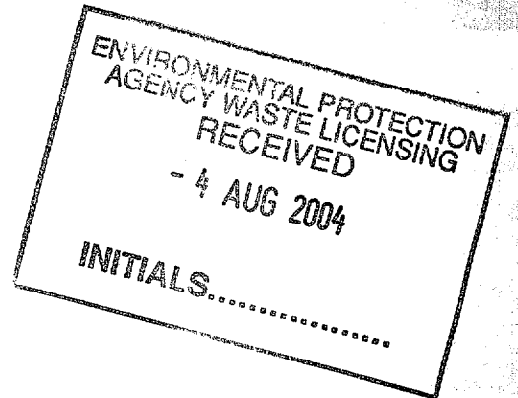


BORD NA MÓNA

BORD NA MÓNA ENVIRONMENTAL LIMITED

Environmental Protection Agency
Environmental Management & Planning Division
PO Box 3000
Johnstown Castle Estate
County Wexford

30th July 2004

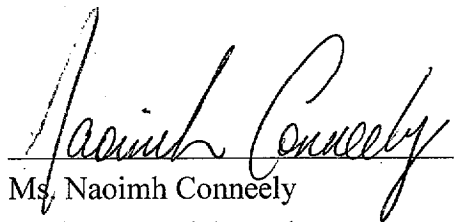


RE: Waste Licence Application and Environmental Impact Statement for Waste Recycling and Processing Facility at Ballymount Industrial Estate, Clondalkin, Dublin 22.

Dear Sir/Madam,

Please find enclosed 1 original and 3 copies of the Environmental Impact Statement (EIS) and 1 original and 3 copies of the Waste Licence Application for a Waste Recycling and Processing Facility, Ballymount Industrial Estate, Clondalkin, Dublin 22. Also enclosed is a cheque (Application Fee) for the sum of €40,000.

Yours Sincerely,



Ms, Naoimh Conneely
Environmental Consultant

Bord na Móna Environmental, Technical Services
On Behalf of Oxigen Environmental Ltd.

MAIN STREET, NEWBRIDGE, CO. KILDARE, IRELAND.
TELEPHONE: (045) 431201. INT: +353-45-431201. FAX: (045) 434207. INT: +353-45-434207.

REGISTERED OFFICE: MAIN STREET, NEWBRIDGE, CO. KILDARE.
REGISTERED IN IRELAND NUMBER: 303313

ENVIRONMENTAL PROTECTION
AGENCY WASTE LICENSING
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- 4 AUG 2004
INITIALS.....

SECTION 1

INTRODUCTION

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1.0 INTRODUCTION

Oxigen Environmental Ltd. propose to construct and operate a waste transfer facility at their premises at Ballymount Road Lower, Clondalkin, Dublin 22, which is located in the Ballymount Industrial Estate approximately 0.5km off the M50 Motorway, close to the Red Cow Roundabout.

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. (see Appendix 3).

Oxigen Environmental Ltd. was established as Wheelbin Services Ltd. in 1988, and changed its name to Oxigen Environmental Ltd. in 2000 to reflect changes in the waste industry, and in particular the company's approach to the waste problem. The waste transfer station at Ballymount Road Lower, will allow for the continuation and expansion of the successful 'green bin' initiative, while also allowing the company to expand its commercial and industrial business, while permitting the company to be located close to the markets from which waste is collected. Planning application for the waste transfer and recovery facility has been submitted to South Dublin County Council (Planning Register Number: SD04A/0354) in May 2004, which was granted permission on the 13th July 2004.

Oxigen Environmental Ltd. currently hold a Waste Permit (WPR 041) from South Dublin County Council for the acceptance and sorting of non-hazardous recyclable waste within the facility. This development entails an increase in the volume and the nature of waste accepted at the facility from approximately seventy thousand tonnes to approximately three hundred and fifty thousand tonnes of mixed waste.

Drawings No D.1 in Appendix 2 shows the proposed Site Infrastructure. A detailed description of the proposed development is provided in Section 2.

The development will be supported by its close proximity to the large domestic and commercial/business markets of the greater Dublin area and the existing road and services infrastructure serving the existing development and surrounding industrial estate.

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.

Bord na Mona Environmental were retained by Oxigen Environmental Ltd. to prepare an Environmental Impact Assessment/Statement (EIA/EIS) and a Waste Licence Application in respect of the proposed development.

