

## INSPECTORS REPORT

WASTE LICENCE REGISTER NUMBER 09-1

### (1) Summary:

The application is for an existing landfill and civic waste facility serving most of north Dublin. The landfill disposes of municipal, commercial and industrial wastes as well as hazardous wastes in the form of nickel hydroxide wastes from GE Superbrasives. This latter waste is disposed of in specially constructed cells. A recovery centre for Construction and Demolition wastes is also proposed at the facility. The landfill has disposed of up to 1,200,000 tonnes per annum but current initiatives has reduced that quantity considerable.

<b>Name of Applicant</b>	Fingal County Council
<b>Facility Name (s)</b>	Balleally Landfill
<b>Facility Address</b>	Balleally, Lusk, Co. Dublin
<b>Description of Principal Activity</b>	Landfill
<b>Quantity of waste (tpa)</b>	c. 1,200,000
<b>Environmental Impact Statement Required</b>	No
<b>Number of Submissions Received</b>	4,762
<b>INSPECTOR'S RECOMMENDATION</b>	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 8	03/11/97		24/11/97
Article 14 (2) (b) (ii)	22/12/97	11/02/98	02/03/98
Article 14 (2) (a)	16/04/98		
Article 16	06/08/98		20/10/98

		11/09/98
		02/11/98
		26/11/98

<b>Applicant Address</b>	PO Box 174, Dublin 1
<b>For Local Authority applicants, is the facility within its own functional area</b>	Yes
<b>Is the facility an existing facility:</b>	Yes
<b>Prescribed date for application:</b>	Prior to 1 <sup>st</sup> October 1997
<b>Date Application received:</b>	30 <sup>th</sup> September 1997

### FACILITY VISITS:

DATE	PURPOSE	PERSONNEL	OBSERVATIONS
24/11/97	Site visit and check site notice	T Nealon	Site Notice complies with Art. 8
27/08/98	Site visit	T Nealon	Site improvements being carried out.

### (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	
1. Deposit on, in or under land (including landfill).	X	1. Solvent reclamation or regeneration.	
2. 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.		3. Recycling or reclamation of metals and metal compounds.	X
4. Surface impoundment, including placement of liquid or sludge discards into pits, ponds or lagoons.		4. 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.	P	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.		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.		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.		9. 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).	X	10. The treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system.	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
12. Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.	X	12. 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

**The applicant describes the classes of activity as follows:**

**Class description:**

Third Schedule;

Class 1: Landfill waste in existing landfill.

Class 2: Disposal of sludge with soil as daily cover.

Class 5: Disposal of non-hazardous industrial waste to lined cell.

Class 10: Discharge of leachate and runoff to estuary water.

Class 11: Mixing of sludge with soil for daily cover and activities associated with the construction/demolition waste recycling facility.

Class 12: Activities in the recycling collection area.

Class 13: Possible activities associated with the recycling collection area.

Fourth Schedule;

Class 2: Possible future green or organic composting (pilot study).

Class 3: Activities associated with the proposed construction and demolition waste recycling facility.

Class 4: Activities associated with the proposed construction and demolition waste recycling facility.

Class 10: The treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system.

Class 9: Collection of gas and its conversion to electricity.

Class 11: Activities associated with the recycling collection area.

Class 13: Activities associated with the recycling collection area.

**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 requirements of *the 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 39 hectares, was originally low-lying ground and foreshore adjacent to Rogerstown estuary in north county Dublin. The site is situated in a rural location south-east of Lusk and south-west of Rush, see location drawing. The nearest residential properties are located to the north and east of the facility. The residences impacted upon most by the activities of the landfill are those located along Balleally Lane, which is used for access to the facility. Several other residential properties exist within 500m of the proposed facility. Rogerstown Estuary is designated a proposed Natural Heritage Area. The outer estuary, further away from the facility is also a RAMSAR site and a Special Protection Area for birds. The extensive mud-flats of the estuary are ideal feeding grounds for waterfowl. The estuary is very shallow and drains almost completely at low tide.

