlined in the E.I.S. include major junction improvements at the Pollboy Road/Beechlawn Road junction, and Condition 4.24.1 requires that these improvements be carried out within nine months of the date of grant of the licence.

# 2. Mr. Noel McCullagh, Mount Pleasant, Ballinasloe, Co. Galway, submission received 22<sup>nd</sup> April, 1998.

- 1) One of the explanations given in the licence application for the apparent lack of leachate contamination to surface water is that most of the leachate generated is transported away through groundwater/underground aquifers. This explanation seems the most likely to the person making the submission, and a link between leachate contamination and the deterioration of the water quality of the River Suck since the 1970s is suggested. Carrying out an hydro-geological investigation of the site is suggested to clarify this issue.
- 2) Some of the effects of leachate contamination on surrounding agricultural land are detailed in the submission, including the presence of thick "green sediment" in the water of nearby drains, and the death of livestock due to such effects.
- 3) The future development of a Salmon fishery at Ballinasloe is highlighted, and in this context, the containment and phasing out of dumping in the area should done.

- 4) The application states that batteries are not dumped at the site, however it is alleged that this has been taking place.
- 5) The application states that agrochemicals are not accepted at the site, however it is alleged that offal has been dumped in the landfill.
- 6) The application does not deal satisfactorily with the impact of the facility on the Traveller community, which is situated in immediate proximity to the landfill.
- 7) Section C5 of the application, Human Beings, seems to be absent from the files which are on view at the U.D.C. offices.
- 8) The licence application does not deal sufficiently with the issues of  $PM_{10}$  concentration levels.
- 9) Staff at the U.D.C. did not know of the existence of the EPA manuals on Landfill Monitoring, Landfill Operational Practices and Investigations for Landfills.
- 10) The application does not contain any landfill gas monitoring plan.
- 11) The application does not contain any leachate management plan.
- 12) The land around the facility is zoned as agricultural, yet there is no agricultural activity. A query is expressed as to whether this is an infringement of the Ballinasloe Town Development Plan.
- 13) The Ballinasloe Town Development Plan highlights four scenic views on map 7, Amenity and Recreation. Three of these face onto the bog where the landfill is located.
- 14) On three dates in April 1998, the dump at Pollboy was open to members of the public free of charge for dumping of domestic refuse, including white goods such as old cookers and fridges.
- 15) The road accessing the landfill from the Galway road is inadequate for supporting the traffic that the landfill will attract.

- 1) The application includes an hydrogeological investigation of the site. This found that most of the leachate arising from the landfill was moving through the upper layers of the overburden and discharging to the streams to the north and south of the site.
- 2) The EPA has not been furnished with any evidence to suggest that livestock deaths have occurred in the past as a result of the operations of Pollboy landfill. This submission did not suggest that it was cattle belonging to him which had died. Any possible impact of leachate arising from the facility on adjacent land will be reduced, as leachate management at the facility is required under *Condition 4.16*. *Condition 10.7* allows for the provision of an alternative supply of water to livestock in the event that water quality is affected by the facility.
- 3) The operation of the facility in accordance with the conditions of the licence will not cause any environmental pollution that will affect the development of a Salmon fishery on the River Suck.
- 4) *Condition 5.1* requires that only non-hazardous waste be disposed of at the facility.
- 5) *Condition 5.3.2* requires that within nine months of the date of granting of this licence, animal waste shall be disposed of in lined cells only. Waste handling

- procedures for the handling of animal waste are to be submitted to the Agency for its agreement within six months of the date of grant of this licence (*Condition 5.3.2*).
- 6) *Condition 9.1 (and Schedule F.3)* requires that noise monitoring be carried out at the Traveller halting site.
- 7) This matter is outside the scope of the draft PD.
- 8) Condition 9.1 includes for the monitoring of PM<sub>10</sub> levels.
- 9) This matter is outside the scope of the draft PD.
- 10) Dust and landfill gas monitoring requirements are established under *Condition* 9.1
- 11) Leachate management is required by *Condition 4.16*.
- 12) This matter is outside the scope of the draft PD.
- 13) Restoration and aftercare of the facility are controlled under *Condition 8: Restoration and Aftercare.*
- 14) Charges for waste are outside the scope of the draft PD.
- 15) Refer to submission no. 1 (response no. 1).

## 3. Mr. John Millane, Hon. Secretary of Ballinasloe Golf Club, submission received 14<sup>th</sup> May, 1998.

- 1) The users of the golf course will be affected by dust and odours coming from the facility.
- 2) The application makes no mention of scavengers who presently frequent the site.
- 3) Some parts of the golf course are within 800ft of the proposed landfill extension, and the map of the Visual Impact Study does not show this boundary correctly (i.e. the distance between the two is closer).
- 4) Birds are a particular nuisance, there is no plan to control their numbers and the current application of earth on top of waste is insufficient in distracting birds.
- 5) The possible use of the minor dirt track which runs between the Ballinasloe-Portumna road to the southside of the landfill for traffic associated with the landfill would have a fundamental impact on the golf course.