1.1 DEVELOPMENT PROPOSAL – OVERVIEW

1.1.1 Need for development and Waste Management

Currently, 74 million tonnes of waste is generated every year in Ireland, with household, commercial, manufacturing and construction and demolition making up 15.5 % of this. (National Waste Database Report, 2001). While the national target of 50% recycling/recovery of C & D waste has been met (actual 65.4%), the recycling rate of household and commercial waste is still considered low at 13.3%. This dependence on the landfilling of waste has become a concern as it was noted in the National Waste Database Report 2001, that six of the ten waste management planning regions have less than three years remaining landfill capacity. Therefore moves towards more recycling and recovery centres have become a priority for many regions.

The Department of the Environment and Local Government also published the national waste policy statement in March 2002, entitled 'Preventing and Recycling Waste - Delivering Change' which evolved from and is grounded in the 1998 policy statement 'Changing Our Ways.' The 2002 waste policy statement 'Preventing and Recycling Waste - Delivering Change' addresses the factors and practical considerations that are relevant to the achievement of Government policy objectives and for the prevention of and recovery of waste.

The 2002 Waste Policy Statement:

- highlights the necessary disciplines that must be imposed within waste management systems to secure real progress on waste prevention, re-use, and recovery;
- outlines a range of measures that will be undertaken in the interests of minimising waste generation and ensuring a suitable expansion in re-use and recycling performance; and
- identifies issues and possible actions which require further systematic consideration.

The 2002 waste policy statement concentrates on the 3 highest steps on the waste hierarchy recognising, as do the local and regional waste management plans, that emphasis must be given to the widest practicable realisation of waste prevention, minimisation, re-use, materials recycling and biological treatment before energy recovery through thermal treatment and final disposal in landfill.

The Dublin Waste Management Plan represents common regional action by the four Dublin Authorities –Dublin City Council, Fingal County Council, South Dublin County Council and Dun Laoighaire – Rathdown County Council, and was adopted in December 1998. A key objective of the plan is to reduce dependence on landfill and increase private sector involvement in waste management. The Waste Management Plan was designed to dramatically reduce the dependence on landfill, with the 80% that was being sent to landfill in 1997 required to be reduced to 16% in 2004, through the implementation of extensive recycling schemes and the introduction of thermal treatment schemes.

It is anticipated that this target can be achieved through the diverting of C&D waste, and increasing the recycling rate from 20% (for all waste streams in 1997) to 60%. The plan also sets out ambitious waste minimisation targets aiming to reduce annual growth rates for all categories of waste to 0.5% in 2003 and to 0% by 2007.

Implementation of this waste management plan has seen a significant increase in recycling throughout the regions. Approximately 300,000 green bins (serving approx. 80% of the households) have been distributed to date. This green bin scheme is operated and managed in all four Dublin Local Authority areas by Oxigen Environmental Ltd. and provides for the door to door segregation of 'dry' recyclable material such as paper, aluminium cans, steel, mixed cardboard, cardboard cartons (tetra pak). Other progress within the Dublin region has been the appointment of Environmental Awareness Officers, who advise business on minimisation and education programmes, tendering of a Waste to Energy incinerator, provision of additional resources for tackling litter, and the increase in the number of recycling facilities that are available throughout the region. This has led to a reduction in the waste growth to below 1.5% annually.

Hazardous waste generation and disposal has shown little progress in waste reduction due to the lack of suitable landfill sites, and that while waste growth has reduced, it is still higher than the target level set out in the plan. Therefore, each county council needs to improve its existing waste management infrastructure to ensure that the targets are met.

1.1.2 ALTERNATIVES CONSIDERED

The existing waste management strategies governing the site of the proposed development are outlined above. The proposed waste transfer development at the Ballymount Industrial Estate will provide the size and type of facility required to continue the successful 'green bin' initiative (which currently operates in its existing leased facility at Clonshaugh), while incorporating the best available technologies with regard to 'dry' recyclables in an attempt to expand the number of current waste streams incorporated within the scheme. The site will also allow for Oxigen Environmental Ltd. to expand its customer base in the Commercial and

Industrial sectors, therefore incorporating the requirements of the government policy on segregation at source.

The location of the waste transfer station within the Ballymount Industrial Estate will have three main advantages:

- It is located within an industrialised area with a large customer base, which thereby reduces the transportation distances for the waste
- It is located in close proximity to supporting waste infrastructure such as landfill facility etc..
- A good road, services (namely water and foul sewers) and telecommunications infrastructure already exists at the site.

