OXIGEN ENVIRONMENTAL LTD., (WASTE LICENCE REGISTER NO. 208-1) WASTE TRANSFER STATION,

BALLYMOUNT ROAD LOWER,

CLONDALKIN,

DUBLIN 22.

ENVIRONMEN AGENCY W 2 4 DEC 2004 INITIALS ..

ARTICLE 13 COMPLIANCE INFORMATION .N.

m

A Submission by Bord na Móna Environmental Ltd. on behalf of Oxigen Environmental Ltd.

Bord na Móna Technical Services Ltd.

December2004

Detailed below is the information required for the Article 13 as requested in the correspondence received by the Environmental Protection Agency on the 3^{rd} November 2004.

Non Technical Summary

A revised non-technical summary for the Environmental Impact Statement accompanies this response.

Number 1 Alternatives

Oxigen Environmental Ltd. operate a Green Bin Initiative within the Greater Dublin region, which is operated on behalf of all four Dublin County Councils. This initiative entailed the collection of source segregated dry recyclables (e.g. plastics, paper, tetra paks etc.), which were transported to a Oxigen Environmental Ltd. site in Clonshaugh. However for Ireland, and more specifically Dublin to reach the recycling targets as set out in various Government and County Council initiatives (such as the County Plans), the initiative would have to be increased to include a greater number of the Dublin population.

Oxigen Environmental Ltd assessed their existing waste infrastructure with a view to this planned expansion of the initiative, and identified that a larger site would be required. It was proposed that a larger site that was central within Dublin, with existing infrastructure, that would be capable of amalgamating both the future requirements of the green bin initiative, and the future requirements of Oxigen Environmental Ltd. successful skip waste operations would be required to meet this demand

Oxigen Environmental Ltd. also wanted to locate this facility close to its existing Robinhood waste transfer station, due to Oxigen Environmental Ltd. future plans of developing this transfer station into a baling facility. Oxigen Environmental Ltd. looked at a number of sites within Dublin that were located close to its markets as well as the M50. When the Corus Steel site became available, with the existing buildings and space for development and considering its proximity to the M50 and the Robinhood facility, it was identified by Oxigen Environmental Ltd. as a site that would meet it requirements and subsequently purchased.

Number 2 Article 12 requirements

A response to the Article 12 requirements has been submitted to the Agency in conjunction with this Article 13 response.

Number 3 Difficulties

The main difficulty with generating the information required for the Waste Licence Application and subsequent EIS was encountered within the research into the Best Available Technologies that were available at the time. Oxigen Environmental Ltd. has committed a large volume of resources in identifying the different technologies available within Europe with a view to improving their waste services within Dublin, while adhering to the BAT principles as set out in legislation. The specific details of some of the plant was not available at the time of producing the Waste Licence Application, and therefore details pertaining to water discharge generation, electricity consumption etc could not be provided. These details have now been finalised and can at this time be furnished to the Agency.



December2004



- An Environmental Impact Statement -

NON-TECHNIC AL SUMMARY

Cone Date:

December 2004

oth

A Submission by Bord na Móna Environmental Limited on behalf of Oxigen Environmental Ltd.

.



working for a cleaner environment

TABLE OF CONTENTS

1 **INTRODUCTION**

2 PROJECT DESCRIPTION

- 2.1 Site Description
- **Project Description** 2.2

3 ENVIRONMENTAL IMPACT ASSESSMENT

- 3.1 Human Beings
- Flora and Fauna 3.2
- 3.3 Soil and Geology
- Hydrology 3.4
- Hydrogeology 3.5
- Air 3.6
- 3.7 Noise
- 3.8 Traffic
- Climate 3.9
- Consent of copyright owner required for any other use. Landscape and Visual Impacts 3.10
- 3.11 Cultural Heritage
- 3.12 Material Assets

4 CONCLUSIONS

Bord na Móna, Technical Services

1 INTRODUCTION

This Non-Technical Summary is a concise summation of the primary environmental aspects as outlined in the main Environmental Impact Statement.

