

## INSPECTORS REPORT

WASTE LICENCE REGISTER NUMBER 15-1

### (1) Summary:

This application relates to an **existing landfill** (Ballyogan Landfill) for the disposal of household, commercial, and industrial wastes and to a **proposed recycling park** (Ballyogan Recycling Park). The recycling park and landfill are related waste operations as defined under the Waste Management (Licensing) Regulations, hence they all come under an application for one licence. The proposed recycling park will consist of a Baling Station, Civic Waste Facility, Materials Recovery/Recycling Facility, Green Waste Composting Facility and an Organic Waste Composting Facility. The applicant proposes to cease waste acceptance at the landfill when the baling station becomes fully operational.

<b>Name of Applicant</b>	Dun Laoghaire - Rathdown County Council
<b>Facility Name (s)</b>	Ballyogan Landfill & Ballyogan Recycling Park
<b>Quantity of waste (tpa)</b>	Greater than 100,000tpa (Estimated maximum to landfill from now to closure is 400,000tpa, Recycling park designed to cater for 225,000t/a)
<b>Environmental Impact Statement Required</b>	Yes - for Ballyogan Recycling Park
<b>Number of Submissions Received</b>	26 valid submissions
<b>Inspector's Recommendation</b>	The Proposed Decision Inspectors Recommendation as submitted to the Board be approved

### (2) Activity Summary

#### (i) Ballyogan Landfill

Ballyogan landfill has been in operation since about 1975. The size of the site was increased in 1980 and again in 1985 to the present area of 50 hectares. The total area designated for landfilling has been subject to deposition of waste at some stage previously. The landfill will be restored and developed as a golf course and part of the proposed Recycling Park also extends onto the landfill. Irish Power Systems Limited have constructed facilities on site to use landfill gas to generate power. There is leachate collection. Problems have arisen with this system and the applicant has reported two leachate incidents to the Agency since the date of licence application. A Civic Waste Facility is operated at the site entrance and the public may deposit waste at the landfill at a designated tipping area.

### **(ii) Proposed Recycling Park**

The proposed recycling park consists of a Baling Station (120,000 to 170,000tpa), Civic Waste Facility (15,000tpa), Materials Recovery/Recycling Facility (30,000tpa), Green Waste Composting Facility (5,000tpa), and an Organic Waste Composting Facility (45,000tpa). Wastes to be accepted at the Civic Waste Facility will be processed either onsite (approx. 10,400tpa) or offsite (approx. 4,600tpa). The applicant proposes to stop waste acceptance at the landfill when the baling station becomes fully operational.

### **(3) Facility Location**

**Appendix 1 contains a site location map and a plan showing the layout of the facility.**

The facility is situated between Carrickmines and Stepside and to the south of Ballyogan Road in the foothills of the Dublin mountains. The facility is located in a predominantly agricultural/open recreation landscape. However, urban development now approaches very close to the northern side of the facility. This includes a post office, a marble works and a number of residences, with some 16 residences immediately abutting the northern edge of the proposed Recycling Park. The facility is also surrounded by a public golf course to the south west, two rugby clubs to the south, an ESB station and Council sewage treatment works to the west which has been decommissioned since September 1998.

The proposed recycling park is to be sited partially on the old landfill (leachate lagoon) and partially on a greenfield site (zoned for industrial use and currently used for agriculture - primarily cattle grazing). The proposed Recycling Park is approximately 15ha in size. It will consist of a reception/civic waste facility, materials recovery/recycling facility, amenity/admin building and baling station, green and organic waste composting facilities. A watercourse bisects the site from east to west. The Pale Ditch (late medieval defensive earthwork - archaeological feature that is an important monument) is believed to run alongside the watercourse. The topography across the site varies by up to 10m.

The proposed Recycling Park is traversed by high voltage overhead transmission lines originating from the Ballyogan ESB Station some 100m to the west. The alignment and height of the transmission lines impose certain limitations on the Recycling Park site layout.

The landfill and proposed recycling park are also within 500m of the planned South Eastern Motorway. A major motorway intersection is proposed at Carrickmines, approximately 1 kilometre from the Recycling Park.

### **(4) Waste Types and Quantities**

Condition 5 controls the quantities and types of waste to be accepted at the facility. The quantities of waste to be accepted at each individual unit of the facility are specified in Schedule H: Waste Quantities. The total quantity of waste and materials to be accepted or removed from the facility shall not exceed 400,000 tonnes per annum.

## **(5) Facility Design**

### **(i) Ballyogan Landfill**

#### **• Infrastructure;**

The entrance to Ballyogan landfill is via one access point on the Ballyogan Road. During non operational hours the access point to the facility is secured by a 2m high wall and steel gates. Site security around the boundary of the facility is in the form of hedgerows reinforced in places by posts and wire fencing. During operational hours a security company has been employed to control unauthorised persons scavenging through waste. Problems have occurred through unauthorised access to the site during non-operational hours e.g. scavenging etc (a receptacle for paper waste was observed to have been burnt out during site visit of 21/2/00). The Irish Power Systems Ltd. landfill gas generation compound has at times employed 24 hour security. Condition 4.3 requires the applicant to submit for the Agency's agreement a plan for improvements in security.

Other main infrastructure within the facility includes, gatehouse, portacabin office, weighbridge, civic waste area, wheelwash, leachate storage lagoon all of which are accessible from the main site entrance.

#### **• Landfill Leachate Management;**

Ballyogan landfill is an unlined site and relies on the naturally occurring soil present under the site to provide containment of waste and leachate. There is some collection of leachate. However, records of the leachate collection system are representative only as pipes were laid without detailed construction drawings or specifications. Pipes within the waste body drain leachate, either directly or via a pumping station, to a storage lagoon. Leachate flows from the storage lagoon into a sewer for treatment at Shanganagh Treatment Plant.

Borehole wells drilled within the waste body have indicated leachate levels in excess of 5.5m above pre-existing ground level. Two incidents, regarding problems with leachate, have been reported to the Agency by the Applicant since receipt of application. The first incident occurred on the 26th January 1998 (reported to the Agency via telephone 28th January 1998 and by report received 3rd March 1998) and resulted from a pipe blockage (due to collapse of pipes) which caused leachate to rise in a manhole and overflow to the adjacent stream. The second incident occurred on the 12<sup>th</sup> February 1999 whereby a pump controls system malfunctioned and this resulted in an overflow into the adjacent watercourse (reported to the Agency by Fax on 12<sup>th</sup> February 1999). The applicant has undertaken a leachate study of these areas in the

landfill where the problems arose. Condition 4.17 provides for leachate management at the facility and includes for the implementation of the recommendations provided in the leachate study, referred to above, at the landfill. This includes the installation of vertical leachate extraction wells and the installation of a cut-off trench (this requires extraction of approximately 17,500m<sup>3</sup> of waste).

Leachate is drained from the storage lagoon to sewer. The PD requires the installation of plant to remove dissolved methane in leachate. The applicant has proposed to modify the existing leachate lagoon, through reducing its size taking account of future estimated quantities of leachate to be generated.

- **Landfill Gas Management;**

Landfill gas, from some areas of the site, is utilised for the generation of electricity (approximately 2MW). Condition 4.18 requires the management of landfill gas in areas of the landfill not already served by a collection system and also requires the applicant to manage landfill gas in areas not sufficiently productive to be connected to the utilisation scheme.

- **Capping System;**

The capping system employed to date comprises a varying thickness of imported clay and inert material topped off by a 200mm thick layer of topsoil, vegetated with grasses, shrubbery and other species.

Condition 4.19 sets out capping requirements.

**(ii) Ballyogan Recycling Park  
Infrastructure;**

The proposed Recycling Park is to be constructed as a modern industrial estate, and is to have a separate entrance on the Ballyogan Road from that to the landfill. Condition 4.3 specifies details of boundaries and security gates to this part of the facility. Site roads, vehicles turning areas and parking bays are required under Condition 4.4.

**Baling Station**

The baling station will be constructed with a split level floor. The unit will consist of control room, reception hall and baling hall areas. There will be two separate conveyor systems servicing the balers.

The baling system has a nominal design capacity of 120,000t/a with 6 hours of daily operation over a 250 day year. The system can provide additional capacity by increasing the working hours of the balers – up to 170,000 t/a requiring 8.5 hours of baler operation. Having regard to the Waste Management Plan for the region the quantity of waste for baling is restricted to 120,000t/a. This provides a reserve capacity of 20,000 tonnes (Section 3.2.2.9 of the EIS)

The baling station design also caters for unbaled waste in the eventuality of baler breakdown or alternative disposal options. Condition 5.9 requires that only baled waste be removed from the baling station to Arthurstown Landfill unless otherwise agreed with the Agency.

### **Civic Waste Facility**

The public may use the Civic Waste Facility to drop off waste to various receptacles. Receptacles for recyclables (such as glass, cans, paper, textile, plastic), bulky waste and non-recyclable waste shall be available. The Civic Waste Facility will be a split level unit whereby receptacles for bulky waste will be at a lower level and may also cater for household hazardous waste.