- 1) Dust and odour emissions from the facility will be controlled under *Condition* 5.10 and 6.6.
- 2) Scavengers are prohibited under *Condition 5.7*.
- 3) *Conditions 4.23* and *4.22.2* provide for the installation of a perimeter bund and appropriate planting to mitigate visual impacts on the landscape.
- 4) Bird control is required by *Condition 6.7*.
- 5) Condition 4.24.2 requires that waste contractors only use the preferred route of access to/from the facility as highlighted in the E.I.S., which makes use of the Pollboy Road and the N6 between Galway and Ballinasloe.
- 4. Mr. Mike O'Reilly, STMP: oreilly@iol.ie, submission received 25th May, 1998.

- 1) Can the waste licence application be upheld given that the landfill is so close to people's homes?
- 2) The application fails to draw attention to the traveller halting site located between the landfill and the above mentioned houses.
- 3) Is the EPA aware that it is proposed to upgrade the landfill to be the Galway County dump? And will this require a separate licence application?
- 4) The existing licence application should be judged in light of what is proposed.

- 1) In assessing the licence application, due regard was paid to the presence of residential properties in the area.
- 2) Refer to submission no. 2, response no. 6. A recent visit found the halting site to be abandoned.
- 3) This matter is outside the scope of the draft PD.
- 4) The E.P.A. in assessing the waste licence application have sought all information considered necessary and required by the legislation.
- 5. Mr. Andrew J. McCullagh, 8e Society Court, Society Street, Ballinasloe, Co. Galway, submission received 3<sup>rd</sup> June, 1998.
- 1) The submission complains about the treatment of members of the public in trying to consult with the UDC and their consultants.
- 2) Galway County Council appear to be acting in an inappropriate manner in relation to the whole application process, and pressure is being put on local councillors of the UDC to approve large scale dumping of waste from the whole of Galway at the facility.

- 1) This matter is outside the scope of the draft PD.
- 2) This matter is outside the scope of the draft PD.
- 6. Cllr. Sheila Ganly (Councillor with Ballinasloe Urban District Council), Dunlo Hill, Ballinasloe, Co. Galway, submission received 4<sup>th</sup> June, 1998.
- 1) The possible further application to the EPA for a licensed landfill receiving up to 160,000 tpa at this site would be considered bad planning, considering that it would be located only one mile from Ballinasloe town centre, which includes hospitals, schools, shops, residences, etc. The dump is also located in the Natural Heritage Area of Ballinasloe, as specified in the Balliansloe Town Development Plan.
- 2) Galway County Waste Management Strategy (Jan. '95) refers to the site as incapable of meeting the required EC standards in relation to the protection of surface water and group water, yet the licence application refers to the site as being the most suitable dump site at present in County Galway. In general terms, the licence application does not reflect the true intention for large scale

- dumping activities to be carried out at the site, as expressed in the Galway County Waste Management Strategy.
- 3) The licence application made by the UDC was a "sham", and the apparent strategy was to initially obtain a waste licence to dump 20,000 40,000 tpa, and then have this licence upgraded to receive >40,000 tpa.
- 4) The references to the remaining capacity of the landfill and the amounts of waste deposited therein do not tally between the licence application and figures given in the Galway County Waste Management Strategy.
- 5) If leachate from the facility is treated at the sewage treatment plant, it will be discharged into the River Suck just upstream from where the new Salmon fishing stretch is proposed at the site of the old mill. The Suck callows are designated as a SPA, and will the leachate emissions negatively impact on these SPA areas.
- 6) The land use/visual analysis part of the application incorrectly labels areas where turf cutting is practised and the golf course as "low grade agriculture".
- 7) Birds from the dump are attacking greens on the golf course, and knock over turf which is "footed". Bird control in section D1 of the application is therefore incorrect.
- 8) Little or no mention is made of the traveller halting site in the application, which is less than 250m from the facility.
- 9) Section F.4 (on odour control) is incorrect, and as a local councillor, she has received repeated complaints regarding rats, flies and smells from the existing landfill. Local residents have also complained about the increased number of lorries, vans and cars passing along narrow roads through residential areas.
- 10) A representative of MC O'Sullivan is reported to have stated that the dump is "probably" too near the town. Does the term "probably" imply that the environmental effects of the proposed landfill are not fully understood?
- 11) No mention is made in the application of the stress caused to people living near the facility, and that devaluation of their property may be induced.
- 12) Concern is expressed with regard to the pollution of air due to the decay of waste at the facility.
- 13) Concern is expressed on the psychological effects of having such a large dump located so close to the town, and in particular the effects on the attitudes of the business community. It is argued that the landfill is acting as an impediment to further residential development in the area.
- 14) How is the local authority sure that there is no hazardous waste being disposed of at the facility, given that there is no monitoring of the types of waste deposited.
- 15) Galway County Council is incorrectly identified in the licence application as the local planning authority.