Bord na Móna Technical Services was commissioned by Oxigen Environmental Ltd. to complete an Environmental Impact Statement to accompany a Waste Licence Application concerning the waste recycling and processing facility at Ballymount Road Lower, Clondalkin, Dublin 22.

2 PROJECT DESCRIPTION

Oxigen Environmental Ltd. propose to develop a waste recycling and processing facility at Ballymount Industrial Estate, Clondalkin, Dublin 22, which it is anticipated will be operational by October 2004. The proposed waste recycling and processing facility will provide the size and type of facility required to continue the successful 'green bin' initiative, which Oxigen Environmental Ltd. operates on behalf of the four Dublin Local Authorities. The existing green bin operation currently operates from a leased facility in Clonshaugh, Dublin 17. The proposed waste recycling and processing facility will incorporate the best available technologies with regard to 'dry' recyclaptes in an attempt to expand the number of current waste streams incorporated within the scheme i.e. tetra pak etc.. The facility will initially be operated in compliance with the conditions of Waste Permit (reference WPR 041), which has been obtained from South Dublin County Council in March 2004. Oxigen Environmental Ltd have applied to South Dublin County Council for 'change of use' planning permission, which was submitted in May 2004 (SD04A/0354), which was granted on the 13th July 2004.

It is intended to upgrade the existing waste permit to a Waste Licence in order to allow for expansion of the green bin initiative in both the waste type and in the number of households, while allowing Oxigen Environmental Ltd. to expand their current waste management customer base within the Dublin region, through its skip hire and collection business.

2.1 Site Description

The site had been operated as a steel works by Corus Steel (formerly The Steel Company of Ireland) until December 2003, when it was purchased by Oxigen Environmental Ltd.. Six acres of the original eighteen acre site was subsequently sold to Dublin City Council for the operation of the green bin 'dry' recyclable scheme, which is operated throughout the four Local Authorities by Oxigen Environmental Ltd. Therefore, the entire eighteen acre site shall be under the management of and operated by Oxigen Environmental Ltd.

The site is located in the administrative area of South Dublin County Council and is zoned "E – *To provide for industrial and related uses*" under the existing County Development Plan, 1998, and is zoned "E - to provide for enterprise, employment and related uses" under the draft County Development Plan 2004 - 2010.

The site is located within the sub-catchment River Camac which is a tributary of the River Liffey. Surface water from the facility will discharge into the South Dublin County Council surface water sewer, which serves the Ballymount Industrial Estate, via an oil interceptor and silt trap. This sewer discharges into the Ballymount Stream, which in turn discharges into the Cammac River.

Quaternary sediments underlying the site are glacial in nature, which consist of firm to stiff sandy gravely clays with clast present. The site is underlain by Lower Carboniferous rock consisting of the Calp Limestones (CD). These have been provisionally classified by the GSI as a *Bedrock Aquifer which is moderately productive only in local zones (Ll)*. Using GSI criteria for groundwater vulnerability the site has a high - moderate vulnerability rating.

The topography of the area in general is generally flat, located within an industrialised area. The site is at an elevation of approximately 60 m OD. The site is bordered on all four sides by roads, the two main ones being Ballymount Road Lower and Turnpike Road. The nearest residential dwelling is located approximately 180 m north west of the facility.

St copyrit

2.2 Project Description

Oxigen Environmental Ltd waste recycling and processing facility will operate 24 hrs a day seven days a week, with the majority of the traffic movements to and from the site between 06:00 and 22:00 Monday to Sunday, with limited movements occurring outside these hours. Entry onto the site is restricted to employees of Oxigen Environmental Ltd. and permitted/licenced waste contractors at all times during the operation of the facility. Outside the hours of traffic movements to the site, the gate will be closed and access is only permitted by the key personnel (i.e. site manager, recycling building staff etc).

The waste that is accepted at the site may be characterised as follows:

- Domestic household waste
- Commercial
- Industrial
- Construction and Demolition

These waste classifications, subsequent to inspection, can be further categorised as being either for recycling, for transfer (i.e. suitable for recovery off-site) or for disposal to off-site authorised disposal facilities. All other wastes that are deemed to be in non-compliance with the relevant permit/licence, upon inspection, are returned to source (if determinable) or stored within the bunded quarantine area prior to authorised disposal off-site.