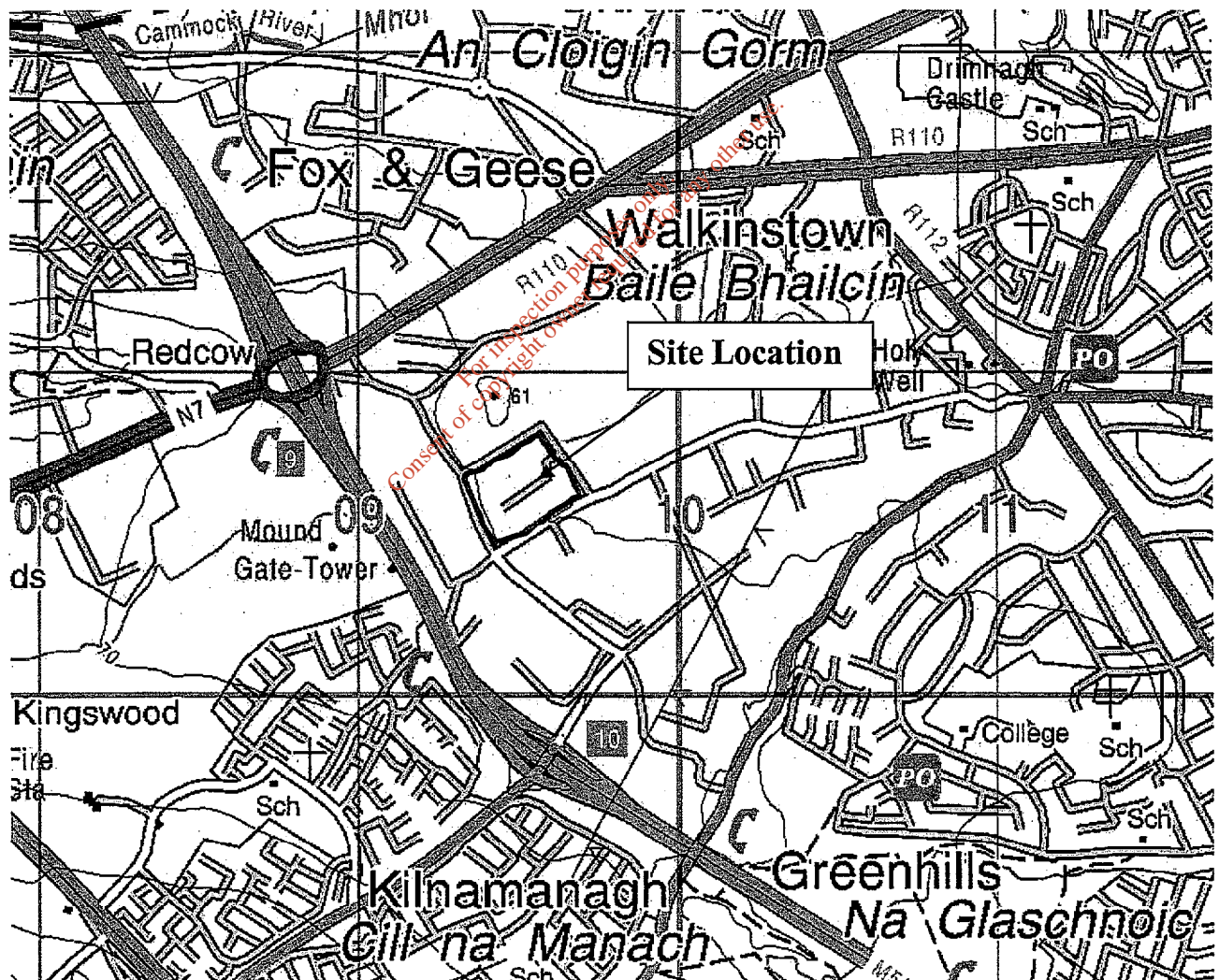
This will reduce the overall cost of recycling of the material, therefore making recycling a more viable option than diverting to landfill.

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1.2 SITE DESCRIPTION

The proposed development site is part of the overall Ballymount Industrial Estate. The site was historically used as a steel works that was operated by Corus Steel (formerly The Irish Steel Company), until December 2003 when it was purchased by Oxigen Environmental Ltd. The total area of the site is eighteen acres, six acres of which was subsequently sold to Dublin City Council for the operation of the 'green bin' initiative. Oxigen Environmental Ltd have been contracted to operate and manage the 'green bin' scheme within the functional areas of the four local authorities within Dublin, and therefore the entire site will be operated and managed by Oxigen Environmental Ltd..

Figure 1.2/1 Regional Location of Proposed Development Site



The existing entrance to the site is located to the north east of the facility and enters on to an unnamed road, which can be accessed via the Turnpike Road or the Ballymount Road Lower.

This entrance will also service the proposed development. The site is located within an industrial estate setting and is surrounded on all four sides by commercial/industrial units.