1) The draft PD restricts the total amount of waste to be disposed of at the landfill to that proposed by the UDC prior to the enactment of the Waste Management Act (1996).

- 2) The operation of the facility according to the conditions of the draft PD, will not cause any further environmental pollution and the effects of the historic facility will be remediated.
- 3) The comments have been noted by the Inspector.
- 4) Condition 1.6 of the draft PD requires the applicant to submit accurate figures for the amount of waste deposited at the facility since February 1998 within three months of the date of grant of the licence. Regardless of the estimated capacity of the facility to accept further waste, Condition 5.4 requires that the site may only accept up to 375,000 tonnes of waste from February 1998. In addition, Condition 8.2 requires that the final profile of the facility be agreed with the Agency and designed to reflect the final quantity of waste. Proposals for the final height of the restored facility (which takes account of the total tonnage of waste to be deposited at the facility) be submitted to the Agency within 6 months of the licence being issued.
- 5) Condition 5.14 requires the leachate to be pretreated on-site prior to its treatment at Ballinasloe Waste Water Treatment Works. This will minimise the impact of the leachate on this treatment works and any discharge from that works.
- 6) The consideration of the application has included visits to the facility and all valid submissions received.
- 7) Refer to submission no. 3, response no. 4.
- 8) Refer to submission no. 2, response no. 6.
- 9) Refer to submission no. 3 (response number 1), and submission no. 1 (response no. 1). The attraction of the site to nuisance–causing species will be reduced following the implementation of *Condition 5.10* which requires the daily covering of waste.
- 10) This matter is outside the scope of the draft PD.
- 11) The facility already exists, therefore its improved operation and restoration under the conditions of the draft PD will improve matters.
- 12) The regular application of adequate daily cover over deposited waste (*Condition 5.10*) will reduce the potential for malodour emissions. Landfill gas will be controlled under *Condition 4.17*.
- 13) The size of the facility is restricted by *Condition 8.2*.
- 14) Condition 5.1 prohibits the disposal of hazardous waste at the landfill.
- 15) The Planning Authority indicated on the original application form was Galway County Council, however this was later changed to Ballinasloe Urban District Council in correspondence received by the EPA on 25<sup>th</sup> January, 1999.

### 7. Mr. Padraig Fahy, Beechlawn, Ballinasloe, Co. Galway, submission received 16<sup>th</sup> June, 1998.

1) Why is section D4.1 of the application not relevant, when sections D4.3 and D4.2 are also not applicable. Under section D5 of the application, the assumption by M.C. O'Sullivan that there will be a 50/50 composition of rapidly decomposing/slowly decomposing waste is not scientifically substantive. Section

- D5 should be revised to give accurate particulars for public inspection. Section D51 on landfill gas monitoring is blank.
- 2) Section H.1 provides no concise statement of environmental impact of foul-water to groundwater at a distance.
- 3) There are only 140 words (in section H.1) dealing with the 55,000m³ of leachate per year emanating from the site.
- 4) In section H.1, no composition of the dust emissions is provided, or of its possible health effects.
- 5) The existing road system is inadequate to deal with the demands of the proposed site.
- 6) In section H8 there is no inclusion of noise pollution.
- 7) Local residents were not consulted on the effects of the facility, or on any aspect of the licence application. Furthermore, no tangible evidence exists of the Council addressing odour and litter problems associated with the site (which was stated in the application), and no measures have been taken to safeguard local water supply.
- 8) It is a feature of wetlands to have a thin layer of Lacustrine Clay, and increased or continued use of the facility could result in the infiltration of this semi-permeable layer, thereby releasing vast quantities of contamination into the water table.
- 9) The submission enquires whether stratigraphy and hydrogeology surveys are being conducted by the Council. No such details are available to the public and are not included in the application.