A dual weighbridge currently exists at the facility, which will be linked to an automated software system, that will record all data regarding incoming waste. It is anticipated that under the Waste Permit the site will initially accept approximately 70,000 tonnes of waste into the facility per annum. It is emphasised that these quantities of waste do not represent the overall capacity of the recycling plant. It is envisaged that on receipt of a Waste Licence from the Environmental Protection Agency that the volume of waste accepted will increase to 350,000 tonnes per annum.

All wastes accepted at the facility will be subject to waste acceptance measures, which will be approved by the EPA.

<u>Skip waste / Transfer Waste Material</u> Oxigen Environmental Ltd will require waste producers to characterise the waste prior to acceptance by vehicle operators. The producer/holder of the waste must, if requested, provide documentation that the waste meets the Oxigen Environmental Ltd. specification. The waste skip is visually inspected by the vehicle operator, and waste not conforming to the specification will not to be accepted by the vehicle operator.

Green bin waste

Oxigen Environmental Ltd have employed dedicated waste inspectors for the green bin collection. Waste inspectors shall accompany the collection of the green bins, refusing any non-conforming bins. Waste inspectors will accompany different routes every week, covering each route at least once a year.

Consen

Wastes will be delivered by Oxigen Environmental Ltd employees and permitted/licence waste contractors only. Prior to gaining access to the site the vehicle operator will be required to enter the required job number, waste type, source of the waste, vehicle type, vehicle tag number and drivers name into the weighbridge software. The load will be required to the verified by the computer system prior to the barrier being raised.

The driver will be directed to the appropriate recycling/transfer building where the waste will be tipped onto the floor. The load is inspected with non-conforming waste being removed. Non-conforming waste (as detailed within the Waste Licence) will be immediately removed to the waste quarantine area. The waste will be stored in the quarantine area pending its removal off site by the waste producer. In the event of the producer refusing to remove the

waste, or the source of the waste is unknown, Oxigen Environmental Ltd will ensure that it is removed off site and disposed of at an appropriate facility as soon as possible. Oxigen Environmental Ltd. will maintain records of the waste type, quantity, and ultimate disposal/treatment facility.

Hazardous waste

Hazardous waste will be accepted on site, in a specially constructed and bunded building that will ensure that the impact on the surrounding environment will be minimal. All processes and procedures shall be agreed with the Agency prior to the acceptance of hazardous waste on site

Outside waste acceptance hours the security gate is closed and access is only permitted by the key personnel (i.e. site manager, drivers, recycling staff etc).

The categories of waste deemed suitable for segregation and subsequent recycling is very much dependant on available markets for such materials. As such, market forces will dictate the feasibility or otherwise of segregating other waste types. It is estimated that approximately 80 - 90 % of all waste accepted will be segregated for recovery or recycling.

Raw materials used on-site for plant equipment and for vehicles will be stored in a bunded tank on-site. This fuel will be stored in the existing tanks subsequent to the tanks and the bund being integrity tested to known construction standards (namely BS8007:1987). In the event that the tanks do not pass the integrity test they will be fully upgraded prior to any fuel being stored on site.

Site operations will consist of the receipt of segregated household, commercial, industrial and construction/demolition waste, which will be inspected and deposited to the appropriate recycling/transfer building. It is proposed to operate the green bin waste processing primarily from this waste recycling and processing facility and therefore, it is considered that the primary activity on-site is recycling/recovery of waste and as such, under the Fourth Schedule the principal activity involves 'Recycling or reclamation of other inorganic materials'.

The relevant waste disposal and waste recovery activities, as per the Third and Fourth Schedules of the Waste Management Act 1996, to which this application relates are:

Third Schedule - Waste Disposal Activities: Activities that occur onsite relevant to the Third Schedule are – 'Surface impoundment, including placement of liquid or sludge discards into pits, ponds or lagoons', 'Physico chemical treatment not referred to elsewhere in this Schedule (including evaporation, drying and calcination), which results in final compounds or mixtures which are disposed of by means of any activity referred to in paragraphs 1 to 10 of this Schedule (including evaporation, drying and calcination)' 'Repackaging prior to submission to any activity referred to

in a preceding paragraph of this Schedule', 'Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule', and, 'Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced'.