### **Materials Recovery/Recycling**

This proposed location for this unit is within 12m of the site boundary and within 20m of two residential properties. I consider that this distance is not sufficient as there is potential for noise nuisance and does not provide adequate ground for landscaping and screening. The PD requires that a proposal be submitted regarding the relocation of this unit and the carrying on of waste activities at this unit will be subject to the Agency's agreement of this location. The applicant states that the precise details of the waste activities to be undertaken in this unit cannot be fully defined at this stage. However the applicant presented a "worst case scenario" in terms of building scale, tonnage throughputs, range of activities and potential impacts. The applicant wants a flexible unit that can be adapted to take account of government policies, markets and the fact that recycling/recovery facilities and collection systems may change considerably with time. It is anticipated that waste collected via kerbside type collections and 'Bring Centres' will be segregated and processed.

### **Green Waste Composting**

The unit is designed to handle 5,000t/a. The applicant has applied for a facility that will consist of a concrete pavement of approximate area 8,000m<sup>2</sup>, a covered storage area for mature compost and a small office/staffroom. Rainwater and leachate from the compost shall be collected and stored in a dedicated lagoon. In dry periods this shall be used to irrigate the compost. During periods of heavy rainfall, large quantities of leachate may be generated which may require to be discharged to foul sewer.

Condition 4.26 requires the applicant to submit a proposal on the feasibility of using heat generated from the composting process.

### **Organic Waste Composting**

The composting unit is an enclosed building of approximately 8500m<sup>2</sup> consisting of reception hall, sealed chambers and storage area. The unit is designed to cater for a waste intake of 30,000t/a with scope for extending to 45,000t/a. It is estimated that there will be a 60% reduction in weight resulting in some 12,000t/a and 18,000t/a of compost respectively.

Oxygen supply in the sealed chamber is controlled by forced aeration (supplied to the sealed chambers through a series of slots in the floor) with release of some of the used air to atmosphere via a stack. The used air from the sealed chambers shall discharge through scrubbers (water curtain spray) and a biofilter which shall consist of wood chippings. Rainwater from the unit shall be collected and stored in a lagoon for use during times of moisture deficit in the compost. Excess leachate shall be discharged to foul sewer. During periods of heavy rainfall, storm water shall be discharged directly to the storm water wetlands.

Condition 4.26 requires the applicant to submit a proposal on the feasibility of using heat generated from the composting process.

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

### **(i) Ballyogan Landfill**

#### **• Waste Acceptance/Handling Procedures**

Conditions 5 restricts the waste types to be disposed of to landfill to municipal waste, and industrial wastes (including swill waste from visiting vessels to ports in the Dublin area and non-hazardous construction / demolition waste). Hazardous waste is not allowed to be accepted for landfilling at the facility.

Refuse freighters and bulk waste transport vehicles are allowed access to the main tipping area. The general public can bring waste for recovery/disposal to two areas designated as Civic Waste Facilities.

### **(ii) Ballyogan Recycling Park**

#### **Baling Station**

Waste shall be delivered to the reception area of the baling station. A loading shovel will be used to push the waste on to a conveyor system that feeds the baling presses at the lower floor level. Waste will be compacted and tied in the baling presses and the ejected bales will be automatically loaded onto a trailer that will be docked in a dedicated loading bay.

#### **Civic Waste Facility**

Waste acceptance and handling are similar to that described in facility design. Waste in the receptacles shall be recovered or disposed of as appropriate.

#### **Materials Recovery/Recycling**

Condition 5.12 requires the applicant to submit details of waste acceptance and handling subject to agreement of Condition 4.25 (unit relocation).

#### **Green Waste Composting**

Green waste may be taken to this unit from the Civic Waste Facility or directly from large producer's e.g. Council Parks Department.

Green waste shall be mixed until a suitable fabric and structure is obtained. The waste shall then be placed into trapezoidal windrows. The level of moisture, temperature and oxygen shall be controlled within the windrows. The windrows will be kept aerobic by turning. An irrigation system shall be used to supply water in times of moisture deficit. A forced aeration system (compressor) shall be provided to allow conditions to be enhanced when necessary. The process of turning, irrigation and aeration will continue for a period of approximately six months until the compost operation is deemed to be complete.

The compost will be screened to remove unwanted waste e.g. stones. The compost will then be bagged and made available for use as a soil conditioner/weed suppressant. It is estimated that there will be an approximate 60% reduction in weight after composting i.e. some 2,000 tonnes of compost will be produced from 5,000 tonnes of raw green waste. In order to ensure that the compost is suitable for such purposes a compost quality is prescribed in Schedule J and the applicant is required to test the compost at monthly intervals to ensure that this quality is being achieved.

### **Organic Waste Composting**

The organic waste composting unit may accept only source segregated organic waste. Green waste and compost may be used to bulk the organic material at times of the year when the kitchen and garden waste is deficient in fabric.

Composting will be carried out in sealed chambers where oxygen, temperature and moisture will be computer controlled. Waste acceptance will involve the deposit of organic waste onto the floor of the reception area of the unit. Any observed unsuitable material should be removed. Composting will take place for approximately four weeks (two stages of about two weeks each). Screening and shredding may be carried out prior to composting or at the end of stage one and on completion of stage two. As with green waste compost, the compost derived from this process must also meet the quality prescribed in Schedule J.

- **Nuisance Control**

Potential nuisances are controlled by Condition 6 Environmental Nuisances.

- (i) **Ballyogan Landfill**

The use of daily cover, as required by Condition 5.8, minimises potential odour nuisance, the attraction for birds and vermin, nuisance caused by insects and litter problems. Condition 4.12 provides for bunds/litter screens around the main landfill disposal area during waste operations. A program to remove existing litter from the surrounds of the facility is to be submitted within three months of the date of grant of this licence (Condition 6.3). Condition 6.7 controls vermin etc. Condition 4.18 controls landfill gas and the odours associated with it. Traffic using the landfill site will use the wheel-wash to prevent the tracking of any materials onto the public road. The distance from the tipping area to the main gate of the internal site road, which is also

surface dressed, reduces the potential for tracking of any materials onto the public road. Scavenging is not allowed at the facility and is prohibited by Condition 5.6.

**(ii) Ballyogan Recycling Park**

Nuisances at the Recycling Park will be minimised by the carrying on of waste activities in enclosed buildings. Environmental nuisances such as birds, vermin, flies, dust and odour are controlled by Condition 6.7.

• **Hours of Waste Acceptance/Removal**

Condition 5.5 controls the hours of waste acceptance and removal at the facility.

<b>(7) Restoration and Aftercare</b>
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**(i) Ballyogan Landfill**

It is proposed to restore the areas subjected to waste disposal to a golf course (thereby extending the existing nine hole course at Stepside to an eighteen hole course). The final profile of the facility, its restoration and aftercare are controlled by Condition 8 Restoration and Aftercare.

**(ii) Ballyogan Recycling Park**

Condition 8.6 controls the decommissioning and aftercare of the Recycling Park.

<b>(8) Hydrogeology</b>
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• **Geology**

The overburden geology in the Ballyogan area is dominated by boulder clay (between 5 and 15m thick) with sand and gravel lenses (0.2m to 4m thick) and with a more extensive sand and gravel deposit alongside the Ballyogan stream. The site is underlain by granite bedrock.

• **Hydrogeology**

Groundwater flow patterns are similar in the overburden and bedrock. Flows in the southern part of the site (landfill area) are from the south-west to the north-east of the site, while flows in the northern part of the site (site of proposed recycling park) are from the north-west to the south-east. The Ballyogan stream and/or sand/gravel deposits alongside it appear to act as a discharge area for the groundwater in both overburden and bedrock. The vertical hydraulic gradient between the overburden and the bedrock are downward. The bedrock was classified in a report by the GSI (1979) as being a poor, unproductive aquifer. However, a pump test in the northern section of the facility (area for proposed recycling park) indicates that it may have properties that would classify it as locally important.

Water levels and contour mapping have indicated mounding of leachate above the natural overburden water level. Monitoring results down gradient of the landfill indicate that the landfill is not having an adverse impact on groundwater quality.



Results of monitoring in up gradient boreholes MW3 and MW14 indicate elevated levels for some heavy metals, this may be due to a leak in the leachate line to sewer, however a new sewer has now been laid. The PD requires measures to be put in place to control leachate from the landfill and this should minimise its impact on groundwater.

There may be a need to locally lower the water table during the construction of the Recycling Park. This is listed as a Specified Engineering Works and the licensee, if necessary, must under Condition 4.15 obtain the Agency's agreement prior to dewatering. The measures contained in the PD should ensure the Recycling Park has no impact on groundwater.

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

There are no heavy industries of any significance in terms of emissions to atmosphere in the surrounding area. The proposed south eastern motorway to the north of Ballyogan road may result in increased contributions of pollutants to ambient air.

Emissions to air from Ballyogan landfill and Recycling Park include landfill gas, the combustion products of landfill gas, dust and odours.

### **(i) Ballyogan Landfill**

#### **Landfill gas and the combustion products of landfill gas.**

*Condition 7.1* sets emission limits for landfill gas detected in buildings. *Condition 7.5* sets trigger levels for landfill gas detected on or in the immediate vicinity of the facility. Landfill gas management is required by *Condition 4.18*.

Landfill gas collected from the field is fed through two engines where it is burnt at a temperature of approximately 450°C. Monitoring results of emissions from these engines have shown elevated levels of CO (870mg/Nm<sup>3</sup> and 1528mg/Nm<sup>3</sup>) and NOx (903mg/Nm<sup>3</sup> and 816mg/Nm<sup>3</sup>) compared to those given in TA Luft - emission limits for internal combustion engines. The applicant carried out air dispersion modelling (under worst case dispersion conditions) of the atmospheric emissions (NOx and CO). The results indicate that maximum predicted ground level concentrations of NO<sub>2</sub> and CO produced outside the site boundary from the generator stacks are within current air quality standards. However NOx (99.8% ile at one point of 217mg/m<sup>3</sup>) exceeds the limit specified in the EU Framework Directive (99.8% ile of 200mg/m<sup>3</sup>) although these limits do not have to be achieved until 2010. Emission limits for emissions from the combustion engines have been specified in Schedule G.