- 1) Conditions 4.16 and 4.17 require that leachate management and landfill gas management be carried out at the facility.
- 2) Section H.1 of the application deals with the environmental impacts and mitigation measures for air. The collection and treatment of leachate, surface water and waste arising from the sanitary facilities on-site are dealt with under *Conditions 4.16, 4.19* and *4.11.1*.
- 3) See response no. 2 above.
- 4) Dust control is required under *Condition 6.6* and dust monitoring is required under *Condition 9.1*.
- 5) Refer to submission no. 1, response no. 1.
- 6) The original licence application deals with the issue of noise in attachment C8, while the amended application/E.I.S. deals with the issue in Appendix J of Vol. 3 (technical appendices).
- 7) The use of daily cover, as required by *Condition 5.10*, minimises potential odour nuisance and litter problems. The protection of groundwater is required under *Condition 7.6*.
- 8) The geology and geohydrology study of the site (see Appendix A of Vol. 3 of the E.I.S.) shows that the silty-clay layer which underlies the peat is about 4m thick under areas where waste has already been deposited. Its thickness is at its least to the south and west of the present waste disposal area, where the layer is between 1 and 2m thick. The risk of leachate contamination to groundwater

- in these parts will be negligible due to the construction of lined cells prior to the disposal of waste here.
- 9) Geology and hydrogeology investigations are included in attachment C6 of the original application, and Appendix A of Vol. 3 of the E.I.S.

# 8. Mr. Bob Tucker, Chief Executive Officer, Portiuncula Hospital, General and Maternity, Ballinasloe, Co. Galway, submission received 29<sup>th</sup> June, 1998.

1) A query is expressed as to whether the person making the submission, acting as Chief Executive Officer of Portiuncula Hospital, has any opportunity of seeing the deliberations of the E.P.A., or be party to any discussions in respect of any issues related to health.

#### **Response:**

- 1) All correspondence dealing with the licence application is placed on the public file and notification to this effect was sent to Mr. Tucker on the 2<sup>nd</sup> July, 1998.
- 9. Mr. Noel McCullagh, Secretary of Subcommittee of Sustainable Development Ballinasloe, submission received 29<sup>th</sup> June, 1998.
- 1) The group known as Sustainable Development Ballinasloe wish to be considered as a body to be notified under Article 18(1)(1) of the Waste Management (Licensing) Regulations 1997, and as such Article 18(2) and (3) of same. They also wish to be consulted on the preparation of the forthcoming E.I.S. to be submitted by the licence applicant.

#### **Response:**

1) A reply to this submission was sent on the 21<sup>st</sup> of September, 1998. It stated that the "Sustainable Development Ballinasloe" group would not be considered as a notified body under Article 18 of the Waste Management Act (1996), as it was not sufficiently clear from the submission that the request by the group to be a notified body was being made on behalf of a wide section of the community in the area affected by the application. In relation to the issue of the group being consulted on the forthcoming E.I.S., the reply sent out by the E.P.A. states that such consultations are a matter for the applicant to undertake and not for the Agency.

# 10. Mr. Noel McCullagh, Mount Pleasant, Ballinasloe, Co. Galway, submission received 8<sup>th</sup> July, 1998.

- 1) The person dealing with inquiries from members of the public is different to that which is identified in the licence application.
- 2) The Planning Authority identified on the application form was incorrect.

- 3) A considerable difference exists between the figure given for the remaining capacity of the facility in the application form and that given in the Galway County Council Waste Management Strategy 1995-2015 AD (of Jan 1995).
- 4) Since the completion of the Galway County Council Waste Management Strategy 1995-2015 AD report, nothing has been done to protect the groundwater.
- 5) The operation of the landfill as a "dilute and disperse" method of dealing with pollution offers no protection to groundwater which is situated only 0.4m below ground level. This is in breach of Article 8 of Council Directive 80/68/EEC of 17<sup>th</sup> December 1979 on the protection of groundwater.
- 6) Despite a statement contained in the Galway Co. Co. Waste Management Strategy implying that specific engineering structures were required to achieve controls on leachate flows from the site, the licence application does not contain any proposals for such structures.
- 7) Sound environmental protection policy has been swept aside in order to facilitate Galway County Council and Corporation to dump their waste on the site.

- 1) This matter is outside the scope of the draft PD.
- 2) Refer to submission no. 6, response no. 15.
- 3) Refer to submission no. 6, response no. 4.
- 4) Following the issuing of a waste licence to the applicant, future waste disposal activities will require the use of lined cells (*Condition 4.15*).
- 5) See response no. 4 above.
- 6) The amended licence application and accompanying E.I.S. received by the E.P.A. on the 30<sup>th</sup> November 1998 contain proposals for leachate containment. These proposals are required to be implemented under *Condition 4.16.1*.
- 7) Refer to submission no. 4, response no. 4.