Fourth Schedule - Waste Recovery Activities: Activities that occur on site relevant to the Fourth Schedule include - 'Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes)', 'Recycling or reclamation of metals and metal compounds', 'Recycling or reclamation of other inorganic materials', 'Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule', 'Exchange of waste for submission to any activity referred to in a preceding paragraph of this Schedule', and, 'Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced'.

3 ENVIRONMENTAL IMPACT STATEMENT

The environmental impacts of the waste transfer facility are described within the Environmental For maction purposes only. 21 Impact Statement under the following categories:

Human Beings Soil & Geology Hydrogeology Noise **Climatic Factors** Cultural Heritage

Flora and Fauna Hydrology Air Traffic Landscape Material Assets

Interactions of the above

In order to predict the likely impacts of the waste transfer operations on the site and its environs it was necessary to establish the existing baseline conditions in the area. To this end, a series of field investigations and desk based studies were initiated by technical staff by Bord na Móna Technical Services from April to May 2004. These studies enabled an assessment of the environmental impacts, if any, that activities may have on the receiving water, soil and air environments.

3.0 IMPACTS OF THE WASTE RECYCLING AND PROCESSING FACILITY

3.1 Human Beings

3.1.1 Noise

Noise is an identified form of air pollution and uncontrolled it can cause nuisance or a deterioration of amenities and the quality of human life. The potential impact of the waste recycling and processing facility on noise levels within the area is associated with the noise generated through on-site activities. It is concluded however that ambient noise levels will not significantly increase and specifically, noise levels at the nearest sensitive location (occupied residential premises) will not significantly deviate above current background daytime noise levels.

3.1.2 Traffic

The traffic impact study assessed the potential impacts of additional traffic movements generated during the operation of the waste recycling and processing facility and the local road networks.

This assessment concluded that the proposed development will not have a significant adverse impact on the road network. In particular, traffic capacity assessments indicate that the existing and proposed road network can accommodate the likely levels of future year's traffic.

Consent

3.1.3 Human Health

A number of air pollutants have known or suspected harmful effects on human health and the environment. In many areas these pollutants are principally the products of combustion from space heating, power generation or from motor vehicle traffic. The air pollutants derived from the proposed extraction activities can be separated into traffic derived emissions and extraction derived dust emissions. Traffic derived primary pollutants include the following species; sulphur dioxide (SO₂), particulate matter, lead, oxides of nitrogen (NO_x), carbon monoxide (CO) and volatile organic compounds (VOCs).

While the levels of traffic derived pollutants may increase as a result of a general increase in traffic along the existing and proposed road network, however due to the minimal increase in traffic volumes, and the existing large volumes of traffic within the busy industrial estate it is anticipated that the impact of the traffic will be negligible.

Dust emissions from the operations of the facility will be minimised by careful on site management. This will ensure that potential problems with fugitive dust emissions from the site will be negligible.

3.1.4 Site Structure / Land Use

Any potential impacts of the facility on the existing structural and land usage of the area are considered insignificant. Land usage in the vicinity of the facility consists of large and medium size industrial units. The site is located in the administrative area of South Dublin County Council and is zoned "E - To provide for industrial and related uses" under the existing County Development Plan, 1998, and is zoned "E - to provide for enterprise, employment and related uses" under the draft County Development Plan 2004 - 2010.

3.1.5 Socio-Economic

The waste recycling and processing facility at Ballymount Road Lower will have minimal social and economic impacts as summarised below:

- It is considered likely that the operation of the facility will have minimal impacts on the existing population structure of the area. The job creation benefits are secondary to the development, as it is the service provided that will benefit the local and regional waste collection and disposal infrastructure.
- 2. Service required (electricity, water Supply, etc.) of the facility will be obtained through existing service lines. The demand usage of these supplies during normal working conditions will be low and should not place the current network under stress.

3.2 Flora & Fauna

An ecological survey was conducted on the site on 27th May 2004.