Landfill gas, including products of combustion, monitoring requirements are established under *Condition 9.1*. *Condition 10.8* requires further action, including investigations and remedial action to be taken if trigger levels or emission limits are exceeded.

## **Dust**

*Condition 7.1* sets emission limits for dust deposition. Dust monitoring requirements are established under *Condition 9.1*. *Condition 10.8* requires further action, including investigations and remedial action to be taken if trigger levels or emission limits are exceeded.

### **(i) Recycling Park**

Potential emissions to air from Ballyogan recycling park include dust and odour from all the units located within the Park. Dust and odour emissions from the Recycling Park will be minimised through the carrying on of waste activities inside enclosed units, except green waste composting and civic waste activities that are carried on outdoors. Dust extraction and filtration systems are used as abatement measures to minimise dust and odour emissions in the baling station, materials recovery/recycling facility and organic waste composting facility.

*Condition 7.1* sets emission limits for dust. Monitoring requirements are established under *Condition 9.1*. This includes monitoring of dust, particulates and odour. The biofilter stack of the organic waste composting facility shall also be monitored for ammonia, hydrogen sulphide etc.

Bio-aerosols generated from waste activities have given rise to concerns at composting facilities. *Condition 9.1* requires enumeration of colonies of bacteria and fungi in the vicinity of the composting units.

## **(10) Noise Emissions & Vibration**

Currently noise levels in the area north of the facility relate to traffic on the Ballyogan Road. Estimates of noise emissions, without abatement measures, from waste activities at the proposed Recycling Park generally exceed the Agency's daytime guideline value of 55dB  $L_{Aeq}$ , 30 minutes (includes an estimated  $L_{Aeq}$ , 30 minutes of 68 at a noise sensitive location, Section 10 of the EIS). The Agency's Article 16 Notice dated 1<sup>st</sup> April 1999 required an assessment of noise emissions emanating from the total facility. The applicant in their application and again in their reply to the Article 16 notice have stated that noise mitigation and attenuation measures will be specified (once emission values of machinery and facilities to be installed are known) and noise criteria limit levels satisfied

Noise emission limits are established by *Condition 7.1*. *Condition 4.25* requires the Materials Recovery / Recycling Facility, the source of above noise level i.e.  $L_{Aeq}$ , 30 minutes of 68, to be relocated so that it is at least 20m from any site boundary. Noise monitoring of the facility is required by *Condition 9.1*.

## **(11) Emissions to Sewer**

Leachate and foul water (landfill leachate from the lagoon and foul effluent from the units in the Recycling Park) shall be discharged from the facility to the sewerage system for treatment at Shanganagh Sewerage Treatment Plant. Consent for such a discharge has been obtained from the Sanitary Authority in accordance with Section 52 of the Waste Management Act 1996.

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

### **Ballyogan Landfill**

Ballyogan Landfill is situated in the northern section of the Shanganagh River catchment. The Shanganagh system is a listed fishery of the Dublin Angling Initiative and supports populations of otter and kingfisher. The landfill location is between the Ballyogan stream to the north and Glenamuck stream to the east, which are tributaries of the Carrickmines River. The Carrickmines River joins the Shanganagh River downstream of the N11 Motorway. The Ballyogan stream has been culverted in twin 1350mm diameter concrete pipes as part of the landfill development. A tributary of the Ballyogan stream flows along the western side of the landfill and a tributary of the Glenamuck Stream has been piped under the landfill in a 600mm diameter pipe.

The applicant states that some deterioration in water quality arises in the Ballyogan area which may be attributed to either the landfill or an upstream Sewerage Treatment Plant (has been decommissioned since September 1998). Condition 4.17 requires the licensee to put in place measures to contain and collect leachate.

### **Recycling Park**

The Ballyogan stream bisects the proposed Recycling Park and is the principle watercourse to which the Recycling Park site drains.

Surface water from the Recycling Park shall be collected and discharged to the stormwater wetlands (Condition 4.16), from where it will be discharged to an outfall to the Ballyogan Stream. Condition 9.1 requires monitoring of surface water streams and of the discharge to the Ballyogan Stream, it also requires the applicant to carry out an annual aquatic survey.

## **(13) Other Significant Environmental Impacts of the Development**

### **Archaeology & Wildlife**

The Pale Ditch (in its classic form, the Ditch is a significant structure that comprises a substantial central earthworks bank, which is flanked on both sides by a deep ditch, or fosse (a fortification ditch)) bisects the proposed site for the Recycling Park. The earthwork bank runs east to west where it is buried by the landfill. Condition 4.27 requires the applicant to consult with Dúchas in relation to the placing of a permanent barrier around this feature.

Condition 4.28 requires the licensee to consult Dúchas and submit proposals in relation to the relocation of an active badger group.

### **Traffic**

This is one of the main concerns to residents of the area. The maximum quantity of waste currently accepted is approximately 400,000 tonnes per annum. Condition 5 requires that the quantity of waste coming into or leaving the facility shall not exceed this quantity. Therefore, there should not be a significant increase in traffic numbers from that currently using the facility at maximum waste intake. The landfill has a short remaining life span and although capping, restoration, and aftercare works will be ongoing, the level of traffic to this part of the facility will in time reduce. Other restrictions on waste intake will also keep traffic levels down, e.g. restricting the quantity of waste to the baling station to 120,000 tonnes per annum. In addition Condition 6.8 requires details on roads improvements and traffic control and Condition 4.4 requires the licensee to examine the feasibility of providing a dedicated road linking the Recycling Park portion with an intersection of the proposed South Eastern Motorway.

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

Consideration was given to the draft Dublin Regional Air Quality Management Plan and the Waste Management Plan for the Dublin Region 1999-2003.

## **(15) Submissions/Complaints**

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

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

### **1. Ms. Nicola Curry, Chairperson of the Ballyogan Environmental Group (BEG) submission received 2<sup>nd</sup> December 1998**

*BEG expressed their objection to the proposed Waste Management Centre in Ballyogan. BEG enclosed a letter in which they requested The Eastern Health Board to carry out a health survey in the Ballyogan area. BEG also requested the Agency to consider giving BEG more time to make their submission.*

### **Response**

The PD will ensure the requirements of S40(4) of the WMA, 1996 are satisfied. The Agency wrote (3/12/98) to BEG stating that the time for the making of submissions on a waste licence application is set down in Article 15 of the Waste Management (Licensing) Regulations, S.I. No. 133 of 1997 and that the Agency does not have discretion in relation to same.

**2. Dr Howard Johnson, Specialist in Public Health Medicine, Eastern Health Board (EHB), Department of Public Health, Dr. Steevens' Hospital, Dublin submission received 12<sup>th</sup> January 1998**

*EHB stated that should the Agency have any particular concerns about potential public health risks of this facility that the Agency should assimilate and forward to the EHB, the relevant data specific to human health that are available.*

**Response**

The application has been assessed in accordance with the relevant Regulations.

**3. Mr. Fionnbar Moore, Archaeologist, Dúchas The Heritage Service, submission received 15<sup>th</sup> January 1999**

*Mr. Moore states that he concurs with the recommendations for remedial and mitigation measures in relation to the archaeology contained in the EIS for this development and would advise that they be implemented. Mr. Moore recommended that certain features (field boundaries) be subjected to archaeological testing in advance of development works commencing. He also states that certain works (the replacing of the temporary protective fencing/boarding around the Pale Ditch with an appropriately designed permanent barrier and thereafter upgrading and maintaining the earthen embankment to form an ornamental landscape feature) should not be undertaken without prior consultation with Dúchas.*

**Response**

The Agency's article 16 notice dated 1<sup>st</sup> April 1999 required the applicant to provide a report, undertaken by a licensed archaeologist and in consultation with Dúchas, on the archaeological significance of these field boundaries. The subsequent report submitted to the Agency recommended that the works proceed as planned.

Regarding the permanent barrier around the Pale Ditch Condition 4.27 requires the licensee to agree with Dúchas, prior to submitting to the Agency for its agreement, the nature of the permanent barrier and the method of maintaining the earthworks. The PD also requires the implementation of the remedial and mitigation measures contained in the EIS.

**4. Ballyogan Sandyford Cumann, C/O "Tollendal" Claremont Pines, Carrickmines, Dublin 18, submission received 19<sup>th</sup> January 1999**

*They state the following grounds for their objection:*

- a) A facility of this nature should be located in a developed industrial estate as opposed to a residential area.*
- b) They have been promised for many years that the lifespan of the dump was limited and that it would be permanently closed with the entire area being landscaped and developed as a public golf course.*
- c) The large volume of trucks which will use the facility will constitute a totally unacceptable traffic hazard threatening the safety of children*
- d) The current infrastructure of the area cannot presently support current existing levels of traffic and the new facility will add to this existing problem.*

**Response**

- a) The proposed Recycling Park is located in an area zoned industrial by the Development Plan for the County.
- b) Condition 8.1 specifies the final profile for the landfill. The restoration and afteruse for the landfill is controlled by Condition 8, which includes for the development of a public golf course.
- c) & d. Currently a maximum 400,000 tonnes of waste per annum is accepted at the facility. The PD restricts the future quantity of waste to and from the facility to this quantity. Once the landfill is restored the quantity of waste to be accepted at the facility will be 210,000 tonnes per annum. Condition 6.8 requires the licensee to submit proposals for road maintenance/improvements and

traffic control/management and Condition 4.4 requires the licensee to examine the feasibility of providing a dedicated slip road between the Recycling Park and the planned Carrickmines Interchange of the South Eastern Motorway.