## 11. Mr. Noel McCullagh, Mount Pleasant, Ballinasloe, Co. Galway, submission received 16<sup>th</sup> July, 1998.

- 1) The licence application contains a copy of the article which was advertised in a newspaper which circulates in the area. This article was published on the 27<sup>th</sup> of February, 1998, and therefore was not produced on a date preceding the application by 2 weeks.
- 2) The application file available at the U.D.C. offices in Ballinalsoe contains a newspaper article similar to the one contained in the licence application but with a different date.
- 3) A query is expressed as to what section of the relevant legislation enables the applicant to change details of the waste licence application (e.g. Ballinasloe U.D.C. being indicated as the relevant planning authority).

- 1) The newspaper advertisement by the applicant needs to be published within the two weeks preceding a licence application.
- 2) An article 8 notice was sent to the applicant by the E.P.A. on the 16<sup>th</sup> of June 1998, requesting that a new advertisement be published stating that an E.I.S. would be produced in support of the application. A copy of this advertisement may account for the presence of two similar advertisements in the U.D.C. of different publishing dates.
- 3) Corrections made to an application during the period of consideration are not prohibited.

### 12. Mr. Patrick White on behalf of Dúchas, The Heritage Sercice (National Parks and Wildlife branch), submission received 6<sup>th</sup> August, 1998.

- 1) The proposed landfill development is located within the Suck River Callows (Castlecoote-Shannonbridge) pNHA and SPA and the information supplied to Dúchas was not sufficiently detailed to allow them to make an assessment of the impacts of the landfill on these designated areas.
- 2) The submission requests specific details of the lands on which it is proposed to spread waste according to activity number 10 as listed in the Fourth Schedule of the Waste Management Act (1996).
- 3) The submission requests details of any stratigraphy/hydrogeology investigations, and proposals to prevent leachate contamination of the Suck River or Clontuskert stream.
- 4) The submission requests whether a thorough search of the area was carried out to confirm the absence of the pond snail Vertigo geyeri, a species listed for protection under Annex II of the EU Habitats Directive (92/43/EEC) and which had previously existed in the area.
- 5) Concern is expressed regarding the suitability of the underlying geology for landfill purposes, and that the results of geological investigations would be welcomed.

- 1) After consultation with relevant maps supplied to the E.P.A. by Dúchas, it is evident that the Pollboy landfill at Ballinasloe is <u>not</u> currently located within any nationally designated areas of conservation interest (e.g. proposed Natural Heritage Areas, candidate Special Areas of Conservation, or Special Protection Areas). Also see submission no. 8, response no. 9.
- 2) All aspects of the licence application are available for viewing and commenting upon. See submission no. 8, response no. 9.
- 3) Hydrogeological investigations are included in the E.I.S. submitted by the applicant in support of the licence application. The application also details a number of measures to prevent leachate contamination of all watercourses and groundwater (e.g. use of lined cells and leachate collection infrastructure), and these form part of the draft PD.
- 4) An ecological survey was carried out in the area and this is included in the E.I.S. submitted by the applicant. No evidence was found during the course

- of this survey to suggest that the pond snail *Vertigo geyeri* exists in the immediate vicinity of the facility.
- 5) The licence application and accompanying E.I.S. point out that the underlying geology of the area has limited the spread of leachate contamination from the existing landfill. The limestone bedrock has been classified as a regionally poor aquifer, and the overburden, which includes silty-clay and peat deposits, has a low permeability. Future waste disposal activities at the site will be done using lined cells (*Condition 4.15.1*).

# 13. Cllr. Sheila Ganly (Councillor with Ballinasloe Urban District Council), Dunlo Hill, Ballinasloe, Co. Galway, submission received 14<sup>th</sup> September, 1998.

- 1) A copy of a letter from Dr. J. Groarke (Portiuncula Hospital) on the health effects of landfills is enclosed for consideration.
- 2) Claims have been made that containers of cyanide have been buried at the facility.
- 3) The EPA should consult the Grogtmij report (1993) from Galway County Council and consider this in assessing the application.
- 4) The overflow from approximately 40 septic tanks from private residences drain into the area of Pollboy landfill.
- 5) The National Waste Associates submission to Galway Co. Council should be considered as an alternative to landfill waste disposal.
- 6) Attention is drawn to a bill submitted to Ballinasloe UDC by a local farmer for damage done to hay bales by birds attracted by the dump.
- 7) At a recent meeting of the UDC, the manager (Declan Nelson) informed the members that the UDC would face bankruptcy if it operated the facility to the required EPA standards.
- 8) It appears that the UDC applied for a waste management licence aware that they would be unable to finance the required upgrading of the facility, and that they had no intention of operating the site at the 40,000 tpa that they specified.