The site is not designated as a Natural Heritage Area or a Special Protection Area under the Birds Directive (79/409/EEC) or as a Special Area of Conservation in accordance with the habitats Directive (92/43/EEC) nor is it designated under any of the other nature conservation designations currently used. No species on the list of the Flora Protection Order 1987 or rare species lists of the Red Data Book 1 (Vascular Plants) 1988 were found at the site. The site is made up of a limited number of habitats that would be common throughout the Irish urban environments. The site is not considered important for any mammal or avian species.

Mitigation Measures

The habitats encountered on site are widespread in the Irish urban environment and the overall impact of the facility is considered negligible.

Oxigen Environmental Ltd.

3.3 Soil & Geology

Desk-based information relating to the substrata underlying the site of the proposed development was obtained through the Geological Survey of Ireland (GSI), Environmental Protection Agency (EPA) and from information held on file within Bord na Móna Technical Services.

The site is located within an industrial area and as such it is likely that the upper soil horizons beneath the site were altered during construction works. Quaternary sediments underlying the site are glacial in nature, these sediments are referred to as the Dublin Till. They consist of firm to stiff sandy gravely clays with clast (varying in size from cobbles to boulders) present.

Published Geological data of the study area identify the bedrock geology as the Calp Limestones of Lower Carboniferous period. The formation consists of dark grey, fine grained, graded limestones with interbedded black, poorly fossiliferous shales. The Clondalkin Formation, within the immediate vicinity of the site, is karistified and dolomitised in certain areas

Mitigation Measures All wastes and fuels will be stored in fully builded areas in accordance with relevant environmental guidelines and recognised standards. All bunds will be tested in accordance with the waste licence conditions. In addition fill absorbent materials will be kept on site in close proximity to any fuel storage tanks or bowsers during site development works. The refuelling of vehicles will be undertaken in a designated area, which will be fully contained to prevent spillage into the surface water network.

All wastes being delivered to or removed from site will be loaded/unloaded in fully bunded areas. New leachate drains installed on site will be constructed in accordance with all applicable building standards thereby minimising the potential for leaks in underground pipes.

3.4 Hydrology

The study area is located within the EPA Hydrometric Area No. 9, namely the River Liffey catchment. Within the Liffey catchment the site lies in the sub-catchment of the River Camac. There are no existing surface water bodies on-site. All surface water run-off from the site discharges to a surface water sewer serving the Ballymount Industrial Estate which ultimately discharges to the River Camac.

The site currently drains to a surface water sewer within the Ballymount Industrial Estate. This surface water sewer also takes surface waters from numerous other premises within the industrial estate. The surface water sewer discharges to the Ballymount Stream, which discharges into the Camac River, which is a tributary of the River Liffey.

Potential Impacts of the Proposed development

- 1. Surface water from hardstanding areas will pass through an oil interceptor prior to discharge to the surface water sewer and subsequently to the Ballymount Stream. Given that all waste loading/unloading and storage operations will take place within bunded areas the potential for spillages to impact on surface water quality is considered to be low.
- 2. Leachate and process wastewater will be discharged directly to the foul sewer, and will not enter the surface water drainage network.

Mitigation Measures

An oil interceptor with a manual shut-off valve will be placed on the surface water drainage system which will minimise the potential for hydrocarbon emissions to surface water. All waste storage and loading/unloading will take place in bunded areas which will reduce the potential for spillages to occur.

Separate surface water and foul sewage drainage systems will be installed in accordance with building standards. This will eliminate the potential for any interaction between surface water and four sewage. All below ground drainage will be designed, detailed and constructed in accordance with good practice in hydraulics and in compliance with relevant British and Irish Standards and Local Authority requirements.

All newly constructed and existing drains within or near to the development site are to be cleared on completion of works by power jetting and all drains to be CCTV surveyed to ensure removal of construction spill and sediment.

Bunded tanks will be used during site development work to store fuel oil and to collect any waste oil arisings. Any waste oils arising will be disposed of by a licensed waste disposal contractor. Accordingly, seepage into surface water will not occur.

