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GREENCLEAN WASTE MANAGEMENT LTD

ENVIRONMENTAL IMPACT ASSESSMENT

For:

Waste Recycling Centre

At Coldwinters

Blakes Cross, Lusk

Co. Dublin

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1. INTRODUCTION AND OVERVIEW

1.1 Introduction

Greenclean Waste Management Ltd. presently operate a Recycling Centre under a Waste Permit at Coldwinters, Blakes Cross, Lusk, Co. Dublin. The existing facility is located in an industrial estate comprising an area of 1.12 ha and it is proposed to extend the facility to the east of the existing site to occupy an area of 2.33 ha in total. The proposed new facility will process up to 95,000 tonnes of non-hazardous commercial, industrial, household, construction and demolition waste per annum. This document comprises the Environmental Impact Statement (EIS) that is required for the proposed development.

1.2 Overview of the Proposed Development.

Greenclean Waste Management Ltd. Ltd. presently operates a non-hazardous commercial, industrial, household, construction and demolition waste collection and recycling business, which services the greater Dublin region. The business presently operates from the Coldwinters site at Blakescross, Lusk, Co. Dublin. The existing facility is permitted to handle 14,500 tonnes per annum.

The company propose to extend the existing site to 2.33ha and increase the tonnage to 95,000 tonnes per annum.

The site was previously used and owned by Farringtons for the storage and packaging of animal feed, fertiliser, grain and seed products. There have been a number of planning applications on the subject site and on the adjoining sites to north and south. The applications are generally for industrial-related uses, including the construction of warehouses and other ancillary facilities for the companies operating from the sites.

Existing infrastructure at the Greenclean site includes a 2,533 m^2 warehouse, 103 m^2 office space and a 8,605 m^2 hardstanding yard. It is intended to extend the Coldwinters site to increase the operating capacity and provide parking and storage facilities for plant and equipment.

The facility consists of a waste recycling centre that sorts and segregates different types of non-hazardous, solid, recyclable waste. Waste comprises in the main cardboard, paper, plastics, ferrous and non ferrous metals, clay, stones, bricks, blocks, concrete, glass, textiles and wood. Waste segregation is carried out by a combination of mechanical and manual sorting processes. Waste is loaded onto a conveyer belt where it is segregated by various methods including, screening (to separate by size), magnet use to extract ferrous metals, eddy currents to separate out the non ferrous metals, fans (windshifter) to extract light materials such as paper and plastics, and handpicking to effect final waste segregation. A shredder is also used to 'size' the material and some of the segregated wastes such as paper, cardboard and plastic are baled.

All waste handling is carried out indoors inside the main warehouse structure. This eliminates the potential for windblown litter and provides an effective control system for noise, odours and dust. It is proposed that only 10% of the waste processed at the facility will be domestic waste and this will therefore not give rise to any significant odours or vermin issues. Handling the waste inside a fully contained building with roof, concrete floor and concrete lower walls eliminates the potential for leachate generation as rainfall does not gain access to the waste. In the event that any small quantities of leachate are generated from the baling process or from floor washdown the leachate is contained inside the building and directed by falls and a contained drainage system to underground contained concrete sumps. The sumps will be monitored frequently and if leachate accumulates it will be pumped into a road tanker and exported off site to an authorised waste water treatment plant.

Segregated wastes are stored temporarily inside the main warehouse structure awaiting collection and transportation to other recycling facilities. It is planned that at least 65% of the waste will be recycled and recovered. The remainder will be disposed at EPA licensed landfills or exported to approved recycling/disposal facilities.

All waste delivered to and from the site is transported in fully contained trucks with tarpaulin covers and complies with all waste collection permit requirements.

1.3 Location and History

The location of the site is shown on figure 1.1.1 and figure 1.1.2 with a National Grid Reference of 319990E and 251990N. The site is located in a small industrial park at a height of approximately 10 m.OD along the former N1 national primary road (downgraded to the R132 since the opening of the M1 motorway). The N1 forms the western boundary of the site whilst agricultural land forms the eastern boundary. A small stream, the Ballough stream, draining to the Rogerstown Estuary runs from north to south through the centre of the proposed extended site. An Eastern Health Board care centre and a garden centre bound the northern side. The south of the site is bounded by a number of small industrial units and a large warehouse that formerly housed Williames Airfreight. In the wider surrounding area, the main land use is agricultural with tillage and arable farming as well as scattered rural housing. The nearest residential unit is the Eastern Health Board care centre to the north of the site adjacent to the garden centre.