- 1) The information submitted along with Dr. Groarke's letter is largely irrelevant to the facility at Pollboy as it deals with: (a) the Miron Quarry landfill in Montreal, which is the third largest in North America and is therefore of a completely different scale to the landfill at Pollboy, and (b) Hazardous–waste landfills in Europe.
- 2) The E.P.A. does not have any evidence to suggest that seperately collected hazardous waste has been deposited at the site in the past.
- 3) The E.P.A. has considered the application form, additional material and all submissions in assessing the licence application.
- 4) The matter was noted by the Inspector.
- 5) This matter is outside the scope of the draft PD.
- 6) Refer to submission no. 3, response no. 4.

- 7) It is stated in the application that "the council are in a position to meet all short-term and long-term liabilities arising from the activity".
- 8) See response no. 7 above.

## 14. Ms. Kathleen Croffy, Secretary of Ballinasloe Against The Superdump, submission received 15<sup>th</sup> October, 1998.

1) As Secretary of the group, Ballinasloe Against The Superdump, which represents all residents and interested bodies in the Ballinasloe area, the person making the submission requests that the group be a notified body under Article 18 of the Waste Management (Licensing) Regulations.

#### **Response:**

1) A reply to this submission was sent on the 8<sup>th</sup> of February, 1999. It stated that the "Ballinasloe Against The Superdump" group would not be considered as a notified body under Article 18 of the Waste Management Act (1996), as other measures were available to provide the group with full information on the application.

### 15. Ms. Kathleen Croffy, Secretary of Ballinasloe Against The Superdump, submission received 21<sup>st</sup> December, 1998.

1) Attention is drawn to the fact that according to the Assistant County Manager, 2,000 tonnes of waste is being dumped at the facility every week, and that from the 11<sup>th</sup> of January 1999, this tonnage will increase. The submission expresses alarm and outrage at this development in view of the fact that a licence has not been obtained by Galway County Council. The licence application specified the tonnage to be in the order of 560 tonnes per week (approx.) and the view is expressed that this breaches regulations and poses a potential hazard to the environment.

#### **Response:**

1) The annual quantity of waste to be accepted at the facility is restricted to 120,000 tonnes under *Condition 5.4* of the draft PD.

### 16. 16. Mr. Padraig Costello, Hon. Secretary of Prevention and Elimination of Water Pollution Org., 116a South Park, Dublin 18, submission received 14<sup>th</sup> January, 1999.

- 1) Concern is expressed about the effects of run-off and leachate emanating from the facility on the water quality of the River Suck, Fair River and the groundwater.
- 2) Query as to whether the specifications, criteria and procedures of section 62 of the EPA Act (1992), IPC licence and EIS are being complied with.

- 1) Refer to submission no. 2, response no.s 2 and 11.
- 2) There is no requirement for an IPC licence. Section 62 requirements will be superseded by a licence issued under the Waste Management Act (1996).
- 17. Mr. Patrick Hogan, Patrick Hogan and Solicitors, Ballinasloe, Co. Galway, on behalf of the Management Committee of Ballinasloe Golf Club, submission received 25<sup>th</sup> February, 1999.
- 1) Considerable damage has been caused by birds (attracted to the landfill) to the Golf Course, particularly since Galway County Council started using the facility in the previous two months. The Golf Course operators have incurred additional expense in the use of chemicals, re-sodding greens and providing bird deterrent devices.

- 1) Refer to submission no. 3, response no. 4.
- 18. Mr. Declan Nelson, Deputy County Manager, Galway County Council, PO Box 27, County Hall, Prospect Hill, Galway, submission received 30<sup>th</sup> July, 1999.
- 1) The landfill facility at Pollboy is the only realistic option for dealing with waste in Galway City and County in the interim while other waste disposal facilities are being developed in the area. Limiting the total tonnage of the facility to 375,000 tonnes from February 1998 will give rise to significant diseconomies of scale with a resultant substantial increase in gate fees, which in turn will lead to indiscriminate dumping of waste in the countryside as a whole. Government policy on the continued short term use of existing landfill facilities should be taken into account in assessing the licence application.

- 1) A reply from the E.P.A. was sent to Mr. Nelson on the 10<sup>th</sup> of August, 1999. This pointed out that under the Waste Management Act (1996), Urban District Councils are prohibited from applying for waste licences for waste disposal facilities other than those they were operating at the time the legislation was introduced. Ballinasloe Urban District Council (i.e. the licence applicant) are therefore precluded by legislation from applying for a licence for an extended facility, such as the proposed facility for 840,000 tonnes. The stated capacity of the landfill at the time the application was made (i.e. 375,000 tonnes) must be adhered to.
- 19. Mr. Noel McCullagh, Research Student, Rijksuniversiteit Groningen, Nieuwe Ebbingestraat 44 B, 9712 NM Groningen, The Netherlands, submission received 27<sup>th</sup> September, 1999.

1) No notification of the closing date for submissions was received from the E.P.A.

#### **Response:**

1) The E.P.A. sent out notification of the closing date for submissions on the 3<sup>rd</sup> of December, 1999.