3.5 Hydrogeology

Desk-based and site specific information on the underlying hydrogeological characteristics of the site was obtained through the following:

- Research review of data held within the Geological Survey of Ireland;
- Research review of date held within the Environmental Protection Agency

Oxigen Environmental Ltd.

Environmental Impact Statement

The site is underlain by Lower Carboniferous rock consisting of the Calp Limestones (CD). These have been provisionally classified by the GSI as a *Bedrock Aquifer which is moderately productive only in local zones (Ll). Gr*oundwater vulnerability classification are currently being produced by the GSI for County Dublin. As part of this study, guidelines published by the GSI for mapping vulnerability were used to define and classify the site. Using GSI criteria for groundwater vulnerability the site has a high - moderate vulnerability rating.

There are no groundwater monitoring boreholes on the site, however water levels taken from adjoining properties (namely Galco Steel Ltd. located immediately south east of the facility) indicate that the groundwater level lies between 2.50 m and 2.80 m below ground level (bgl). The groundwater flows are from the southeast to northwest, towards the nearby River Cammac. The site and its surrounds have been used for industrial purposes since the 1970's. Due to the historic industrial nature of the site, there is the potential for previous contamination of the groundwaters. Groundwater quality results are available for the adjoining property and these indicate that the quality of the groundwater is good with some localised contamination

Potential Impacts of the Proposed Development

There will be no direct discharges to groundwater or any groundwater abstractions as part of the proposed development.

The site is not located within a groundwater supply protection zone and it is proposed to cover the site with a hardstanding impermeable layer thus protecting the underlying groundwater.

Mitigation Measures

There will be no emissions to groundwater from the proposed development. All wastes and other consumables will be stored in bunded areas.

Potential leachate from the handling of wastes within the building will be collected within a dedicated drainage system and discharged to foul sewer. This will minimise the potential for indirect emissions i.e. leaks to impact on groundwater quality.

3.6 Air

To determine the baseline air quality and subsequently assess the potential impact of the operation of the facility the following approach was taken:

• identification of the potential pollutants

Consent

- monitoring of pollutants to assess the current baseline air quality levels
- discussion of the potential impact to air quality during the operation
- predictive modelling of the impact of traffic derived pollutants on air quality
- mitigation measures to minimise these potential impacts.

The following components were identified as potential pollutants and were therefore, included in the assessment: sulphur dioxide (SO_2) , oxides of nitrogen (NO_x) , volatile organic compounds (BTEX) and particulate matter.

The baseline monitoring survey carried out during May 2004 shown that pollutant concentrations (NO2, SO2, BTEX and particulate matter) obtained are well below their respective limits or guidelines and are indicative of a rural environment.

Potential Impact of the Proposed development

- 1. Generation of dust; Dust is likely to be generated due to the movement of traffic and general on-site operations. It has been identified that on site mitigation measures to be introduce will significantly reduce the generation of dust to a minimal level.
- 2. Traffic pollutants; The movement of construction vehicles and the use of generators at the site during the construction phase of the development will generate exhaust fumes and subsequently contribute to potential emissions of SO₂, NO_x, CO, particulate matter and only any other VOC's including BTEX.

Mitigation Measures

- 1. Generation of dust: Dust will be minimised due to good site management practises, such as restricting the tipping of all waste to within the recycling building etc.
- 2. Traffic pollutants; The use of on site vehicles and movement of waste truck will be operated using good site practices such as all vehicles will be switched off when not in use to eliminate any unnecessary emissions.

3.7 Noise

A baseline noise survey (daytime and night time acoustic assessment) was carried out on 27th and 28th April 2004. Noise measurements were obtained from the four boundaries (namely north, south, east and west) and from one noise sensitive location adjacent to the site (namely the private dwelling to the north west, approximately 180m from the site).

The noise sensitive locations recorded noise levels typical of a busy industrialised areas with the dominant source being traffic.

Potential Impacts of the proposed development

Use of machinery on site; various types of machinery shall be used during operation of the facility. A timber shredder, trommel and bailer will be used as part of the operations of the facility. Using manufacturers specifications for this equipment has identified that the impact from this facility will be minimal.