**(4) Waste Types and Quantities**

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	6,700,000 at October '97	Unquantified	6,700,000
To be deposited	2.4 million tonnes from October 1997	Small quantities of nickel hydroxide	9.1 million tonnes

#### (5) Activity Summary

The facility began operation in 1971. It is situated in Rogerstown Estuary and is designed on the dilute and disperse model. Leachate from the facility enters the estuary either directly through surface water or via the groundwater. The landfill when complete will be capped and restored. The facility accepts municipal and industrial waste. In 1997, the facility accepted 1,270,000 tonnes but this quantity has subsequently been reduced considerably. A large proportion of the waste disposed of at the facility has been Construction and Demolition wastes. In order to minimise the amounts of waste being disposed of, the recovery of these wastes is now carried out on the facility. Landfill gas being produced within the waste is partially collected and used for the generation of electricity. Dedicated, lined cells within the facility are used for the disposal of nickel hydroxide sludges, which are classified as a hazardous waste.

#### (6) Facility Design

- **Development;**

The waste licence application initially included an EIS and a proposal for a considerable expansion of the facility. However, the applicant indicated that their intentions had changed and submitted additional information in November 1997 restricting the activity and therefore removing the need for an EIS.

- **Infrastructure;**

The boundary of the facility is delineated by a 6 foot high security fence to the north and east of the landfill which links into the gated entrance. The boundary of the facility to the south is the estuary. Within the landfill there is a network of haul roads and access roads. The main infrastructure within the facility includes a car

park area, offices, weighbridge, wheelwash, fuel storage tanks, civic waste facility and landfill gas utilisation plant. The provision and maintenance of this infrastructure is required by *Condition 4 Site Infrastructure*.

- **Liner System;**

Part of the facility comprises a number of small cells lined with HDPE for the purpose of accepting Nickel hydroxide and Iron hydroxide waste from GE Superabrasives Ireland. The waste has been classified as hazardous. The lining of future cells of the facility requires the prior written agreement of the Agency under *Condition 4.15 Specified Engineering Works*.

- **Leachate Management;**

Leachate management, except for the lined cells accepting nickel hydroxide wastes, is essentially non-existent. The leachate discharges either directly or indirectly to the estuary. *Condition 4.17* requires a proposal for the installation of a leachate management system. *Condition 4.19* specifies the type of cap to be installed which will reduce rainwater ingress and therefore reduce the amount of leachate being produced.

- **Landfill Gas Management;**

Landfill gas from part of the site is currently being extracted and utilised in the production of electricity. Proposals for the extension of this system and for the introduction of any additional necessary control measures are required by *Conditions 4.18.1 and 4.18.2*. Emission limits for the emissions from flarestacks and from the utilisation plant are set by *Condition 7*.

- **Capping System;**

The final capping system is specified by *Condition 4.19.1*. A proposal for a specification for temporary capping is required by *Condition 4.19.2*.

## **(7) Facility Operation/Management**

- **Waste Acceptance Procedures**

*Conditions 5.1 and 5.2* stipulate the types of wastes which are permitted to be disposed of and recovered at the facility. *Schedule H* lists these waste types. Hazardous wastes, other than nickel hydroxide sludge, liquid wastes, Construction and Demolition wastes and most animal wastes are prohibited from being disposed of at the facility. Waste acceptance procedures are established by *Condition 5.5*.

- **Nuisance Control**

Environmental nuisances are controlled by *Condition 6*. Due to the sensitivity of the area with regard to birds and the need to prevent birds from causing a nuisance, *Condition 6.10* requires the licensee to make a proposal to the Agency dealing with bird control. Landfill gas odours will be controlled by combustion. Traffic using

the site will use the wheel-wash to prevent the tracking of any materials onto the public road. Scavenging is not allowed at the facility and is prohibited by *Condition 5.9*.

- **Hours of Operation**

Monday to Friday and 08.00 to 18.30 for the landfill site. The operation of the Construction and Demolition recovery site is restricted to 08.00 to 18.00, Monday to Friday only. Both the landfill and the recovery site are prohibited for operating on Bank Holidays. The Civic Waste Facility has more extensive opening hours to cater for members of the public.

#### **(8) Restoration and Aftercare**

It is proposed to restore the facility to a mixture of amenity and grassland. *Condition 8.1* requires the licensee, in consultation with Duchas, The Heritage Service and a Liaison Committee established by the applicant to prepare and submit a restoration proposal to the Agency for its agreement. The final profile of the facility is specified by *Condition 8.2*.