# 20. Mr. Padraig Costello, Hon. Secretary of Prevention and Elimination of Water Pollution Org., 116a South Park, Dublin 18, submission received 22<sup>nd</sup> December, 1999.

- 1) Location of landfill is grossly unsuitable and dumping at the site will damage the environment.
- 2) Run-off from dumped waste materials causing pollution to drains/streams, and in particular the rivers Fair and Suck, must be taken account when the licence application is assessed.
- 3) The core ground base is of limestone which is porous and therefore any leachate/run-off will damage the water.

#### **Response:**

- 1) The activity operating according to the conditions of the draft PD will not result in any environmental pollution.
- 2) Refer to submission no. 2, response no.s 2 and 11.
- 3) Refer to submission no. 12, response no. 5.

### 21. Ms. Kathleen Croffy, Secretary of Ballinasloe Against The Superdump, submission received 4<sup>th</sup> January, 2000.

- 1) A copy of the out-of-court settlement between Ballinasloe Against The Superdump and Ballinasloe UDC is included, in addition to a Progress Report on Ballinasloe Landfill and Remediation and Development (part of the Galway Waste Management Strategy Study). In reference to the E.P.A.'s draft manual on landfill site selection, a number of points are raised, and these are discussed below.
- 2) In the Draft Waste Management Plan for Galway City/County 1999-2004 (published in September, 1999), a map shows that a regionally important aquifer is located to the south of Ballinasloe, which is close to where the Pollboy facility is situated.
- 3) The 1995 Draft Development Plan for Ballinasloe UDC highlights the location of the landfill as "flood plain and callows", and the E.P.A. states in its Draft Manual on Site Selection (1996) that "developers of landfills should ensure that the landfill is not located within the 50 year floodplain of rivers".
- 4) There are differences between statements contained in the licence application and the 1995-1999 Town Development Plan with regard to the visual amenity and designation of the Pollboy area.
- 5) The E.I.S. states that further site investigations to the west of the site may be required in relation to geohydrology. The submission considers this an

- inappropriate response and regards the investigation as incomplete. A number of "spring wells" are situated to the west of the site and may become contaminated by leachate.
- 6) The proximity principle is being ignored, as waste arising from Galway city is being transported 40 miles to reach the landfill at Pollboy. The traffic is being funnelled through Loughrea town, and in the Galway Waste Management Strategy Report, it was stated that the proposed Ballynahistil facility was regarded to be at a disadvantage for the same reason.
- 7) The E.I.S. makes little or no mention of the low density residential area at Beechlawn Road, which is located to the north of the facility.
- 8) All of the traffic associated with the landfill is funnelled through a number of residential areas.
- 9) Having regard to the exclusionary factors detailed above, the site is totally unacceptable for intensified use as a landfill and should not receive a waste licence.
- 10) Certain wastes have been buried in the dump, either in drums or plastic. A request is made that the E.P.A. investigate this matter, and if evidence is found that this waste is hazardous or toxic, that a contingency plan be put in place should leakage/contamination occur at a future date.
- 11) The visual impact of the site after closure will be significant and will have a detrimental effect on the tourism value of the area, which is due to be developed in close proximity to the site through the upgrading of the Suck navigation. A suggestion is made that the overall height of the facility, including the total height of any stockpiled wastes or cover material should be restricted to within a maximum height of 50m O.D.
- 12) Concern is expressed that there is no provision for a local monitoring committee with the power to inspect the type of waste entering the site.
- 13) Timeframes for the implementation of various aspects of the licence application should be specified in any waste licence issued.
- 14) Many residents in the Pollboy area are unable to open their windows because of dust.
- 15) The submission argues that it is necessary to install an impermeable membrane barrier around the existing waste deposited to prevent leachate migrating laterally to adjacent lands.
- 16) No commitment is made by the applicant to control the growth of weeds in the streams to the north and south of the site, which according to the application (section C4 on ecology) is increased by the influence of leachate.
- 17) The installation of drains around the facility is recommended to restore the natural drainage in the area, and to prevent flooding which may allow contaminated water to leave the site.
- 18) The visual impact of the site is now becoming apparent and a landscaping programme should be implemented immediately.
- 19) The site is unfenced or poorly fenced to the north, west and south of the site.
- 20) Vermin should be controlled in an environmentally safe manner, as the use of pesticides would have an inhibitory impact on the treatment of leachate.