The site is predominantly flat, with a large mound of earth located at the southern and western boundaries of the site. The site topographical level ranges from a low of 59.27m OD to 64.48m OD, with the buildings height of 72.97 m OD.

The quaternary sediments underlying the site are glacial in nature and originate from the Midlandian glaciation. These sediments are referred to as the Dublin Till, and consist of firm to stiff sandy gravely clays with clast (i.e. varying in size from cobbles to boulders) 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 (L1)*.

The site is located within the River Liffey catchment, in the sub-catchment of the River Cammac, via the Robinhood stream. (refer to section 3.4; Hydrology) .

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1.3 ENVIRONMENTAL IMPACT STATEMENT (EIS)

An Environmental Impact Statement (EIS) is required to accompany a Waste Licence Application, where the volumes of waste are above a certain threshold volume (greater than 25,000 tonnes per annum), as outlined in Schedule 5 Part 2 of the Planning and Development Regulations, 2001 (S.I. 600 of 2001). The proposed volume throughput of the waste transfer station is above the threshold value and therefore an EIS will accompany the Waste Licence Application to the Environmental Protection Agency.

This Environmental Impact Statement is based on the structure as outlined in the Planning and Development Regulations, 2001, and in accordance with the following Environmental Protection Agency documents:

'Advice notes on Current Practise in the Preparation of Environmental Impact Statements' (1995); and

'Guidelines on the Information to be contained in Environmental Impact Statements' (2002)

In determining the potential impacts of the operation of the waste transfer facility the Environmental Impact Statement focused on impacts that 'are environmentally based', 'are likely to occur' and to 'have significant and adverse effects' (EPA Guidelines on Information to be contained in Environmental Impact Statements, 2002)

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1.4 STRUCTURE OF THE ENVIRONMENTAL IMPACT STATEMENT

Schedule 6 of the Planning and Development Regulations, 2001 sets out the information to be contained within an EIS. The structure of this Environmental Impact Statement adopts a sequence, which is broadly in line with these requirements. The sequence is as follows:

- A non-technical summary
- A description of the proposed development
- A description of the baseline receiving environment
- The potential and predicted impacts of the development and mitigation of those impacts.

The existing environment and the subsequent impacts of the development are explained by reference to its possible impact on the following environmental topics:

Human Beings	Flora and Fauna
Soil & Geology	Hydrology
Hydrogeology	Air
Noise	Traffic
Climatic Factors	Landscape
Cultural Heritage	Material Assets
Interactions of the above	

Where appropriate, throughout the document the impacts of the proposed development on each of the above environmental topics are dealt with under the following headings:

- 1 Introduction
- 2 Baseline Environmental Assessment
- 3 Environmental Impacts
- 4 Mitigation Measures

Supporting documentation and maps is appended to the document.

1.5 CONSULTATION AND SCOPING

A range of government departments, agencies and bodies, non-governmental organisations and interest groups were consulted during the preparation of the Environmental Impact Statement in order to ensure that all relevant issues were addressed. Specific concerns raised relating to any issue, environmental or otherwise, could subsequently be considered via design or procedural modifications or by the implementation of appropriate mitigation measures. Appendix 1 details the range of bodies which were consulted and the views expressed by same.

Pre-licence application consultation meetings were held with the EPA to determine the scope of the investigations required for the waste licence application.

During the internal scoping phase, several aspects of the long-term operation of the development were identified as requiring close attention: they included waste acceptance procedures, environmental monitoring, potential loads on existing water and wastewater treatment resources and construction impacts associated with air and noise. Table 1.5/1 overleaf indicates the possible impacts of the facility.

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TABLE 1.5/1: MATRIX FOR THE POSSIBLE ENVIRONMENTAL IMPACTS ASSOCIATED WITH THE WASTE RECYCLING AND PROCESSING FACILITY AT BALLYMOUNT ROAD LOWER, CLONDALKIN, DUBLIN 22.

	Structure	Water Emissions	Abstraction	Air Emissions	Traffic	Noise & Vibrations
Human Beings	Visual aspects	Possible impacts on local groundwater supplies	Possible impacts on local groundwater supplies	Dust emissions,	Increased traffic Traffic emissions	Noise & vibrations generated from site Noise generated from traffic
Flora & Fauna	-	-	-	Dust emissions,	Increased volumes of heavy traffic Traffic emissions	Noise & vibrations generated from site Noise generated from traffic
Soil & Geology	-	-	-	-	-	-
Hydrology	-	-	-	-	-	-
Hydrogeology	-	Possible Groundwater impact	Possible impacts on local groundwater supplies	-	-	-
Air	-	-	-	Dust emissions	Traffic emissions	-
Climate	-	-	-	Microclimate Acid rain/ greenhouse effect	Traffic emission	-
Landscape	Visual aspects	-	-	-	-	-
Material Assets	Property value, visual aspect	Possible impacts on local groundwater supplies	Possible impacts on local groundwater supplies	Property value: dust & emissions aspect	-	Property value: noise & vibration aspects
Cultural Heritage	Existing undiscovered archaeological features	-	-	-	-	-

TABLE 1.5/2: SUMMARY OF THE ENVIRONMENTAL IMPACTS OF THE WASTE RECYCLING AND PROCESSING FACILITY AT BALLYMOUNT ROAD LOWER, CLONDALKIN, DUBLIN 22.