#### **(9) Emissions to Air**

Emissions to air include landfill gas, landfill gas combustion products and dust. Dust monitoring requirements are established under *Condition 9.1* and dust deposition limits established by *Condition 7.1*. Landfill gas monitoring requirements have been established in *Conditions 9.2, 9.3 and 9.9*. *Condition 7.1* sets emission limits for landfill gas detected in buildings. *Condition 7.4* sets trigger levels for landfill gas detected on or in the immediate vicinity of the facility. *Condition 10.9* requires further action, including investigations and remedial action to be taken if trigger levels or emission limits are exceeded. Where emissions of dust are generated, particularly during dry windy conditions, *Condition 6.7* requires the use of a water tanker to dampen the access and internal haul roads.

#### **(10) Emissions to Groundwater**

The geology of the area comprises estuarine deposits of silt and silty sand which vary in thickness from 0.7m to 5.0m, thinning towards the shoreline. The sand layer represents an infilled channel and is oriented east-west under the facility with the waste lying directly on it. These deposits are partially underlain by gravelly clays which, in turn, is

underlain by sand and gravel. Underlying these superficial deposits is the bedrock comprising black limestone.

The deposits do not comprise aquifers which would be classified as regionally important. It is likely that there may be a direct discharge of leachate into the groundwater. However, the groundwater under the facility is considered to be permanently unusable due a combination of factors, including the location of the facility adjacent to the shoreline and the salinity of the groundwater due to tidal influences. A leachate plume has been identified under the landfill and extending out under the estuary. Monitoring to-date has indicated that considerable attenuation of the contaminants occurs within the leachate plume. Requirements of the proposed decision both minimise the quantities of leachate to be produced by requiring the installation of an effective cap, *Condition 4.18*, and minimise the quantities of leachate emitting from the facility by requiring the installation of a leachate abstraction and treatment system, *Condition 4.16*.

Groundwater quality is monitored by a network of boreholes. Proposals to monitor the quality of the estuary and the potential impacts on bird life are required by *Conditions 9.6 and 9.7*.

#### **(11) Noise Emissions**

Traffic using the facility and the operation of plant and machinery are the main sources of noise associated with the facility. Noise associated with the traffic outside the facility boundary is outside the scope of this licence. Noise monitoring at the facility is required by *Condition 9.1*. *Condition 7.1* establishes noise emission limits. The hours of operation of the Construction and Demolition Recovery Site are restricted by *Condition 5.10* to minimise noise impacts from that source.

#### **(12) Emissions to Sewer**

There are no emissions to sewer.

#### **(13) Emissions to Surface Water**

Analyses of water and sediment samples from the estuary indicate that, in general, the landfill is not causing pollution of the estuary. However, elevated concentrations of heavy metals are found in the estuary as a whole but they are generally below the threshold values for negative impacts on flora and fauna. The pollution status of the estuary in 1997 did not appear to have deteriorated since 1981, when the last study



was carried out, except for the area to the north-east of the facility and the area of the transition zone between the inner and outer estuary. It is considered that a further increase in the pollution load on the estuary may have a severe negative impact on its ecology. As described, leachate emissions will be controlled and minimised under the licence and additional monitoring will be carried out on the quality of the estuary.

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

None.

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

Balleally landfill is discussed in the Waste Management Plan adopted by Fingal County Council.

**(16) Submissions**

**Appendix 2 contains details of all submissions, received relating to the application. All submissions received are available for inspection.**

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

Signed \_\_\_\_\_

Dated:

Name Dr T Nealon

**APPENDIX 1**  
**LOCATION PLAN**

**APPENDIX 2  
SUBMISSIONS**

## **SUBMISSIONS:**

Four thousand seven hundred and twenty six standard letters were submitted as submissions. These have been grouped A to Q and the numbers recorded. They are dealt with below. In addition, a number of individual submissions were also received and these are dealt with after the standard letters. The individual submissions comprise twenty-six short submissions and ten detailed and extensive submissions.

### **Submission Type A: 627 submissions.**

These submissions dealt with the requirement in the Foreshore Licences for levelling the waste and states that the waste licence application should be rejected due to the neglect and breach of licence conditions by Fingal CC over the previous 26 years.