**5. Mr. Jack O'Sullivan, Environmental Management Services Ltd. (EMS), on behalf of Ballyogan Environmental Group (BEG), submission received 20<sup>th</sup> January 1999**

*Mr. O Sullivan on behalf of BEG requests that the Agency refuse the waste licence application or attach conditions requiring the applicant to incorporate suggested modifications. Set out below is a summary of the main points.*

- a) *EMS state that an industrial estate would be a more suitable location for the proposed recycling park, rather than a location best described as residential and semi rural in character.*
- b) *EMS state that the BEG are not opposed in principle to the establishment of the proposed waste management facility but have concerns in relation to:*
  - i. *the location of the facility close to residential areas;*
  - ii. *the significant increase in road traffic which will result from the construction and operation of the facility;*
  - iii. *the scale and visual appearance of the baling and waste transfer station and other buildings on the site, and the degree of visual intrusion and visual obstruction which would be caused;*
  - iv. *the proposed operating hours of the facility;*
  - v. *noise and vibration from the proposed waste baling station and other activities on the site;*
  - vi. *water and air pollution (dusts, odours and gases) from the landfill and from the construction and operation of the waste management facility. EMS highlight statements from the EIS relating to the likelihood that leachate is making its way to the Ballyogan stream and EMS state that the EPA should require the applicant to undertake a more comprehensive aquatic monitoring programme, and to develop a programme for the reduction of pollution and rehabilitation of the river system and its trout stocks as a much needed amenity;*
  - vii. *hazards and public health risks associated with the operation of the waste management facility. EMS state that proposed water bodies may be a hazard to local children who may gain unauthorised access and that such ponds should be covered or made otherwise inaccessible. EMS state that there is no means to detect small hazardous waste items and that as more recyclables and organics are removed from the waste stream that this proportion will increase. They state that they are concerned about such material going through the baler because of the risk of explosion. EMS state that they are concerned about the storage of hazardous waste at the civic amenity area as it may be a potential hazard, especially the case in the event of a fire. EMS state that residents in the Ballyogan area believe that their children have suffered health wise as a result of living beside the landfill. EMS highlight recent research into potential public health risks of landfill sites and state that they have asked The Eastern Health Board to conduct a health survey in the area and are awaiting a response from the Health Board;*
  - viii. *continuing association of Ballyogan with refuse and waste; and*
  - ix. *management issues. EMS state that they are concerned that the EPA licensing standards may not be adhered to if and when the running of the Waste Management Centre is taken over by a private operator. EMS also state that they are concerned over conflict of interest between a move by the Council to reduce waste to that of a commercial operator whose earnings or profits are related to the amounts of waste processed or handled. EMS state that they are concerned that a subsequent application can be made to the Agency by the operator for the purpose of extending the scale or nature of the waste handling operation. EMS are concerned that the quantities of waste being processed at the planned facility may increase beyond the amounts predicted, and that these additional quantities will then be licensed by the EPA.*
- c) *EMS state that in order to address the above concerns and to ameliorate the nuisances and hazards which would otherwise be caused by the proposed facility that the EPA should require the waste licence applicant to incorporate a number of changes into the design and operation of the facility giving priority to:*

- i. *relocating vehicular access to the proposed waste management facility by providing a dedicated slip road or link between the facility and the planned Carrickmines Interchange of the South Eastern Motorway.*
  - ii. *moving the entire complex back from the Ballyogan Road by a distance of at least 50m and to provide a buffer zone at least 50m in width.*
  - iii. *reducing the height of the transfer station and vehicle manoeuvring area by some 3 or 4 m below the level it is currently proposed.*
  - iv. *providing architectural treatment to the north-west and north east elevations of the waste transfer and baling station and to the organic waste composting facility.*
  - v. *restricting the hours of operation from 8.30am to 17.30pm until a dedicated road has been constructed and opened.*
  - vi. *conditioning that two baling machines should be fully operational from the time when the facility is opened and that none of the baling machines should operate outside the normal working day of 8.30am to 17.30pm.*
  - vii. *attaching to the waste licence strict conditions covering the management of the facility.*
- d) *EMS state that since several of their suggestions relate to matters other than environmental pollution that the Agency should inform EMS whether or not it can take their suggestions into consideration in determining the licence application and/or attaching conditions to a waste licence if granted. They requested that the Agency confirm specifically which of their suggestions might be considered to fall within the Agency's powers.*

#### **Response**

The following points address the concerns and amelioration measures proposed above:

- Items relating to facility location and traffic have been dealt with in the response to submission 4 above.
- Condition 4.30 requires that the facade and finish of the buildings within the Recycling Park must include architectural treatment.
- Hours of operation of the facility are controlled by Condition 5.5.
- Condition 2 controls the management of the facility.
- The PD will ensure the requirements of S40(4) of the WMA, 1996 are satisfied, this includes that the activities being carried on in accordance with the PD will not cause environmental pollution and that any emissions from the activity will not result in the contravention of any environmental standard.
- The Agency replied on 3<sup>rd</sup> February 1999 to EMS advising that the contents of submission were noted and would be considered by the Agency in accordance with the regulations.

#### **6. Dr. Sylvia Dockeray, Chairperson, Planning Committee of the Association, Kilgobbin House, Kilgobbin, Sandyford, South County Dublin, submission received 20<sup>th</sup> January 1999**

*Summary of main points:*

- a) *Dr. Dockeray states that to relieve the residential roads permanently of the traffic a dedicated route should be provided to the lower end of the Ballyogan Road where it enters the roundabout serving the M50 interchange. They state that this route should pass well back of the cottages to the east of the new facility, enter the facility at its eastern extremity, and form the main/only entrance to the site. They state that this dedicated route could also serve the industrial zoning to the south east of the site.*
- b) *Dr. Dockeray states that the recovery building and the refuse reception/baling hall are visually intrusive. They state that the only effective mitigation of the impact of these buildings would be to have a good solid tree planting screen which would require the recovery building to be set back at least another 10m and to satisfactorily treat and colour the facade. Dr. Dockeray, also states in the submission that the recovery building should be set back by 20m from the road and that within the 20m strip there should be tree planting. Dr. Dockeray states that a tree belt (approximately 40m wide) should also be planted on the south side of the organic waste composting facility. They state that colour consultants should be employed for the buildings and that the colour should*

*probably be leaf green or darker. They state that the wall (built of stone or stoned faced) and railing along the road should be high quality and aesthetically adequate.*

- c) Dr. Dockeray commends the intention to conserve and protect the feature, which is believed to be the Pale Ditch, but states that access to the site should always be available for the public and a walkway along it should be kept in good condition.*
- d) Dr. Dockeray states in relation to composting smells, air and water pollution that key indicators be established for monthly monitoring and that a committee of local residents be formed to whom monthly reports would be available.*
- e) Dr. Dockeray states that there have been rumours of incipient methane problems and questions whether this may have potential impact on the proposal.*
- f) Dr. Dockeray raises the question on whether the Agency are empowered to deal with planning matters and asks the Agency to specify which of the issues raised are within the remit of the Agency.*

#### **Response**

- a) This item has been dealt with in the response to submission 4 above.
- b) This item has been partially dealt with in the response to submission 5. Condition 4.25 requires the Materials Recovery / Recycling Facility to be relocated. Condition 4.3 requires a stoned face wall along the road.
- c) This item has been dealt with in the response to submission 3 above.
- d) Monitoring requirements are established by Condition 9. Monitoring frequencies vary from continuous to yearly. Condition 6.1 requires, at minimum, weekly inspections for odour. The licensee, through Condition 2.7, is required to make available monitoring results.
- e) Condition 4.18 provides for the control of landfill gas management.
- f) The Agency replied to Dr. Dockeray advising that the contents of the submission were noted and would be considered by the Agency in accordance with the regulations.

#### **7. Daragh Murphy, Glencairn Residents Association (GRA), 5, Glencairn Road, Dublin 18, submission received 20<sup>th</sup> January 1999**

*Summary of main points:*

*GRA object to the development of the proposed waste management centre on the following grounds*

- a) It is situated immediately across the road from the designated primary school site for the Ballyogan area.*
- b) The road network is unable to cater for the existing development in the area and cannot cater for the heavy demands that this new development will place on it. GRA state that to allow this development to proceed in advance of the South Eastern Motorway would be folly and that it is contrary to proper planning and development of the area until there is a road network that can cope with it.*
- c) Its proximity to residential areas. GRA state that it is inappropriate to permit a development of this nature in a densely populated residential area.*

#### **Response**

Items relating to facility location and traffic have been dealt with in the response to submission 4 above.