Greenclean Waste Management Ltd. currently operate their existing Coldwinters facility under Waste Permit No. WPT43 issued by Fingal Co.Co. As it is proposed to expand the volume of material handled an application for a Waste Licence is being submitted to the EPA.

1.4 Site Facilities

1.4.1 Infrastructure

The Coldwinters site is situated adjacent to the N1 (R132), M1 and convenient to the M50 motorway with access to a number of national primary routes. Other infrastructure currently in place at Blakes Cross include:

- three phase electricity
- telecommunications infrastructure
- water mains,
- stormwater drainage, and
- foul sewerage.

Following discussions with the Fingal Co. Co. Drainage Division Greenclean Waste Management Ltd. installed and commissioned their own proprietary waste water treatment plant (Biocycle treatment plant or equivalent) to process the domestic and sewage effluent generated on the site. The treated effluent is discharged to a percolation area designed in accordance with the EPA standards and is located in the northwestern corner of the site.

1.5 Planning Context

1.5.1 Site Description

The site is located within a cluster of buildings in industrial use, at the Blake's Cross junction. The surrounding area is predominantly given to agricultural-related land uses, including tillage and arable farming, with scattered individual houses. However, the subject site is surrounded by commercial and industrial uses, with warehouses occupied by workshops, and used for storage, logistics and transportation of products. Furthermore, the presence of the N1, M1 and the close proximity of Blake's Cross to Dublin Airport has seen the growth of logistics and other light industrial uses, which rely on good road access.

The site was most recently owned by Farringtons. They are producers of animal feeds, fertilisers, grain and seed merchants. The facility, handled approximately 25,000 tonnes of fertiliser and animal feed and 10,000 m^3 of grain each year. Some of the adjoining industries include industrial-type or agri-related businesses.

The existing site measures 1.12 hectares (measures to the mid-stream eastern site boundary) and has 150 metres of road frontage along the N1. The site is accessed directly from the N1 road at the southern end of the western boundary.

The site is presently covered by an area of hard standing, and is occupied by a large warehouse with an area of 2,533m^2 and an existing office with a floor area 103m^2. This warehouse comprises a mass concrete base wall, which has upper walls and roof with a double-pitched roof profile, clad with ridged cement asbestos cladding.

The site boundary comprises a belt of tall leylandii along the northern boundary, with a 1.8 metre wire-and-post fence. The vegetation, which is well-established and dense, provides considerable screening. To the east is agricultural land. To the south is a security fence, and to the west (bordering the N1) is a 1.8 metre post-and-wire fence with some hedging.

1.5.2 Dublin-Belfast Economic Corridor

The development of the Dublin-Belfast motorway will provide the impetus for significant economic development over the next decade. This M1 motorway, provides for improved transport and therefore causes the improvement of other infrastructure, and therefore increased trade and the widening of markets. Section 3.1.1 of the Fingal County Council Development Plan states the following policy objective with regard to the Dublin-Belfast Economic Corridor:

"Fingal County Council is committed to the European Commission's broad aim of improving transportation networks between and feeding major cities, in order to stimulate inter-regional and international networks and economic co-operation. Within this context, the Council recognises the importance of the Dublin-Belfast Economic Corridor and its potential to stimulate equitable economic growth and create sustainable employment throughout Ireland."

Section 3.1.3 of the Fingal County Council Development Plan states the following specific objectives for the Dublin-Belfast Economic Corridor:

- To focus future development along the corridor in such a way as to enhance Fingal's existing industrial clusters, particularly in computer hardware and software, IT, pharmaceuticals and electronics;
- To facilitate the development of small indigenously-owned companies throughout the County which will benefit from the enhanced inward investment and tourism activities associated with the Corridor;
- To facilitate equitable economic development within the County and, in particular, to ensure that less developed areas within Fingal benefit from future developments associated with the Corridor;
- To market and promote Fingal, particularly in Northern Ireland, as an attractive tourist destination in the main population centres along the Corridor.

1.5.3 Fingal County Council – Development Plan Zoning

1.5.3.1 Development Plan Zoning

The site is situated within an area zoned "Objective B" – "to protect and provide for the development of agriculture and rural amenity". With regard to the development strategy for such rural areas, the Fingal County Council Development Plan states that the rural area is seen as a landscape, agricultural and rural resource, which must be protected from urban-based development.