*Response: The Agency is not the enforcement authority for Foreshore Licences. The granting, or otherwise, of a waste licence is subject to the requirements of Section 40(4) of the Waste Management Act 1996. Condition 5.13 attaching to the licence requires the compaction of all waste disposed of at the facility.*

### **Submission Type B: 659 submissions.**

These submissions dealt with the area being densely populated and the fact that landfills should be remote from urban areas. They also blamed Balleally for the pollution of the estuary and the loss, by several beaches of their Blue Flag status. The submissions called for the waste licence application to be refused.

*Response: As Balleally is an existing landfill its location is already established. However, the profile of the facility is fixed by Condition 8.2 which also fixes the quantities of waste to be accepted and restricts the lifespan of the facility. There is evidence that leachate from Balleally landfill has discharged to the estuary but no evidence that the landfill has been implicated in the loss of any Blue Flags. The conditions of the Proposed Decision will control and minimise discharges from the facility. Conditions 4.15 dealing with leachate management and capping will assist in controlling those emissions from the facility. Monitoring of the estuary is required by Condition 9.6.*

### **Submission Type C: 583 submissions.**

These submissions refer to Balleally landfill being a significant source of pollution and nuisance and, in particular causing pollution of the estuary. Nuisances include seagulls, wind blown litter, odours, flies, vermin and traffic. They state that the waste licence application should be refused because of poor past practices.

*Response: The granting, or otherwise, of a waste licence is subject to the requirements of Section 40(4) of the Waste Management Act 1996. Condition 6 attaching to the licence require the control of all nuisances from the facility. Condition 5.12 requires the use of daily cover which will minimise the attraction for birds, flies and vermin and which will minimise litter and odours. The installation of*

*a comprehensive landfill gas system, as required by Condition 4.16, will minimise odours. The control of traffic to and from the facility is outside the remit of the waste licence. Under the conditions of the proposed decision, the overall management and operation of the facility will be greatly improved.*

**Submission Type D: 457 submissions.**

These submissions deal with the potential impact of the facility on market gardening in the area and the potential pollution of the food chain through air and water pollution. They are concerned about birds and rats spreading disease and call for the refusal of the waste licence application.

*Response: As Balleally is an existing facility its location is already established. However, the conditions attached to the licence which require the control of birds and rats are specifically designed to prevent them spreading disease and causing contamination of the food chain.*

**Submission Type E: 468 submissions.**

These submissions dealt with the breaches of the Foreshore Licences by Fingal CC over the life of the facility and suggest that the facility be closed immediately. They state the need for leachate control and the need to treat the visual impact of the landfill mound by planting native grass and shrubs. They further suggest that the waste licence application should be refused.

*Response: The granting, or otherwise, of a waste licence is subject to the requirements of Section 40(4) of the Waste Management Act 1996. Condition 4.15 requires leachate control with the view of minimising emissions from the facility. Condition 8.1 requires the appropriate restoration of the facility.*

**Submission Type F: 430 submissions.**

These submissions deal with the fact that the landfill is located in a high amenity area, used extensively by residents and visitors. They refer to the view of the facility from passing trains as being distressing and request the refusal of the waste licence application.

*Response: Conditions 4, 5 and 8 relating to the operation and restoration of the facility are intended to control any impact that the facility may have on the area. The visual impact of the facility, from the train and other aspects, shall be improved by restoration works that will be carried out under Condition 8.1.*

**Submission Type G: 510 submissions.**

These submissions deal with the importance of the area to wild fowl and that the outer estuary is a national nature reserve, a RAMSAR site and a special protection area for birds. They state that the continued use of this landfill is unacceptable and request the refusal of the waste licence application.

*Response: The facility itself does not lie within any designated area. Conditions controlling the operation and closure of the facility are intended to control any impact it is having on the surrounding areas. Conditions 9.6 and 9.7 requires the establishment of a monitoring scheme for birds using the estuary and for the quality of the estuary itself. Remediation actions, if appropriate are required by Condition 10. 9.*

**Submission Type H: 226 submissions.**

These submissions deal with the location of Balleally landfill on a floodplain and the fact that the road floods periodically. They also state that the estuary side of the landfill is washed by the tide which may result in a collapse. The submissions request that the waste licence application be refused.