#### **8. Mr. Padraic Costello, Hon Secreatry PEWPO, 116a South Park, Dublin 18, submission received 2<sup>nd</sup> February 1999 (passed on by Dun Laoghaire-Rathdown County Council).**

*Summary of main points:*

*PEWPO object on the following grounds*

- a) There are no provisions or mechanisms in place at the existing dump site or the extended dump site, such as sediment retainer tanks or settlement tanks to prevent pollutants entering the main water courses.*



- b) *They have no confidence that Dun Laoghaire-Rathdown Co Co would comply with undertakings to prevent water pollution*

**Response**

The management of the facility is controlled by Condition 2 and the PD will ensure the requirements of S40(4) of the WMA, 1996 are satisfied.

**9. Dr. Howard Johnson, (Specialist in Public Health Medicine, Department of Public Health, Dr. Steevens' Hospital, Dublin 8) Eastern Health Board (EHB), submission received 18<sup>th</sup> March 1999.**

*Summary of main points:*

- a) *The discharge of leachate to Ballyogan Sewer should not give rise to a public health nuisance.*
- b) *Strict adherence to acceptance procedures and to good operational practices (appropriate precautions and the systemise cleaning of the buildings and the avoidance of any excessive or prolonged storage particularly during warm weather) must be achieved to prevent the potential for a nuisance at the baling station and composting facility.*
- c) *Control measures such as spraying, use of rodenticides, baiting bird scarers and traps must be monitored and managed effectively particularly during warm weather to prevent potential for nuisance.*
- d) *Prior to the commencement of any construction work a rodent eradication programme should be undertaken at the existing facility in order to prevent the spread of rodents to the nearby residential areas.*
- e) *During and after construction all practical measures must be taken to prevent the ingress of rodents from the foul and surface water drainage systems.*
- f) *The services of a reputable pest control company or consultant must be employed to ensure that the measures referred to in the Environmental Impact Statement are strictly observed.*

**Response**

Condition 6 Environmental Nuisances of the PD provides measures to satisfy the above.

**10. Mr. Billy Kelly, 83 Ballyogan Road, Carrickmines, Dublin 18, submission received 17<sup>th</sup> May 1999.**

*Summary of main points:*

- a) *Mr. Kelly refers to Dun Laoghaire-Rathdown County Council (DRCC) application to extend the time limit to allow them to reply to the Agency's request for further information. Mr. Kelly states this would be unfair and states that he was not allowed to object outside the prescribed time limit. He requested that the Agency refuse the extra time sought, refuse the application and require DRCC to commence the entire process again.*
- b) *Mr. Kelly states that throughout this application Dun Laoghaire-Rathdown Co Co have treated him and the residents of the area with contempt and derision and failed to take on board their concerns and failed to conduct the public consultation which it claimed to undertake.*

**Response**

The Agency replied to Mr. Kelly on 28<sup>th</sup> May 1999 stating that the time for the making of submissions on a waste licence application is set down in the Waste Management (Licensing) Regulations, S.I. No. 133 of 1997 and that the Agency does not have discretion in relation to same. Mr. Kelly was informed that his submission would be considered as it was going to be within a submission period. Regarding DRCC not providing necessary information by the requested date, the regulations (SI No 133 of 1997) through Article 16(4) provide the Agency with discretionary powers in relation such matters. The application has been assessed in accordance with the regulations.

**12. Mr. Seamus Brennan, T.D., Minister of State & Government, 9 Braemor Road, Churchtown, Dublin 14, submission received 25<sup>th</sup> March 1999.**

*Minister Brennan states the local residents advised him that the applicant did not appear to fully abide by the required public consultation process prior to the application being made and that many residents therefore missed the opportunity to make submissions.*

**Response**

The Agency replied on the 8<sup>th</sup> April 1999 to Minister Brennan advising that the application complied with the requirements of the regulations. A copy of Waste Management Licensing - A Guide to Implementation and Enforcement in Ireland was enclosed for Mr. Brennan's information.

**11. Mr. Seamus Brennan, T.D., Minister of State & Government, 9 Braemor Road, Churchtown, Dublin 14, submission received 24<sup>th</sup> May 1999.**

*Minister Brennan made a representation on behalf of Mr. Billy Kelly. He states that he understands that Mr. Kelly's submission was one date late and therefore could not be heard and that DRCC have not supplied information within the time prescribed. He states that it would seem appropriate that DRCC application should fail if information was not presented within the due time or alternatively that Mr. Kelly's submission should be fully considered. He states that in this eventuality, acting on behalf of local residents, his constituency would welcome the opportunity for an oral presentation.*

**Response**

The Agency replied on 28<sup>th</sup> May 1999 to Minister Brennan advising him of the provisions for submissions, objections and oral hearings and that the determination of the application would be in accordance with the regulations. Mr. Kelly's submission was considered.

**13. Mr. Seamus Brennan, T.D., Minister of State & Government, 9 Braemor Road, Churchtown, Dublin 14, submission received 20<sup>th</sup> July 1999.**

*Minister Brennan states he understands the applicant did not provide necessary information by the requested date. On behalf of residents, he requested a statement on how much further time the Agency was allowing.*

**Response**

The Agency replied on 26<sup>th</sup> July 1999 to Minister Brennan advising him that the applicant had not submitted the requested information but that the regulations (SI No 133 of 1997) through Article 16(4) provided the Agency with discretionary powers in regard to such a failure to provide such information. The Agency stated that it did not intend to proceed to a proposed decision until the information concerned had been received and that the Council had been informed to submit the outstanding information without undue delay.

**14. Mr. David Rowe, An Taisce, South Dublin County Association, Glenfarn, Woodside Road, Sandyford, Dublin, 18, submission received 20<sup>th</sup> January 2000.**

*Mr. Rowe requested to know where further information was available for inspection.*

**Response**

The Agency replied on 21<sup>st</sup> January 2000 informing Mr. Rowe of the locations where application documentation was available for inspection.

**15. Mr. Paul Halpenny, 6 Glenbourne Close, Leopardstown Valley, Dublin 18, submission received 28<sup>th</sup> January 2000.**

Summary of main points:

- a) *If the development is to proceed can the following be guaranteed, that there will be no negative impact on his health or that of his family and in particular from composting.*
- b) *Will infrastructure be put in place prior to the plant being operational, to deal with the new levels of traffic from new residential levels in the area and this development?*
- c) *What restrictions apply to the plant in relation to smoke and noise emissions?*

- d) *How will the rest of the landfill area be developed?*
- e) *Does such a development have to seek formal planning permission?*
- f) *What safety measures are taken in relation to gas extraction from the dump area and how long will these measures be in place?*
- g) *Would such large scale operations be limited in the hours they can operate?*

**Response**

- a) The PD will ensure that the requirements of Section 40(4) of the Waste Management Act are satisfied.
- b) This item has been dealt with in the response to submission 4.
- c) Emission limits for noise and for emissions from landfill gas combustion plant have been specified.
- d) The landfill shall be restored to a golf course.
- e) The Local Government (Planning and Development) (No. 3) Regulations, 1997 (SI No. 261 of 1997) amends Part X of the 1994 Planning and Development Regulations to exclude from that Part proposed local authority waste facilities which require an EPA licence as the waste licence regime requires a public notification procedure.
- f) Condition 4.18 controls landfill gas management and requires the licensee to install systems to facilitate the collection and recovery or flaring of landfill gas. Measures to control landfill gas will be in place until the Agency is satisfied that there is no potential for landfill gas to cause environmental pollution.
- g) Condition 5.5 controls the hours of operation.

**16. Mr. Billy Kelly, 83 Ballyogan Road, Carrickmines, Dublin 18, submission received 22<sup>nd</sup> January 2000 (by e-mail).**

*Summary of main points:*

- a) *Mr. Kelly requests that consideration be given to what this facility will do to his home and comments on points taken from leaflets issued by DRCC which include:*
- b) *The Ballyogan Waste Disposal Unit was not included in the 1999 Stepside Area Action Plan. Who can he appeal planning permission from, as the waste recovery/recycling building is 8711 in height and 98000 long, and is 30ft from his home.*
- c) *He states that in the EIS there were no sensitive buildings found near the waste unit and that his home is a sensitive building.*
- d) *He states that the EPA has power to require measures to be taken to prevent or limit noise from activities that are licensable by the Agency. He states that as the waste facility would be open 7 days a week there would be no let up in traffic passing his home.*

**Response**

- a) The Dun Laoghaire-Rathdown County Development Plan (1998) zones the area for the proposed recycling park as industrial.
- b) The PD requires the applicant to relocate the Materials Recovery/Recycling Facility.
- c) Although the EIS states that there are no sensitive receptors, it also identifies that there are a number of properties, including residential properties, directly abutting the proposed Recycling Park.
- d) Emissions limits for noise have been established through Condition 7. Matters on traffic have been dealt with under submission 4 above.

**17. Ms. Marie O Neill, 'Ogham', Ballyogan Road, Carrickmines, Dublin 18, submission received 4<sup>th</sup> February 2000.**

*Summary of main points:*

- a) *Ms. O Neill objects to the granting of a licence to DRCC to erect a Recycling Park at a site adjacent to their property. She requests that consideration be taken of the history of the site and to its use. She states that they have witnessed the transformation of a beautiful and picturesque*

valley into a rat infested, insect ridden eyesore where litter and debris is constantly airborne and mounds of waste materials are clearly visible. She states that back in 1974, residents were promised the site would only take 4 years to fill at which time it was envisaged that a golf course would be developed. She states that the Ballyogan Tip Head has been a source of constant nuisance over the years. She states that they have problems with flies, rats and litter. She states that the tiphead is also frequented by itinerants, who haul rubbish from the dump down the roadway which runs adjacent to the avenue to her house and leave what they don't want at her entrance.