Section 7.3 of the Fingal County Council Development Plan states the following as development objectives for the rural area:

- To promote sustainable social and economic development in the rural areas including the coastal corridor;
- To protect and improve high amenity areas and to prohibit development not directly related to those areas' amenity potential or their use for agriculture including hill farming;
- To ensure that new development does not impinge on landscapes of special value or sensitivity or on areas designated as sensitive landscapes.

The Development Plan states, in relation to development within areas zoned "B", that any new development requiring a rural location should not seriously detract from the agricultural use of these areas or the landscape character area, or intrude on the visual amenity of the area. With regard to the potential of the establishment of a Recycling Centre within an area zoned "B", the Development Plan states that such a land use would be "Open for Consideration". The subject site is not situated within a landscape area with any special designation, for reasons of scenic or habitat value. Furthermore, the site is located in an existing industrial park, adjacent to the N1 road and will have minor, if any, visual impact on the surrounding countryside and will not detract from the visual amenity of the area.

Although situated within an agricultural-zoned area, the site has been in use as an agricultural-related industrial facility for over ten years. This is also the case with the adjoining sites, where there has been an air freight company operating for a number of years. In addition, there is an area of land zoned "Objective E – to facilitate opportunities for general industrial employment and related uses in established industrial areas", located to the south-east of the subject site. Therefore, the development plan recognises that, although the lands are zoned agricultural, there has been established industrial land use in this area for many years.

To conclude, there are established industrial & commercial (warehouse-type) units on the site, and the establishment of a Recycling Centre will fit in with these developments. In addition, the subject site is located adjacent to an area of land zoned "Objective E" – "to facilitate opportunities for general industrial

employment and related uses in established industrial areas". Clearly, the development of this site is in accordance with these industrial-related and employment-generating objectives.

1.5.3.2 Current Use Class

The subject site was previously in use as a storage depot by Farrington's. This use was as a storage building for agricultural products, and was the subject of a planning application in 1991, which made application for the commencement of this type of activity. The subject site is located to the north of a number of existing industrial facilities. These include the following:

(i) The premises of Williames Freight – including offices, warehouses, loading bays, and truck and container storage;

(ii) A depot for Fingal Coaches, where coaches are parked;

(iii) A workshop, showroom and office for Starplan Windows Ltd.;

(iv) An office and storage area for National Agrochemical Distributors Ltd.;

(v) An office and storage area for Uroprize Ltd., seed distributors.

Located to the north of the subject site is a garden centre, patio centre and irrigation company – located adjacent to the N1, and an Eastern Health Board residential care centre, which is located behind the garden centre.

1.5.4 Waste Recycling Initiatives

1.5.4.1 Fingal County Council Development Plan – Recycling

Section 5.4 of the Fingal County Council Development Plan makes reference to the disposal and management of solid waste. It states the following:

It is the policy of this Council in relation to waste to reduce the amount of waste produced and reduce the toxicity and environmental effects of that waste. Following this it is the policy to re-use, repair, recycle/compost remaining waste, and to dispose of waste by landfill as a last resort. It is the policy of the Council to select and design its landfills on an environmental, geological and hydrogeological basis, in consultation with the Geological Survey of Ireland.

Section 5.4.1 of the Fingal County Council Development Plan refers to the specific objectives with regard to the development of Refuse Transfer Stations.

The Development Plan states that:

It is the policy of the Council that refuse transfer stations shall generally be located in industrial zones within urban areas. The following matters will be important in determining the suitability of a site for a refuse transfer station:

- The impact of the development on existing residential amenities,
- The visual impact of the development,
- The projected levels of traffic and the ability of the road infrastructure to accommodate these.

Permission will not be granted if it is considered that the proposed development will impinge on residential/visual amenities or if it is considered that the proposed development will be prejudicial to public health or traffic safety.

The proposed expansion will not impinge on existing residential or visual amenities. The nearest dwelling is located to the north of the site adjacent to the garden centre and is well screened from the site. In addition, there is some vegetative screening in place which will be enhanced with further planting of semi-mature trees along the boundaries and stream.

With regard to the impact on roads and traffic, the opening of the M1 motorway allows for excellent access for the facility from the N1 road with easy access to the M1 and M50 motorways.

With regard to recycling initiatives, the Development Plan states as a specific objective that the Council will provide and facilitate the provision of recycling facilities and the proposed facility fits in well with this objective.