*Response: As Balleally is an existing facility its location is already established. No evidence is provided to suggest that the presence of the facility causes the flooding of the road. The state of the estuary side of the landfill is addressed in the restoration of the landfill which is controlled by Condition 8.1 A stability survey of the side slopes of the facility is required by Condition 9.8.*

**Submission Type I: 520 submissions**

These submissions deal with the nuisances generated by the landfill over the previous 26 years. They refer to the location being important for bird life, that it is an area of Scientific Interest, and that the estuary is now so polluted by leachate that the county council have erected signs telling people not to swim in it. The submissions refer to a report by consultants, Kirk, McClure and Morton, which advised on sealing the dump and immediate restoration. A retaining wall was also to be installed along the estuary side of the facility. The submissions request that the Agency refuse the waste licence application.

*Response: Nuisances potentially caused by the facility are controlled by Condition 6 of the licence. Recognition of the importance of the area for bird life is given by conditions 9.7 and 10.6 which require appropriate monitoring and remediation actions. No evidence has been provided which indicates that the facility has so polluted the estuary that it is unsafe to swim in it. Restoration of the facility is controlled by Condition 8.1.*

**Submission Type J: 23 submissions.**

These submissions raise the same issues as Type I with the addition of Lusk being selected as the location for a SuperDump because of the relatively low population in the area. They request that the Agency refuse the application.

*Response: The Response to Type I is relevant with the addition that the proposal for an extension to Balleally landfill was withdrawn by Fingal CC shortly after the initial application was made.*

**Submission Type K: 22 submissions.**

These submissions object to the presence of the landfill and refer to an attached letter which had been forwarded to Fingal County Council complaining about the facility.

*Response: The issues addressed in the submission have been addressed elsewhere with the exception of the decrease in value of property values. It is likely that such a decrease has occurred. However, the lifespan of the facility is limited and with the appropriate restoration of the facility, in accordance with the conditions of the proposed decision, the property values should rapidly recover.*

**Submission Type L: 34 submissions.**

These submissions deal with the destruction of the estuary by the landfill and the fact that it is now so high that it is blocking views in every direction. They refer to the importance of the area for bird life and the potential for pollution of the feeding areas by chemicals and waste. They state that they believe that the bodies of birds infected with Botulism have been found in the estuary. They request the Agency to refuse the licence application.

*Response: These submissions are dealt with above with the exception of the reference to Botulism. It is noted that no evidence of such has been presented. Conditions dealing with nuisances and restoration of the landfill will prevent the presence of birds on the landfill.*

**Submission Type M: 32 submissions.**

These submissions deal with the deterioration of the estuary due to the presence of the landfill and the fact that its presence threatens or destroys the health, well-being and ability to enjoy nearby coasts and beaches of the locals.

*Response: The quality of the estuary, at least in the two areas referred to earlier, has deteriorated due to the presence of the landfill. However, there is no evidence that the facility has impacted on local beaches. While the facility has undoubtedly caused a considerable nuisance to local resident and users of the local amenities, there is no evidence that it has affected their health. Nuisances caused by the landfill as a result of poor practices in the past will be controlled by Condition 6 of the licence. The facility now has a finite life as the final contours are controlled by Condition 8.2*

**Submission Type N: 35 submissions.**

These submissions refer to the broken promises by Fingal CC regarding the facility. These include a statement that the landfill was to close in 1997, and a commitment to follow best practice. They also object to the proposal for a Construction and Demolition Recycling Centre and state that it will be used to continue the life of the dump.

*Response: Although past promises may have been broken, the future operation of the facility will be controlled by the licence which will ensure that the facility is well managed and properly operated. The operation of the C&D recycling centre is subject to a number of conditions, controlling noise, Condition 7.1, controlling dust, Condition 6.9, and visual intrusion, Condition 8.2. Condition 5.4.3 also requires the applicant to provide a proposal to the Agency for another location, off the facility, for the recycling centre, within twelve months of date of grant of the licence.*

**Submission Type O: 37 submissions.**

These submissions deal with the length of time the landfill has been operational, the high rate of waste input, the pollution of the estuary and the smell from the landfill. They ask that the application be refused.