	Human Beings	Flora	Fauna	Soil & Geology	Water	Air	Climate	The Landscape	Material Assets	Cultural Heritage
Human Beings		none	none	none	3.4, 3.5	3.6	none	3.10	3.12	none
Flora	none		none	none	none	3.6 & 3.2	none	none	none	none
Fauna	none	none		none	none	none	none	none	none	none
Soil & Geology	none	3.2	none		none	none	none	none	none	3.11
Water	3.4 & 3.5	3.4 & 3.5	3.4 & 3.5	none		none	none	none	3.1 & 3.4	none
Air	3.6	3.6 & 3.2	none	none	none		none	none	none	none
Climate	none	none	none	none	none	none		none	none	none
Landscape	3.10	none	none	none	none	none	none		3.12	none
Material Assets	3.12	none	none	none	3.1 & 3.4	none	none	3.12		none
Cultural Heritage	none	none	none	3.11	none	none	none	none	none	
Traffic	3.6 & 3.8	none	none	none	none	3.6	none	none	none	none

Note: This Table identifies the Section of the EIS where impacts or effects on interactions between environmental media are discussed. Any interactions which will not be impacted upon or affected by the facility are not described in the EIS.

1.6 CONSULTING TEAM

The following specialists contributed to the areas indicated:

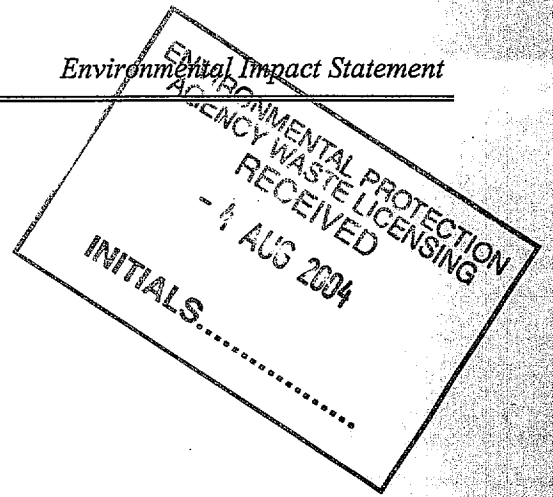
Environmental Impact Assessment Project Management:

Bord na Móna Technical Services,
Main Street,
Newbridge,
Co. Kildare.

Human Beings
Soil & Geology
Cultural Heritage
Surface Water Assessment
Hydrogeological Assessment
Air Assessment
Noise Assessment
Traffic & Road Assessment
Landscape Assessment
Flora & Fauna Assessment
Climate Factors
Material Assets

Bord na Móna Technical Services,
Main Street,
Newbridge,
Co. Kildare.

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SECTION 2

DESCRIPTION OF THE PROPOSED WASTE RECYCLING AND PROCESSING FACILITY

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2.1 PROPOSED OPERATIONS

2.1.1 General overview

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 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' recyclables 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.

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.

2.1.2 Site Design

The proposed site layout is shown on Drawing No. D.1, Site Infrastructure in Appendix 2. The site is accessed via access roads from the Turnpike Road and from Ballymount Road Lower. Entry onto the site will be restricted to employees of Oxigen Environmental Ltd. or suitably permitted/licenced waste contractors at all times during the operation of the facility. There is an existing entrance, which is located at the north eastern boundary. It is proposed to install a second entrance, which will be located south of the existing entrance. This entrance will not be used during the operation of the facility (except in the event of access required by emergency vehicles), as all vehicles entering the site will use the existing entrance.

The site is serviced by electricity from the national grid. The site has an existing telecommunications network servicing the main office building and the facility offices within the larger operations building.

The existing site is serviced by the South Dublin County Council water main. The water main connection will be sufficient to cater for the peak demands of the proposed facility. This connection will not impact on the water supply in the locality.