- b) She states that if permission is granted that this 'edifice' will run parallel with the full length of their avenue and at certain points will be a mere 30 yards from their house. She states that from the window at the rear of their house they will be looking directly at the concrete wall of the structure. She states that this will be, without doubt, so high as to affect their natural light and impede dramatically any view that they had ever hoped to regain. She states that a considerable portion of the site which adjoins her house to the west, conveniently as yet have no proposals mentioned, and she states is there worse to come. She states that because of its closer proximity, noise levels from even more traffic will increase.

#### **Response**

- a) Nuisances from the landfill are controlled by Condition 6 and include control of flies and rats (Condition 6.7) and litter (Condition 6.3). The remaining lifespan of the landfill is controlled by Condition 8.1, which specifies its final profile. Condition 8.2 requires the licensee to restore the landfill to a golf course. Condition 5.6 requires that scavenging shall not be permitted at the facility.
- b) Condition 4.25 requires the relocation of the Materials Recovery/Recycling Facility. Condition 4.29 requires the establishment of planting. No other waste activity than those licensed can be carried on at the facility. Noise emissions limits are established by Condition 7.

#### **18. Ms. Mary Maher Donohue, 12 Glenbourne Road, Leopardstown Valley, Dublin 18, submission received 8<sup>th</sup> February 2000.**

*Summary of main points:*

- a) Ms. Maher Donohue states the Ballyogan Road is not suitable for trucks of any kind and that there has been an accident involving a lorry carrying clay to the landfill and a car on this road. She states that a large number of children and adults have to cross this road to catch the bus every morning. She states that about 50 yards from the only entrance to Leopardstown Valley (300 houses) there is a bend on the road making visibility poor. She states that this is a residential area with plans to increase population.
- b) She states research has highlighted the risk of respiratory illness associated with composting. She states that at least two children living near the entrance have already got problems. She states she suffers from Trigenial Neuralgia and that the noise from existing lorries is bad and wonders what the 40 tonne bulk carriers will do.

#### **Response**

- a) Traffic matters are dealt with in submission 4.
- b) I am aware of no existing evidence to suggest that residential properties outside the facility may be at risk from the carrying on of composting.

#### **19. Ms. Breda Mc Hale, 8 Glenbourne Road, Leopardstown Valley, Dublin 18, submission received 8<sup>th</sup> February 2000.**

- a) Ms. Mc Hale states that she was informed in 1992 that the landfill would be closed in three years and would be then replaced with a golf course. She expresses her concern to hear that not alone will the landfill not be closing but that it will be converted to a waste management centre with all the implicit traffic.

- b) *She expresses concern regarding health implications for the children of the area. She states especially with gas extraction on the original dump to be sorted out.*
- c) *She states that traffic is chaotic on old country roads predating residential developments.*

**Response**

- a) Submission 17 deals with the closure of the landfill.
- b) The PD shall ensure the requirements of S(40)(4) are satisfied. Landfill gas management is controlled by Condition 4.18.
- c) Traffic matters are dealt with in submission 4.

**20. Mr and Mrs. William & Rosaria Kelly, 83 Ballyogan Road, Carrickmines, Dublin 18, submission received 7<sup>th</sup> February 2000.**

*Summary of main points:*

- a) *They state they are residents living approximately 30 feet from the proposed development and provide a history of their home in relation to the facility. They have included photos of the Councils running of existing landfill on the Ballyogan Road (original photos to be returned as requested by submitters)*
- b) *They state that they have had to endure nuisances arising from the landfill activity (flies, smells, rats, rubbish blowing, dust, rubbish being tipped on their doorstep by the public and speeding bin lorries).*
- c) *They state that the proposed development will devalue their home.*
- d) *The huge visual intrusion of a 200 foot shed running alongside their property.*
- e) *The extreme danger to their children by the trucks, that will be passing frequently.*
- f) *The noise, vibration and dust, that will be caused by the entire workings of this facility.*
- g) *The unknown risks of having such a facility so close to residential properties.*

**Response**

- a) The management of the facility is controlled by condition 2;
- b) Nuisances are dealt with in Submission 17.
- c) The area for the proposed Recycling Park has been zoned industrial and the activity proposed is in accordance with the Development Plan.
- d) This matter is dealt with in Submission 6.
- e) This matter is dealt with in Submission 4.
- f) Noise and dust emission limits are specified within the PD.
- g) Condition 10 controls contingency arrangements at the facility.

**21. Mr Richard Dixon on behalf of Leopardstown Valley Residents Association (LVRA), 19 Glencairn Drive, Leopardstown Valley, Dublin 18, submission received 7<sup>th</sup> February 2000.**

*Summary of main points:*

*LVRA consider an industrial estate to be a more suitable location for this type of facility and state that they are opposed to its proposed location and give the following grounds:*

a) *Area Development:*

*The Stepside Draft Action Plan 1999 indicates the area surrounding the proposed waste management site is zoned for residential development with some light commercial development. They state it is estimated that population in the immediate area will rise to over 15,000. They state that residents have purchased homes on the understanding that the landfill was to close in the near future and would be replaced by an extension to the golf course. They state that residents feel cheated as local property prices face devaluation if the waste management centre is approved. They state that they feel the applicant has failed to properly inform the general public of the enormity of the proposed development and feel that a scale model should have at least been provided for the public to view.*

b) *Health*

LVRA state that the applicant did not carry out an independent comprehensive environmental health study on the impact of the proposed development on the surrounding community and they feel that this is a serious omission from the application. They state gases, odours and dust created by the activities at the proposed plant including traffic entering and leaving will have a significant effect on the health of the local residents.

c) *Dangers*

LVRA state that the existing landfill is not lined and as a result there is approximately 15 years of gas extraction to be carried out. They state that the proposed development is to be located less than 50m from this landfill site.

d) *Traffic*

LVRA state that the predicted volume of bulk carriers (44 per day) and heavy goods vehicles (200 during weekdays) is of concern to them. LVRA state that there are a number of serious accidents along the Ballyogan Road and that heavy goods vehicles are involved in the majority of them. They state that with an increase in the volume of traffic, the risk of accidents will also increase.

They state that the Stepside Draft Action Plan 1999 outlines a road improvement scheme for the Ballyogan Road which would include the introduction of traffic calming measures, a possible LUAS route and a proposed feeder service. They state that this may be undermined if the proposed waste management centre goes ahead.

LVRA state that they have noted an increase in heavy goods vehicles, on route to the landfill, entering their estate to access the shops for refreshments and that on doing so have caused damage to the roads and infrastructure within the estate. They are concerned that an increase in heavy goods vehicles will have an adverse effect on road safety within the area.

They state that noise and vibration caused by traffic will eventually cause structural damage to the immediate area and to their homes. They state that the traffic impact assessment has not adequately addressed the cumulative impact of traffic generated from the areas zoned for residential development; the decommissioning, closure, and aftercare of the existing landfill site; and the proposed waste management centre. They state that the applicant has shown very little foresight in alleviating the problems caused by additional traffic and that a slip road from the proposed South Eastern Motorway interchange at Carrickmines that would link up with the development was omitted.

e) *Conclusion*

LVRA state DRCC have a number of shortcomings in its application for a waste licence. They state that a full traffic impact assessment using baseline monitoring, developmental traffic figures and annual increase in traffic without the development should be carried out. They state this report should incorporate junction analysis, impact on feeder roads and recommended traffic mitigation measures. They state that proper assessment should also be carried out on the impact of vibrations on the local area due to the proposed development.

**Response**

Responses to submissions 4, 5 and 6, deal with the item raised.

**22. Mr & Mrs Austin & Alice Byrne, 38 Glenbourne Close, Leopardstown Valley, Dublin 18, submission received 9<sup>th</sup> February 2000.**

They object to the proposed Recycling Park on the grounds that it is a preposterous proposal for an area which is at present residential and zoned for a further 15,000 housing units and four schools. They state that they object on health grounds as the proposal will cause pollution in the environment from the operation of the facilities and the resultant traffic increase on the Ballyogan Road. They state that the increase in traffic will increase the risk of accidents.

## **Response**

Submission 4 deals with location and traffic matters. The PD shall ensure that the requirements of S(40)(4) are satisfied.