*Response: The operational future of the facility is now fixed by the final contours. The annual input of waste is controlled by Condition 5.7 not to exceed 1,200,000 tonnes. Condition 6.8 requires that no odour from the facility shall result in a significant impairment of, or significant interference with, amenities or the environment beyond the facility boundaries.*

**Submission Type P: 31 submissions.**

These submissions refer to the gradual deterioration of the environment due to litter, fly-tipping, the size of the landfill, and the smell from it. They also state that swans have left the estuary due to the presence of the landfill. They ask that the application be refused.

*Response: Litter from the facility will be controlled by Condition 6.3, any fly-tipping in the vicinity of the facility is required to be removed by the licensee under Condition 6.5, the size of the facility is now tied to the proposed final contours by Condition 8.2. Odour from the facility is controlled by Condition 6.8. A proposal to carry out annual surveys of the bird life in the estuary is required by Condition 9.7.*

**Submission Type Q: 32 submissions.**

These submissions deal with the size of the landfill and the fact that it is leaking pollution into the estuary. They state that it should be closed immediately and the estuary cleaned up.

*Response: These issues have been dealt with in the replies above.*

An additional 26 single submissions were received. These were submitted by concerned residents, Duchas, Donabate Parish Council, Skerries Development and Community Association Ltd., Muintir na Tire, Fairways Residents Association, and the Waste Action Group.

The submissions deal with many of the issues discussed above and many of them express concern about the proposed extension. Muintir na Tire state that discussions



with local G.P.s indicate an increase in allergic type illnesses in the area. There are also a number of calls to increase recovery and reduce the amount of waste being disposed of. Duchas stated that the landscaping of the facility should not include amenity planting on the East and West side. If kept as grassland and properly managed these areas should become feeding grounds for birds. The planting of hedgerows on the restored landfill is considered a positive development and it is recommended that nesting boxes for Tree Sparrows be installed in suitable locations. Duchas also stated that they would like to be consulted on the location and design of observation hides and on the content of educational material for the Visitors Centre. In a second submission, Duchas stated that, if the facility is properly implemented and maintained, there should not be a major negative impact on the estuary. They expressed concern about the discharge of surface water directly into the estuary and whether this water would be monitored prior to discharge.

*Response: As stated earlier, while the facility has caused considerable nuisance to local people, there is no evidence that it has caused health problems. The conditions of the licence will control emissions from the facility thus controlling impacts arising from the facility. Conditions 5.4 and 5.14 of the licence require the licensee to investigate and carry out recovery of a number of waste streams. The comments made by Duchas have been incorporated in Condition 8.1 which controls the restoration of the facility. Discharge of surface water from the facility and the monitoring of that discharge is controlled by Conditions 7.5.*

The ten detailed submissions were submitted by the following: Mr J Barnett, (two submissions); Lusk Community Council Ltd., (four submissions); Rush Action Group for the Environment, (two submissions); Ms R Condrot, (two submissions).

**The Lusk Community Council Ltd's first submission dated January 1998** deals with the history of the facility, concerns about the waste licence application, a discussion of the County Development Plan, an assessment of the environmental impact of the facility, EU Directives on Ecology, social impacts of the facility including visual intrusion, and conclusions. Their conclusions state that:

1. The facility is polluting the estuary and is in contravention of EU directives, national legislation and the County Development Plan;
2. The visual intrusion of the facility is considerable and the height must be controlled;
3. The local communities have had to deal with a landfill in their locality for too long;
4. A potential disaster exists from the presence of the steep slopes of the facility adjacent to the train line; and ,
5. Request that the licence application be refused.

*Response: The submission was considered during the assessment of the waste licence application. The response to the conclusions are as follows. Conditions of the licence require the remediation of the facility and the collection and treatment of leachate thus preventing pollution of the estuary. Extensive monitoring is also required under the conditions of the licence. As Balleally landfill is an existing facility its presence and size are already established. However, the final contours of the facility and its restoration are controlled by the conditions of the licence. Condition 9.8 requires a slope stability assessment of the slopes of the facility adjacent to the train line and Condition 10.7 requires the remediation action be taken if required.*

**The second submission from Lusk Community Council is dated 3<sup>rd</sup> March 1998** and comprises a review of the hydrogeological, geological, leachate and capping layer aspects of the application. The review comprises three main sections; one summarising comments on deficiencies in the licence application, a second making recommendations for addressing the described shortcomings in the application, and a third detailing those shortcomings.