- 21) The E.I.S. and licence application contain a number of errors and contradictions.
- 22) The Waste Management Strategy Study Progress Report on Ballinasloe which was prepared by MC O'Sullivan, states that "it is strongly recommended that Galway County Council write to the Department of the Environment and Local Government pointing out that the findings of the Galway Waste Management Strategy in accordance with EU and Irish Government Waste Policy cannot be economically realised based on current legislation". It is suggested in the submission that this statement constitutes a recommendation to have the current legislation changed to enable the total tonnage of waste deposited at the Pollboy site to be increased to 840,000 tonnes.
- 23) Land registry details are included with the submission, which imply that the UDC do not own a small section of land which is highlighted in the licence application as part of the site boundary.
- 24) The submission includes a critique of the Human Health section of the EIS.

- 1) The agreement reached between the U.D.C. and Ballinasloe Against The Superdump has been taken into account in preparing this Inspector's Report and in drawing up the accompanying draft PD.
- 2) The site specific hydrogeological investigation of the area, indicated that the aquifer underlying the landfill is a regionally poor aquifer.
- 3) The guidelines contained in the E.P.A. Draft Manual on Site Selection (1996) apply to new facilities, and therefore are not applicable in this instance.
- 4) The Town Development Plan mentions the "fine landscape views along the Pollboy ring road" and this road occurs to the north of the landfill facility. Views from the road were taken into account in assessing the visual impact of the site in the E.I.S. In relation to the designation of the site, the submission is probably correct in pointing out that the site was once designated as an Area of Scientific Importance (ASI), however it is unclear as to the exact location of "Pollboy Bog". Regardless of this, the site is not designated as a pNHA, which have replaced the designations of ASIs. Also see submission no. 6 (response no. 1).
- 5) The PD requires that prior to the commencement of any development to the west of the historic waste deposited, further hydrogeological investigations be carried out and the results submitted to the Agency.
- 6) There are no other municipal waste landfills in County Galway.
- 7) The E.I.S. does show the residential area at Beechlawn Road on the Land Use Map (Fig. 4.5), and makes reference to it under section 4.4.5 (P. 40) of the main report (Volume 2). This states "the spread of urbanization has modified the land use pattern to a certain degree and takes the form of ribbon development along roads at a relatively low density".
- 8) Refer to submission no. 1, response no. 1.
- 9) The development of the landfill is restricted by the draft PD.
- 10) Refer to submission no. 13, response no. 2.

- 11) Condition 8.2 requires that the final profile of the facility be as shown in Figure 6.1 of Vol. 2 of the EIS, and that proposals for the final height of the restored facility (which takes account of the total tonnage of waste to be deposited at the facility) be submitted to the Agency within 6 months of the licence being issued. The facility is to be restored using native trees (Condition 8.1).
- 12) *Condition 2.7.1* requires the establishment of a Communications Programme. It is expected that locals will have access to the facility at any reasonable time.
- 13) Timeframes are specified for the implementation of all aspects of the waste licence.
- 14) Refer to submission no. 3, response no. 1.
- 15) The insertion of an interceptor drain around the existing waste (see submission no. 2, response no. 2) will collect leachate migrating laterally off-site.
- 16) The control of leachate emissions from the facility (see submission no. 2, response no. 2) will reduce the enrichment effects evident in the drains around the facility.
- 17) See response no. 15 above.
- 18) *Condition 8.1* requires that capping and other remediation be carried out on the existing landfilled area.
- 19) *Condition 6.3.1* requires that a 2m high perimeter fence be erected around the whole facility.
- 20) Conditions 6.7 and 6.10 require that vermin be controlled. There is no evidence that any method of vermin control impacts on leachate treatment.
- 21) The licence application has been assessed taking into consideration E.P.A. guidelines, relevant legislation, the application submitted, the E.I.S., submissions received and replies received from queries expressed by the E.P.A.
- 22) This matter is outside the scope of the draft PD.
- 23) Condition 1.2 requires that waste activities shall be restricted to the area of land outlined in red on Figure 3.2 of the application (contained in Vol. 2 of the EIS).
- 24) In general, a detailed assessment of the health effects of any landfill facility is difficult, given that little research has been carried out in this area. In an overview of the health effects of controlled landfilled sites presented by L. Heasman at the Seventh International Waste Management and Landfill Symposium in 1999, it was shown that where studies have been carried out on populations living near controlled landfills, no causal links have been established and no exposure pathways identified. The operation of the facility according to the conditions of the draft PD, will not cause any further environmental pollution and the effects of the historic facility will be remediated.

### 22. Ms. Gabriel Rohan, Chairman of Ballinasloe Against The Superdump, submission received 4<sup>th</sup> January, 2000.

See submission no. 21

23. Ms. Sheila Ganly, Committee Superdump, submission received 4 <sup>th</sup>			Against	The
See submission no. 21				
Signed:	Dated:			
Dr. Ted Nealon				
The preparation of this report has been assi	sted by Caoin	nhin Nolan, In	spector.	