1.5.4.2 Regional Planning Guidelines for the Greater Dublin Area

Advances have been made in the preparation of new Regional Planning Guidelines for the Greater Dublin Area. These guidelines, issued jointly by the Dublin and Mid East Regional Authorities, have reached a draft stage and 'Part B for Consultation' was launched in December 2003.

This document recognises the crisis situation with regard to waste management in the Region and contains a number of statements that will assist in allowing a sustainable cost-effective solution to the provision of the urgently required waste infrastructure in the Greater Dublin Area (GDA). These statements highlight the need for integration between the four waste management plans that exist in the GDA. Section 8.6.3 of this draft document deals specifically with waste disposal infrastructure. Statements of particular relevance contained in the document include the following:

"Waste Disposal

An interregional solution should be sought, through the liaison and cooperation between relevant parties, to address the critical lack of waste disposal infrastructure within the Greater Dublin Area." - Executive Summary page viii.

"To Coordinate settlement pattern with strategic plans for (a) water resource management and (b) waste management and disposal: The Water Framework Directive provides the basis for a catchment-based strategy for the delivery of water and wastewater services. Delivery should be coordinated regionally and across administrative boundaries to ensure a balanced and equitable use of resources. Waste strategies should be coordinated across the region to allow flexibility in the management of waste services" - Goal 4, Objective 4.2, page 19.

"Planning Policies
In view of the above, Planning Authorities should, in seeking to promote the economic development of the region, include policies in their Development Plans that:" (inter alia)

- "Support the implementation of a coherent solid waste management strategy for the region as a whole." - Section 6.6 General Policies for the Promotion of Economic Development, page 46.

"Planning Authorities should: (inter alia)

- Liaise and cooperate with each other and other relevant bodies to facilitate an inter-regional solution to address the critical lack of waste disposal infrastructure; and

- Provide integrated waste management facilities." - Section 8.6 Services Infrastructure, page 74.

"New facilities should be allowed to perform their required function in one region and also form part of the wider strategy that includes waste management in another region.

From a strategic perspective, the waste management industry (which includes Planning Authorities and private operators) should aim to develop integrated waste management facilities infrastructure in the GDA. This infrastructure includes new landfills, waste to energy plants, biological treatment and recycling facilities. In developing this infrastructure, provision should be made to:

- Provide for growth in the regional capacity for integrated waste management so as to mitigate the escalating costs of waste disposal;

- Develop biological treatment facilities for organic waste, further recycling and waste to energy plants to serve the needs of the GDA;

- Permit inter-regional transfer of waste to give appropriate economies of scale to integrated waste management facilities;

- Consider the requirement for new infrastructure in the context of the GDA, rather than the existing waste management regions; and

- Consider the examination of other viable options, for example the identification, promotion and recommendation of potential Strategic Development Zones (through Part 9 of the Planning and Development Act, 2000) to facilitate the development of integrated waste management facilities." - Section 8.6.3 Waste Disposal, page 78-79.

These Regional Planning Guidelines are based on sound planning principles and highlight the need and acceptability of the proposed development at Coldwinters for the following reasons:

- The development will provide an appropriate economy of scale in keeping with the need for cost-effective waste management;
- The facility will perform a recycling function in waste management regions within the GDA and this function is in keeping with the objectives of each of the regional/county waste management plans; and
- The facility will be part of an inter-regional solution to the waste management crisis in the GDA.

1.6 Waste Management Policy and Plans

1.6.1 National Waste Management Policy

National policy for waste management in Ireland for the 15 year period 1998 to 2013 is presented in three policy statements issued by the Department of the Environment and Local Government. Firstly, 'Waste Management - Changing Our Ways', was published in September 1998, this was followed in 2002 by 'Preventing and Recycling Waste - Delivering Change' and in April 2004 by 'Waste Management - Taking Stock and Moving Forward'. The proposed development is designed to assist in achieving some of the targets set out in these policy statements as discussed below.

1.6.1.1 Changing Our Ways

The proposed development would assist in achieving the following three targets set out in Changing Our Ways (Section 4.1):

- a diversion of 50% of overall household waste away from landfill,
- recycling of 35% of municipal waste, and
- recycling at least 50% of C&D waste within a five year period, with a progressive increase to at least 85% over 15 years.