Mitigation Measures

Use of machinery; During the operational phase several measures will be enforced to reduce the potential noise impact. These include: proper training of on site personnel in the minimising of noise generation, correct maintenance of on site plant machinery and monitoring of noise levels to comply with these control measures.

3.8 Traffic

The site is located approximately 0.5 km east of the M50 motorway, southeast of the Red Cow Roundabout. The site is located within the Ballymount Industrial Estate, and is located on a brownfield site that was previously operated as steelworks. The proposed development will use the existing entrance to the site. The site is bordered on all four sides by roads, namely the Ballymount Road Lower to the south, Turnpike Road to the west and to the north and east by internal industrial estate access roads.

It is estimated that a maximum of 180 inbound/outbound traffic movements a day will be generated from the proposed development.

Potential Impacts of the proposed development

- 1. Generation of traffic; It is anticipated that there will be 180 traffic movements a day at the site, which will have a minimal effect on the existing traffic network.
- 2. Atmospheric Emissions; Atmospheric emissions will be generated by the traffic entering and exiting the site (as detailed in the air section above).
- 3. Generation of nuisance; Mud may be accumulated on the road due to the movement of trucks

Mitigation Measures

- 1. There is currently a system of a weighbridge located at both the entrance and exit lanes of the site, which will ensure that there is no queuing at the weighbridge.
- 2. Traffic will not be allowed to park on the public roadway, or to impede the free flow of traffic on the adjoining road network.
- 3. A daily inspection of the industrial estate roads adjacent to the site will be undertaken and in the event of significant quantities of mud on the road, the road shall be swept accordingly.

3.9 **Climatic Factors**

The climate of the proposed development site is characterised as follows:

- prevailing wind is predominantly south-westerly; ٠
- wind conditions do not vary greatly over the entire year (3 m/s); •
- long term monthly mean precipitation ranging from 53 mm to 84 mm; ٠
- Ambient air temperatures ranging from 4.6 °C to 14.9 °C. •

It is not considered that the development will have any impact on the climate in this area.

3.10 Landscape and Visual Impacts

The site is located within a predominantly flat landscape, with the site being approximately 60m OD. The significance of the impact is rated as Imperceptible i.e. "An impact capable of measurement but without noticeable consequences" (EPA Guidelines on Information to be contained in EIS).

Potential Impact of the proposed development

150 The proposed development will be undertaken on an existing facility, with the existing buildings to be used as part of the process. It is proposed to construct two buildings near to the boundaries of the site. These buildings will be constructed in accordance with the conditions of the planning permission granted by South Dublin County Council, and will be designed in keeping with the buildings on site, and with the nature of the buildings surrounding the facility. 5003

The site is bordered to the south by regional roads, which services the industrial estate. The impact on the general public will be this aspect of the site. The existing earthen banks with additional tree planting shall reduce this overall impact.

Mitigation Measures

The selection of trees planted will be appropriate to the site conditions and narrow crowned trees will be selected for the traffic movement areas to minimise the risk of future damage from high vehicles.

The colour and finishes selected for all buildings at the facility will continue to be selected in accordance with an overall colour scheme and will be muted in shade and tone, taking into account the surrounding environment, the scale of the buildings concerned and the local landscape context.

3.11 CULTURAL HERITAGE

A Cultural Heritage Assessment that was carried out on the area identified that the nearest historical site is located over 500 m from the facility. There were no features or events of historical interest revealed during research into the local history of the townland.

During the groundworks operations at the site an qualified archaeologist will be on site to oversee operations. It is not, therefore, considered that the development will have any impact on the cultural heritage in this area.

3.12 MATERIAL ASSETS

It is contended that the material asset values of the surrounding area will not be significantly affected by the waste recycling and processing facility as the environmental impacts (air, noise and water pollution, visual intrusion, traffic impacts) of the proposed activity are shown to be minimal.

4.0 CONCLUSIONS

In summary, it is contended that the negative impacts of the waste recycling and processing facility can be minimised or eliminated by adherence to the mitigation measures. The Environmental Impact Statement, therefore, shows that no significant adverse effect on the environment should occur as a result of the operation of the facility

Consen

Bord na Móna, Technical Services