*Response: The comments and recommendations were considered and addressed during the processing of the waste licence application and the information used, both in requiring additional information and in producing the Proposed Decision.*

**The third submission from Lusk Community Council is dated 12<sup>th</sup> May 1998** and deals with the Fingal CC reply, dated 26<sup>th</sup> of February 1998, to the Agencies Article 14 (2) (b) (ii) notice. The submission highlights inconsistencies in the information provided in the application.

*Response: The comments and recommendations were considered and addressed during the processing of the waste licence application and the information used, both in requiring additional information and in producing the Proposed Decision.*

**The first submission by Ms R Condrot was dated 14<sup>th</sup> May 1998** and dealt with pollution of the estuary by the landfill, the impact of traffic and vermin, the impact on farmers and residents, and concerns about the lifespan of the facility. The submission further included a very detailed assessment of the application, listing concerns and raising a considerable number of questions.

*Response: The comments and recommendations were considered and addressed during the processing of the waste licence application and the information used, both in requiring additional information and in producing the Proposed Decision.*

**The first submission from the Rush Action Group for the Environment was dated 14<sup>th</sup> May 1998** and comprised three sections. The first being a general submission, the second being a detailed submission on monitoring and the marine

ecology, and the third comprising a technical submission. The entire submission provides a detailed assessment of the waste licence application and discusses the appropriateness of the location for a landfill.

*Response: The comments and recommendations were considered and addressed during the processing of the waste licence application and the information used, both in requiring additional information and in producing the Proposed Decision.*

**The first submission by Mr J Barrett is dated 15<sup>th</sup> May 1998** and includes a description of how he realised that the proposed extension of the landfill would result in the demolition of his home, a detailed assessment of the waste licence application, and a tape demonstrating the noise levels associated with the landfill.

*Response. The proposed extension of the facility was withdrawn shortly after the original application was lodged with the Agency. The comments, audiotape and recommendations in the submission were considered and addressed during the processing of the waste licence application and the information used, both in requiring additional information and in producing the Proposed Decision. Noise from the facility will be controlled by Conditions 7.1 and 7.3.*

**The second submission from Ms Condrot was dated 1<sup>st</sup> January 1999** and dealt extensively with the reply by Fingal CC to the Agencies Article 16(1) notice. The submission details inconsistencies in the information submitted in the application and raises a number of questions.

*Response: The comments and recommendations were considered and addressed during the processing of the waste licence application and the information used, both in requiring additional information and in producing the Proposed Decision.*

**The fourth submission by Lusk Community Council Ltd is dated 2<sup>nd</sup> January 1999** and deals with the information submitted by Fingal CC in response to the Article 16 (1) notice issued by the Agency. The submission also queries whether the nickel hydroxide sludge disposed of at the facility is a hazardous waste or not.

*Response: The comments and recommendations were considered and addressed during the processing of the waste licence application and the information used, both in requiring additional information and in producing the Proposed Decision. The nickel hydroxide waste is considered to be a hazardous waste and the arrangements for its disposal are controlled by Condition 5.3. Furthermore, Condition 5.3.4 requires Fingal CC to submit a proposal, within six month of the date of grant of the licence, to the Agency regarding the cessation of the disposal of this waste at the facility. The proposal is also required to include details of the capping and restoration of the area used for the disposal of these sludges.*

**The second submission from Mr J Barrett is dated 2<sup>nd</sup> January 1999.** The submission deals with the information submitted by Fingal CC in response to the

Article 16 (1) notice issued by the Agency and additional information about the operations of the landfill.

*Response: The above responses deal with the issues raised by Mr Barrett.*

**The second submission by the Rush Action Group for the Environment is dated 3<sup>rd</sup> January 1999** and deals with the quality of the estuary, the odours arising from landfill gas, the visual intrusion of the facility, concerns about the different types of wastes being deposited there, the Construction and Demolition waste recycling centre, leachate arising from the facility, traffic problems, the disposal of sewage sludge arising in the Dublin area, the reliability of Fingal CC's plans and commitments, and a summary of the county council's obligations and arrangements.

*Response: Most of the issues have been dealt with in the responses above. Issues such as traffic and Fingal CC's obligations and arrangements are, in general, outside the scope of the waste licensing process. The quantity of sewage sludge disposed of at the facility is controlled by Condition 5.2.*