The proposed development will connect to the existing foul sewer within the Ballymount Industrial Estate. This sewer discharges to the Dublin trunk sewer system and outfalls finally into the Ringsend Treatment Works. Leachate containment provisions ensure that waters that have come in contact with the waste is not discharged into the surface water system within the vicinity of the site, but discharged into the foul water system. The foul sewer drainage network will be completely separated from the surface water system. Drawing No. D.1: Site Infrastructure in Appendix 2.

Surface water run-off from the hardstanding areas is collected within the drainage channels that are located across the site, and transports the surface water towards the north eastern section on the site. All surface water drainage will be discharged, via an oil interceptor, to the storm sewer which serves the Ballymount Industrial Estate. This storm sewer collects surface water run-off from the adjacent industrial properties, and ultimately discharges to the River Camac, which is a tributary of the River Liffey.

For details of plant sheds, garages and equipment compounds please see Drawing D.1: Site Infrastructure. An office building houses all administrative activities, and staff facilities (i.e. canteen, toilets etc.).

There are currently two 50 foot Avery weighbridges located at the entrance of the facility. The entrance is segregated into an entrance and exit section, each of which will be controlled by a weighbridge operator. It is proposed to connect the existing weighbridge to a digital weight software programme (Gensys by Precia Molen) that will control all vehicles entering and exiting the site.

It is proposed to install a sufficiently sized and bunded quarantine area at the facility, which will be constructed in line with the planning requirements of South Dublin County Council.

The general public will not have access to the facility at any time.

2.2 PROPOSED CONSTRUCTION DEVELOPMENT

The proposed development of the site will require the construction of

- two additional buildings (a maintenance shed, and a waste transfer building),
- increased hardstand cover,
- extended drainage and sewer infrastructure,
- to develop the operational infrastructure (i.e. development of quarantine area, water holding tank etc), and
- final plumbing and electrical installation of all plant at the site.

The earthworks to provide the site for the proposed structure shall require the removal of the existing grass covered areas with the exception of the earthen banks to the south of the facility and the areas around the office block.

It is expected that the site will be developed within approximately six months of grant of planning permission, with the site being fully operational by 2006. This section of the EIS describes the construction phase including infrastructure design and construction procedures.

The site development works and construction sequence for the proposed development will, in general, comprise the main steps set out below. All site development works shall be undertaken in conjunction with all planning conditions as set by South Dublin County Council and in compliance with any specific requirements that may be set by the EPA within the waste licence for the facility. However, the schedule of works is subject to change depending on site conditions, planning conditions, weather etc.

2.2.1 Site Development Works

The site development works will be undertaken as follows:

1. Identification of active services on site.
2. Diversion of all necessary services e.g. electricity supply, water etc.
3. Undertaking of earthworks cut and fill to include cart away of topsoil to establish formation level.
4. Construction of below ground services to site – foul, surface and watermain.
5. Construction of additional services; connection to existing on-site drainage infrastructure – in liaison / agreement with Local Authority.
6. Construction of hardstanding areas – vehicle parking areas, clean skips storage areas etc.
7. Construction of above and below ground services (Mechanical and Electrical) - Telecom, Electricity, etc. in liaison / agreement with Services providers.
8. Construction of two new building structures and above ground infrastructure i.e. waste quarantine area
9. Installation of all plant and machinery in completed buildings.

2.2.2 Preliminary Works

The first step of the site development works will be to identify all site services i.e. surface water and foul sewer, electricity, water mains etc. The identification of these services at the earliest possible stage will allow safe uninterrupted development of the site and will reduce the potential for any environmental pollution to occur. Once these services have been identified any service which requires diversion will be moved or altered, in liaison/agreement with the service providers.

The necessary excavation to achieve the foundation level for the concrete retaining structure will then be undertaken and will be done using standard construction methods. Hard core fill will also be imported at this stage of the project to establish the formation level of the development.

2.2.3 Construction Works (Phase I)

The construction of all the proposed below ground services to the site will be installed at this stage of the project. The proposed surface water and foul sewage systems are shown on Drawing No D.1 in Appendix 2.

The proposed construction areas will ultimately be connected to the existing drainage (surface water and foul) infrastructure. The ground works for the connecting pipe network shall be developed at this stage.

A mains water distribution system will be provided as part of the development infrastructure. The proposed development will be served by the South Dublin County Council public main serving the existing facility. The connection to the water mains will be carried out in accordance with local authority requirements and the planning permission for the development. The watermain connection will be sufficient to cater for the peak demands of the proposed additional buildings.

Other Services

The existing ESB supply will be extended to the newly constructed building via an underground distribution cabling system. This connection will be made in conjunction with the ESB.

A network of telecommunication cable ducting will also be provided as part of the development infrastructure.