### **23. Ms Noreen Barron, Ballyogan Environmental Group (BEG), c/o 2 Glencairn Park, The Gallops, Dublin 18, submission received 9<sup>th</sup> February 2000.**

*BEG submitted an environmental appraisal, done by consultants on their behalf, of the waste licence application. In the covering letter BEG state that the results of the document do not allay fears of the large population in the area in relation to the design, building and running of the proposed centre.*

*Summary of main points from the environmental appraisal of the waste licence application (by Malone O Regan on behalf of BEG):*

- 1. They state that they are satisfied that the waste licence application and supporting documentation are comprehensive. They accept that a recycling facility is recognised as a means of waste disposal throughout Europe, provided they are properly designed, constructed and operated and are aware that the technology exists to achieve this. They state that they are satisfied that a Recycling Park could be successfully located in this environment. They request that greater attention be given to the views of the local community and that their recommendations be taken into account.*
- 2. They state that the environmental assessment should have taken greater account of current and future developments in the area, in particular in relation to the cumulative effects of noise, traffic, waste water and landscape.*
- 3. They state that the recycling plant is dependent on markets being available for recycled materials and they are not satisfied that the application has adequately established that the markets will be open at all times.*
- 4. They recommend that particular attention be paid to rodent control, ventilation and odour control, landfill gas accumulation, surface and groundwater protection, and landscape treatment.*
- 5. They state that they are concerned about the stockpiling of end of life vehicles and white goods, particularly in relation to their visual impact and potential for contamination of surface and groundwater.*
- 6. They state that proposals in the application regarding remedial works associated with the site closure and capping are imprecise, particularly in relation to leachate marshalling and slope stability, the leachate drainage system and the level of dissolved methane and leachate discharge to sewer.*
- 7. Traffic*  
*They state that current traffic levels on the Ballyogan Road were not directly assessed but based on other documents not included in the EIS. They state the daily traffic movements (timing and nature) are not identified. They state that no junction analysis has been undertaken. They state that it is not clear whether future commuter traffic has been assessed. They state that the EIS indicates an increase in heavy goods vehicles from 115 to 200 during weekdays (73.9% increase) but also indicates that traffic movements will not significantly exceed that historically associated with the Facility. They state that the cumulative impact of the Recycling Park and South Eastern Motorway on the existing and proposed residential areas have not been considered.*

#### *8. Visual & landscape*

*They state, given the size of the proposed development, that photomontages or 3D visual assessment should have been provided.*

*They state mitigation measures are lacking in detail.*

*They state that the methodology utilised in conducting the visual intrusion and visual obstruction assessments is questionable and that there is more representative methodology available and give 'Guidelines for Landscape and Visual Impact Assessment' by the Institute of Environmental Impact Assessment as an example.*

#### *9. Noise & Vibration*

*They state that it should be a condition of the licence to undertake the modelling of noise and vibration with the power rating of plant and equipment at the detailed design stage.*

*They state that the modelling of expected noise (total) at the noise sensitive receptors was not undertaken.*

*They state that noise emissions from the organic waste composting plant have not been fully assessed.*

*They state that noise sources from the landfill have not been addressed e.g. pollution abatement equipment.*

*They state the cumulative noise impact of the South Eastern Motorway and the proposed Recycling Park on the zoned and the existing residential areas have not been assessed.*

#### *10. Material Assets*

*MOR state that land severance by the development was not adequately considered.*

*MOR states the impact of the Recycling Park on public utilities e.g. water usage was not adequately assessed.*

#### *11. Human Beings*

*MOR considers that a large number of residential homes are in the immediate environs of the proposed development and will be directly affected by the proposal. They state there are two residential estates containing 1118 houses, 16 houses adjoining the site directly and other zoned residential lands within 0.5km radii of the proposed site. They state that there is a neighbourhood centre 800m west of the site.*

*MOR state that there has been an omission of a comprehensive environmental health study on the impact of the proposed development on the surrounding community. They state that there has also been an omission of a risk assessment on the impact of the site on the surrounding community.*

#### *12. Site Design & Selection*

*MOR states that one of the site selection criteria for the baling / waste transfer facilities was that it would be sufficiently removed from major residential areas to avoid significant nuisance. They state that over 2500 households have already expressed their concern and additional lands have been zoned residential. They therefore conclude that the site is not significantly removed from residential areas.*

*They state that a number of design issues relating to receptacles in the civic amenity have not been considered. They suggest that all receptacles should be locked and fire proof, glass receptacles should have flaps to reduce noise emissions, and textile banks should be designed so that persons cannot enter them through the chute. They state the application does not state how fly tipping of hazardous waste will be managed.*

*MOR states the application does not provide procedures for dealing with undesirable material in relation to the baling process.*



*MOR states the construction and excavation works onsite will have the potential to change the migration of gas and leachate. MOR states that the Agency's Article 16 notice requested information on the foundation and tank of the organic waste composting chamber. They state the applicants response did not include details of the tank and the risk of gas accumulation in the tank has not been assessed.*

*MOR states that there are a number of deficiencies, relating to safety, in the design of the fire pond.*

#### *13. Contaminated Land*

*MOR states that part of the Recycling Park will be constructed on the part of the current leachate lagoon. They state the soil in the area may be contaminated from leachate. They state the risk of emanating from constructing on contaminated land has not been addressed.*

#### *14. Alternatives*

*MOR states that alternative sites were not adequately assessed.*

#### *15. Fuel Storage*

*MOR states the applicant has not stated whether fuel storage is over ground or under ground. MOR states that these tanks should be located away from any surface water and leachate drains as there is a potential risk of contamination and that if located under ground there is a risk of gas accumulation.*

#### *16. ESB Substation*

*MOR states that there will be an ESB substation onsite situated in one of the buildings. They state that such a substation may provide a source of ignition if landfill gas accumulates. They state that the risk of locating such a substation onsite needs to be assessed.*

#### *17. Odour*

*MOR recommend that quantitative odour monitoring be carried out on a regular basis. They suggest that this could be carried out using solid phase absorption tubes or impingers.*

*MOR suggest that the slight negative pressure to be maintained within the organic waste composting building may increase the risk of gas accumulation within the building.*

#### *18. Aerosols*

*MOR states that the installation of a biofilter at the construction stage of the baling station should be considered.*

*MOR states that it is not mentioned in the application what effect using leachate as an odour control on the air emissions from the organic waste composting facility will have on the aerosol or heavy metal concentration from the Organic Waste Composting Facility.*

#### *19. Environmental Pests*

*MOR states this relies on good management practices and that management procedures and practices should be clearly stated within the licensable conditions of any licence issued.*

#### *20. Contingency and Emergency Arrangements*

*MOR states it is unclear whether the emergency arrangements are based on risk assessments and/or consequence analysis. MOR states that a more detailed emergency plan should be submitted.*

*MOR states that it is not clear in the licence application how a problem with the quality or quantity of leachate onsite or at the Shanganagh Waste Water Treatment Works will be dealt with.*

#### *21. Management Plans*

*MOR states that out of hours work should be undertaken in accordance with consultation with residents.*

*MOR states that contract arrangements, which would involve third parties, should be outlined.*

#### *22. Discharges to Sewer*

*MOR states that issues relating to Shanganagh WWTP are not adequately addressed.*

*MOR states that the applicant has not stated the method of control in relation to gas accumulation in leachate, which is being discharged to sewer. They state a consequence analysis was not carried out as part of a risk assessment with regards this issue.*

#### *23. Hydrogeology*

*MOR states that alteration of the water table during the construction phase of the proposed development could cause groundwater and surface water pollution because of infiltration of leachate due to changes in the hydrological balance of the site and that this needs to be addressed prior to construction.*

*MOR states that cadmium and chromium occur at elevated levels at sampling points MW3 and MW14. They state that this may be due to leachate leaking from the pipe leading from the lagoon to sewer.*

*They state that contaminated groundwater could give rise to additional issues including contamination of surface water due to contaminated groundwater discharge.*

#### *24. Leachate System & Leachate Levels*

*MOR states that the applicant does not state which options or recommendations put forward in the specialists report will be implemented.*

*MOR states that the applicant does not mention how a warning of high leachate in the sump is responded to or how an incident would be prevented during non operational hours. They state that the float switch in the sump should be checked daily.*

#### *25. Air*

*MOR state that the working capacity of the landfill gas generators were not given at the time of sampling and that this could impact on the results obtained, in particular the emission concentration and flow rate.*

*MOR states that although the applicant has identified additional areas for gas extraction, an assessment of the impact of these areas on present emissions from the gas generators is not included.*

*MOR states, in relation to emission from the landfill gas generators, that the applicant does not state how the 2010 limit value for NO<sub>2</sub> will be satisfied (European Council Directive 1999/30/EC), even though present levels are marginally above the 2010 limits.*

#### *26. Ecology*

*MOR states that both groundwater analysis and biological results of surface water suggest the landfill is contributing to the poor quality in Ballyogan Stream. MOR states that the applicant has omitted to mention whether the recommended use of baffles will be implemented.*

*MOR states that the impact of the landfill on the surrounding ecosystems and elements of those systems, is not extensively or adequately addressed by the applicant.*

#### *27. Site Design and Selection*

*a) Slope stability*

*MOR states that it is not known if measures recommended in the specialists report on slope stability have or are to be implemented. They state that liquid waste, in the form of swill, is accepted at the facility. They state that the quantity of this waste type is unknown. They state that this waste type may have an effect on the slope stability assessment. They state consequence analysis of slope stability / instability was not carried out as part of a risk assessment.*

*b) Landfill Gas*

*MOR states that it is not clear whether there are any passive gas protection measures, on or around the current site.*

*c) Swill*

*MOR states that landfilled swill could constitute a biological hazard if disturbed. They state that remedial works includes repairing fractured leachate drains on site and putting in place measures to reduce the head of leachate which would involve the disturbance of waste. MOR states that a risk assessment including the risk of biological hazards needs to be completed.*

*28. Decommission and Aftercare.*

*MOR states that the impact of these works have not been considered.*

*MOR states that capping material should be tested to ensure that it is to the correct specification.*

*MOR states that it is not clear from the application whether the sites gradients are in accordance with the specialist recommendation or that recommended in the EPA manual on Restoration and Aftercare.*

*29. Contingency & Emergency Arrangements*

*MOR states that the contingency arrangement presented in relation to leachate spill is not a plan for the failure of the leachate system.*

*30. Management Plans*

*a) Management Structures - MOR states the relationship between Wimpey-EPC and Power Services Ltd is not provided.*