The external lighting scheme will be in accordance with the Guideline Notes for the reduction of light pollution as issued by the Institute of Lighting Engineers to ensure that:

- Lights are switched off when not required and outside agreed hours.
- The use of specifically designed lighting equipment that minimises the spread of light
- Areas are not over lit. In non process areas a general illuminance level of 20 lux will be provided in the low risk areas and 50 lux in the high risk areas. In loading bays, a general illuminance level of 150 lux will be provided.

Hardstanding Areas

All additional hardstanding areas will be constructed at this stage of the development, and shall be completed to the same standard as the existing hardcore material. Surface water runoff from these areas will discharge via the newly constructed surface water drainage system.

2.2.4 Construction Works (Phase II)

Once all of the steps above have been carried out the site will be ready for the construction of the two additional recycling buildings. These will be constructed in conjunction with the requirements of the planning permission and agreement from the Environmental Protection Agency.

2.2.5 Construction Procedures

The earthworks contractor will be required to manage the works and control dust emissions, run-off, noise, sequencing of earthworks operations, stockpiling etc.

Earthworks are programmed to commence immediately following grant of planning permission from South Dublin County Council. Details of the construction procedures shall be submitted to the Environmental Protection Agency for agreement, when final designs and construction schedules have been formulated.

Hours of Work

Site work will normally be restricted to normal working hours with the exception of essential activities such as repairs and refuelling. Generally, site work will not be permitted on Sunday or at night-time except where programme constraints or safety concerns necessitate it.

Site Management

The site will be managed by the main contractor. The site manager will oversee all of the construction activities including:

- Traffic management on-site including scheduling of deliveries.
- Site security.
- Control and management of site services.
- Approval of development proposals.

2.2.6 Wastes and Emissions

During site development and construction works, the generation of waste and emissions will be as follows:

Solid Waste

Generally, solid waste arising during these phases will be retained on site insofar as is practicable. However, some material may be unsuitable for reuse or acceptable at the on-site waste recycling and processing facility. Any off-site waste disposal will be agreed with the Regulatory Authority, prior to transport off site. A licensed waste contractor will be used for off-site disposal of waste arising during earthworks and construction.

Emissions to Atmosphere

The operation of mobile plant and equipment will give rise to emissions to atmosphere of combustion gasses, sulphur dioxide, oxides of nitrogen and particulates.

Fugitive dust emissions will arise through wind assisted dust generation during earthworks as topsoil is stripped and the site is levelled. Where required, water bowsers will be used to dampen down soil, thereby minimising fugitive dust emissions. A temporary wheelwash and roadsweeper will also be used if necessary to control and minimise the effects of dust generation on the site.

Noise

The operation of mobile plant and equipment, including HGVs will give rise to noise emissions during earthworks and site development. Construction equipment will comply with SI 320 of 1988: EC (Construction Plant and Equipment Permissible Noise Levels) Regulations, 1988, with consideration to be taken of BS 5228:1984: Noise Control in Construction and Open Sites.

Waste Water

There will be no sources of wastewater arising from earthworks or construction activities on site.

Employment

Employment within the site development phase of the proposed development is estimated at 10 – 15 employees, which will be construction based employment

2.3 WASTE ACCEPTANCE AND HANDLING

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

Skip waste/Transfer waste

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.

Wastes (skip waste, transfer waste and green bin waste) will be delivered by Oxigen Environmental Ltd employees and permitted/licenced 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 be verified by the computer system prior to the barrier being raised.

The driver will be directed to the appropriate recycling building where the waste will be tipped onto the floor. The load will be 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.

It is also proposed to accept bailed material from the Oxigen Environmental Ltd. facility in Robinhood Industrial Estate (Waste Licence Register No. 152-1) for storage. This waste shall only be stored on site for a maximum of overnight during weekdays, and over two days during weekends, prior to its removal to a licenced landfill facility the following day.

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).

2.4 WASTE QUANTITIES

Oxigen Environmental Ltd. purchased the site at Ballymount Industrial Estate in December 2003. The site was purchased to provide the necessary space requirement for the successful 'green bin' initiative, as well as to allow Oxigen Environmental to expand their commercial and industrial customer base. The site will initially be operated in compliance with the conditions of the Waste Permit (WPR 041), which was obtained from the Environmental Services of South Dublin County Council in March 2004. Under this permit the acceptable waste includes paper/cardboard, metal, plastics, glass and construction and demolition waste.

Under the conditions of the Waste Permit hazardous waste will not be accepted at the facility. Given the nature of the waste (i.e. domestic and commercial) and the method of collection (i.e. skips and commercial wheelie bins) hazardous waste may inadvertently be admitted to the site. Waste that enters the site is tipped within the recycling building and inspected for hazardous waste. Hazardous waste, such as fluorescent lights, paints, batteries will be segregated into designated bunded storage units within the facility and subsequently forwarded to an authorised disposal agent. Any other hazardous waste that may be found within a load is segregated and stored within the bunded quarantine area until either it can be returned to source (if determinable) or until an authorised disposal agent can be sourced.

There is a weighbridge located at the entrance and exit of the facility, see Drawing D.1: Site Infrastructure in Appendix 2. Therefore accurate waste acceptance figures will be available upon commencement of the operation of the facility under the Waste Permit.

The categories of waste deemed suitable for segregation and subsequent recycling is very much dependent on available markets for such materials. As such, market forces will dictate the feasibility or otherwise of segregating other waste types. It is predicted that up to 97% of the 'green bin' waste and 80% of 'skip' waste accepted at the facility shall either be recovered or recycled.

2.5 OPERATIONAL DETAILS

Oxigen Environmental Ltd waste recycling and processing facility will operate 24 hrs a day seven days a week (with the exception of mechanical devices which will be restricted to operating between 06:30 to 23:30), 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). A list of all relevant employees and their respective duties and responsibilities are detailed in Table 2.5 below.

Title	Staff Member	Qualification	Responsibility
Managing Directors	Sean Doyle & Sean Rooney	20 years experience in the waste industry	Overall responsibility for the management of the site and maintenance of the licence. Delegation of authority and responsibility to ensure the effective management of the facility
General Manager	Peter McLoughlin	20 years experience in business management	Day to day supervision of operations as directed by the Managing Director.
Operations Manager	Patrick Mongey	15 years experience in Engineering	Management of operations as directed by the General Manager.
Health & Safety Officer	Derek Rosarius	10 years experience	Maintain H & S procedures
Facility Manager (and deputy)	To be appointed		Day to day operations at the site and waste permit/licence compliance
Mechanic			Maintenance of machines and vehicles
Vehicle Operators			Carry out daily operations as directed by the Operations Manager
Architectural/Engineering Consultant			Responsibility includes carrying out routine site visits, inspections / certifications and overall supervision of developments at the site.
Environmental Consultant			Responsibility includes ensuring that none of the activities on-site have a detrimental effect on the environment.
Administrative Staff			Responsible for the day to day administration of the facility and accounts.

2.6 RAW MATERIALS/ENERGY/PLANT

It is proposed that the main requirements for fuel on site will be road diesel, marked gas oils central heating oil and natural gas. As detailed in the previous section fuels will be stored on site in appropriately banded, integrity tested tanks, which will allow for safe and contained dispensing of the fuel.

2.7 ENVIRONMENTAL NUISANCES

The following measures will be undertaken at the facility to reduce the potential for nuisances arising from on-site activities:

- Waste operations on site will ensure that waste (i.e. either in sealed containers or covered) is never exposed and as such no food source will be readily available for localised bird populations.
- A daily litter patrol of the site perimeter and access road will be undertaken. Where the escape of litter has occurred it is immediately collected and returned to the site
- During the routine inspections for litter, an inspection of the access road and the facility will be inspected for mud deposition, especially during periods of wet weather. Any mud will be removed through the washing of the area.
- All movements into and out of the site will be controlled by the site manager/plant operator.
- Pest control measures undertaken at the facility will consist of setting of poison by an independent specialist pest control company, throughout the site. Fly nuisance will be minimised by the rapid removal of degradable waste off-site, the washing of the floor of each of the operations buildings with disinfectant, the covering of all compacted waste and ensuring all skips stored outside are kept empty and clean.

2.8 DECOMMISSIONING AND AFTERCARE

Oxigen Environmental Ltd. have set out plans in the unlikely event of facility shut down, or a planned cessation for a period of greater than six months of all or part of the site involved in the licensed activity. Should either of the above conditions occur Oxigen Environmental Ltd. will decommission, render safe or remove for disposal/recovery, all materials, waste, ground, plant and equipment that may result in environmental pollution. This plan will be reviewed annually by Oxigen Environmental Ltd..

Following implementation of the plan, Oxigen Environmental Ltd. will produce a validation report that demonstrates its successful implementation. This report will confirm that there is no continuing risk of environmental pollution to the environment from the site.

This report shall address: -

1. Disposal of raw materials,
2. Disposal of wastes,
3. Decommissioning of plant and equipment,
4. Disposal of obsolete equipment,
5. Results of monitoring and testing,
6. The need for ongoing monitoring or investigations.

This report will be submitted to the Agency within three months of execution of the Plan.

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