*b) Procedures - MOR states that the application does not show what procedures are in place in relation to complaints during non operational hours. MOR states, in relation to landfill gas, that appropriate action is not defined for dealing unacceptable levels of gas and that these gas levels are also not defined.*

*c) Additional Items –*

*MOR states that some monitoring points are currently broken or are in bad repair. They recommend that these monitoring points be properly abandoned in accordance with appropriate guidelines.*

*MOR states that the alarms and sensors in the landfill gas generator compounds should be tested regularly.*

*d) Conditioning Plan*

*MOR states that the Ballyogan Conditioning Plan does not comply fully with the EPA Guidance Notes on this matter. MOR also states that the Conditioning Plan should be revised in relation to mitigation measures and provisions for the following:*

*Slope stability*

*Reducing head of leachate within the site*

*Repair and improvement of leachate drainage system*

*Conditioning of leachate before discharge to sewer in order to prevent dissolved methane in the leachate migrating offsite.*

*MOR states that these tasks must be clearly defined and presented with their associated targets and timescales.*

### *31. Interactions*

*MOR states the following interactions have not been addressed adequately in the application.*

*Vibration and slope stability – MOR states the impact of vibration from the proposed Recycling Park could cause problems with respect to landfill slope stability.*

*Noise and traffic - MOR states the traffic impact assessment is deficient as the interaction between traffic and noise has not been adequately addressed.*

*Traffic and dust - MOR states the traffic impact assessment is deficient as the interaction between traffic and dust has not been adequately addressed.*

*Gas accumulation and odour – MOR states that the possibility of gas accumulation and odour control problems in the organic waste composting facility has not been adequately addressed.*

*Landscape (Existing landfill – proposed Recycling Park) – MOR states that an overall approach needs to be taken with regards to the visual and landscape assessment for the proposed Recycling Park and landfill site.*

### *32. Conclusion and recommendations*

*MOR puts forward the following recommendations to mitigate negative impact associated with the development:*

- a) A full traffic impact assessment should be carried out. Consideration of a duty road from the motorway to accommodate HGV associated with the development. At minimum the present feeder roads should be upgraded and the location of the proposed site entrance reconsidered.*
- b) The visual impact assessment should be re-addressed using methodology designed for a spatial development. MOR would like to see an overall approach taken of the larger site (landfill and proposed Recycling Park) for the assessment and mitigation of landscape and visual impact.*
- c) End of life vehicles and white goods should at the very least be totally screened from visual impact, stored in a bunded area with contaminated surface water runoff drained to the WWTP.*
- d) They state that the recycling plant is dependent on markets being available for recycled materials and they are not satisfied that the application has adequately established that the markets will be open at all times. MOR express concern whether sufficient time has been given to the market for recyclable material produced from the recycling park and what would happen if there is no market for prolonged periods.*
- e) MOR state that although abatement technology for dealing with dissolved methane has been mentioned it is unclear which system the applicant is committed to installing.*
- f) MOR states that issues relating to Shanganagh WWTP are not adequately addressed.*
- g) MOR recommends 24 hour security at the Recycling Park.*
- h) MOR states that there is leachate mounding on site. They state that the applicant does not state which options or recommendations put forward in the specialists report will be implemented.*
- i) MOR states that consideration should be given to a proper leachate collection system, as contaminated leachate is reaching groundwater and surface water.*
- j) MOR states that it is not known if measures recommended in the specialists report on slope stability have or are to be implemented.*
- k) MOR states that an integrated approach needs to be adopted for the management of gas accumulation in buildings on site in association with the management of air emissions*
- l) MOR states the cumulative impact of the South Eastern Motorway and the proposed development needs to be assessed.*

- m) MOR states that an assessment of the impact of vibration from the proposed Recycling Park on slope stability should be completed.
- n) MOR states that an up front approach needs to be taken in regards to the management of rodents

#### **Response**

Only the conclusions and recommendations put forward by MOR will be responded to here. All other issues raised by MOR have been considered in the assessment. A number of items raised relate to standard requirements of a waste licence. A number of issues have already been dealt with in responses to other submissions.

- a) Traffic has been dealt with in the response to submission 4.
- b) Visual impact has been dealt with in the response to submission 5.
- c) End of life Vehicles and white goods shall be stored in bunded area with potentially contaminated surface water runoff drained to the sewer.
- d) Units for recycling waste at the facility are the materials recovery / recycling facility and the compost facilities. Compost shall be produced at the composting facilities and the proposed materials recovery / recycling facility shall be flexible to meet market demands.
- e) Condition 4.17 requires the licensee to put in place a method to remove dissolved methane to meet the limit specified in Schedule G.
- f) Condition 7 sets limits for emissions to sewer, issues relating to Shanganagh WWTP are outside the scope of this licence.
- g) Site security is covered by Condition 4.3.
- h) & i) Condition 4.17 controls the management of leachate at the landfill, this requires the licensee to implement measures leachate put forward in the specialists report.
- j) & m) Condition 9.12 requires the licensee to carry out a stability assessment of the side slopes and in the event that monitoring indicates a risk of slope failure (Condition 10.9) it shall be treated as an incident.
- k) It is agreed that an integrated approach should to be taken for the management of gas accumulation in buildings on site in association with the management of air emissions. The licensee is required to construct buildings in accordance with guidance to protect the building and its occupants from landfill gas (Condition 4.18), permanent gas monitoring systems must be installed in site buildings (Condition 9.2), and an emergency response procedure (ERP) must be agreed with the Agency (Condition 10.1). The ERP shall include details on this matter.
- l) The PD shall ensure that the waste activities carried on at the facility shall satisfy the requirements of S(40)(4) of the WMA. The cumulative impact of the South Eastern Motorway and the proposed development relate to traffic and this item has been responded to in submission 4.
- m) Rodent control is provided for through Condition 6.

#### **24. Daragh Murphy, Glencairn Residents Association (GRA), 5, Glencairn Road, Dublin 18, submission received 9<sup>th</sup> February 2000.**

*GRA reiterate the points made in their previous submission (submission 7 above). In addition they state that they are concerned about plans to manage the disposal of hazardous waste at the site.*

#### **Response**

Regarding hazardous waste, this waste relates only to household hazardous waste and may only be collected at the Civic Waste Facility and must then be recovered or disposed of at an appropriate facility. Items relating to facility location and traffic have been dealt with in the response to submission 4 above.

#### **25. Ms Fiona Hogan on behalf of the Ballyogan Wood Residents Association (BWRA), 1 Ballyogan Wood, Carrickmines, Dublin 18, submission received 9<sup>th</sup> February 2000.**

*BWRA express the following concerns:*

- a) BWRA are concerned with nuisances arising from the landfill, including dust, traffic, flies, odour, and rats. They provide articles on health issues relating to living near landfills.
- b) BWRA in relation to the materials recovery unit are concerned on reported adverse impacts on health and outline articles.
- c) BWRA in relation to the organic waste unit also have concerns relating to health issues.
- d) BWRA states that there are sensitive buildings including 3 play schools less than a mile from the facility and all the residents.
- e) BWRA include photos from a site visit. Photos include that of the gas generating station and monitoring wells (damaged).
- f) BWRA states that cows graze in this area and ask will the EPA investigate whether this herd is milked and if so is the milk tested in any way.
- g) BWRA states that children are attracted to the landfill in search of adventure and that security can not keep them out.
- h) BWRA states DRCC are negligent and ask can they expect more from them or whatever private company they choose to operate the waste management centre in the future.
- i) BWRA express concern in relation to the danger of leaving the fire pond uncovered.
- j) BWRA are concerned for residents and feel a full risk assessment has not been carried out.
- k) BWRA ask can they have assurance from the Agency in relation to the establishment of a joint monitoring committee made up of local residents.

**Response**

- a) Item a) is dealt with in the response to submission 4.
- b) & c) Regarding items b) and c), although there has been a number of papers in relation to health effects from waste, the inspector is unaware of any definite link which shows an adverse effect between the two. The PD shall ensure that the requirements of S(40)(4) are satisfied.
- d) Item d) has been dealt with in the response to submission 4.
- e) landfill gas is controlled by Condition 4.18. Condition 9.5 requires the applicant to submit a report on the present state of monitoring infrastructure, any damaged infrastructure must be replaced.
- f) Cows shall not be allowed to graze on the facility.
- g) Condition 4.3 requires the facility to be secured. Condition 5.6 prohibits scavenging at the facility.
- h) Condition 2 controls the management of the facility.
- i) Condition 10.2 requires fire control infrastructure. The construction of a fire pond depends on the construction time of the Materials Recovery/Recycling Facility, in the event that a fire pond is to be constructed appropriate safety measures shall be required.
- j) The PD shall ensure the requirements of S(40)(4) of the Act are satisfied.
- k) All monitoring results shall be available to the public.

**26. Dr. Gerardine Sayers, Specialist in Public Health Medicine, Department of Public Health, 4<sup>th</sup> Floor, Baggot Street Community Hospital, Baggot Street, Dublin 4, submission received 9<sup>th</sup> February 2000.**

*Copy of submission received on 18<sup>th</sup> March 1999 (submission 9 above).*

**Response**

See response to Submission 9.

Signed \_\_\_\_\_

Dated:

Peter Carey

Inspector, Environmental Management & Planning

**APPENDIX 1**  
**LOCATION MAP & LAYOUT PLAN**



## **APPENDIX 2**

### **LIST OF PERSONS MAKING SUBMISSIONS**