The latest available data from the National Waste Database (EPA) shows that in 2001 the following rates were achieved:

- Recycling of Household Waste = 5.6%
- Recycling of Municipal Waste = 13.3%
- Recovery of C&D Waste = 65.4%

It is clear that the provision of a comprehensive national network of recycling facilities is urgently required to meet the above targets. The greatest progress has been achieved in the recovery of C&D waste. However, it should be noted that the recovery results for these materials in 2001 were heavily influenced by activities at Balleally Landfill in Fingal and Kinsale Road Landfill in Cork City, where this material was screened and used in landfill restoration. The Kinsale Road project has now been decommissioned and Balleally is due to close in 2007. The future of this form of recovery is uncertain.

Changing Our Ways recognises the important role that the private sector plays in waste management in Ireland and encourages increasing private sector involvement in all aspects of waste management. Section 5.4.1 of the document states:

"There is considerable scope for increased participation by the private sector in all areas of waste management in Ireland, and authorities should encourage and facilitate business involvement in the provision of waste management services. Private participation can contribute much needed capital investment in infrastructure, specialist expertise in the application of alternative and emerging technologies, a better understanding of the dynamics of the marketplace, especially in relation to recyclables, and in some cases greater operational efficiency and flexibility. It can also release local authority staff and resources for other productive uses."

1.6.1.2 Delivering Change

Section 3.1 of Delivering Change highlights the constraints on the improvement of Irish recycling performance. One such constraint has been recognised as:

"the lack of available recycling and reprocessing facilities and lack of access to the facilities which do exist."

Section 3.3 of the document outlines challenges for the future if Ireland is to achieve waste recycling levels comparable to best European Union practice. These challenges include:

"undertaking sorting and pre-treatment of separately collected wastes at appropriate facilities"

1.6.1.3 Waste Management - Taking Stock and Moving Forward

In April 2004 the DOEHLG carried out a National Overview of Waste Management Plans and produced a policy document entitled 'Waste Management - Taking Stock and Moving Forward'. This document

provides an update on progress in relation to our national targets and formulates policy on many current waste management issues. Several of these issues are of relevance to this project and are discussed below.

Recycling

The document highlights progress in relation to recycling and in particular recycling of municipal waste. In Section 4.1 the document refers to the fundamental policy framework derived from 'Changing Our Ways' and states:

"In giving effect to this policy approach in developing waste management plans, local authorities -

- identified and provided for maximum achievable levels of recycling and biological treatment,"

This statement promotes the policy of providing maximum recycling capability.

Waste Management Planning

Section 4.2 of the document discusses the role of National Policy framework and the role of the Waste Management Plans and states as a Key Point, that:

"Waste management planning will continue to be delivered through local authorities in their (largely) regional groupings."

However, Section 4.3 discusses planning decisions in relation to waste infrastructure and the waste management regions. This discussion is particularly relevant to this project, as the proposed Recycling Centre is designed to handle waste from a catchment area that includes waste management regions within the Greater Dublin Area.

Section 4.4 of the document examines the waste arisings data that the waste management plans were based on and compares the waste growth assumptions with the National Waste Database (NWD) reports for the years 1998 and 2001. Municipal waste growth has far exceeded expectations due to several factors including population growth, decline in household size and the "Celtic Tiger" economic boom. This indicates a need for additional waste management infrastructure to deal with the volumes of waste and waste growth expected over the coming years.

Role of the Private Sector Waste Industry

Section 4.6 of the document recognises the increasing role of the private sector in waste management in Ireland. It states that an estimated 60% of municipal waste is now collected by private waste companies. This is a significant change from the mid to late 1990s when the waste management plans were prepared by the local authorities. In Section 4.6 the document states:

"while waste management plans took account of the private sector, they were, by and large, predicated very heavily on local authorities either directly delivering or leading the process of infrastructure delivery."

The Key Point arising from Section 4.6 of the document is as follows:

"In updating waste management plans -

- the local authorities concerned will pay particular attention to ensuring effective engagement with the private waste industry; and
- the outcome of this engagement, together with other relevant factors, will be reflected in the final updated waste management plans adopted."

1.6.2 Regional Waste Management Policy

1.6.2.1 Waste Management Plan for the Dublin Region

In terms of waste management planning Ireland is divided into a number of regions, each of which has devised waste management strategies and plans to assist in providing a co-ordinated approach to all aspects of waste management. Greenclean Waste Management Ltd. is located in the Dublin Waste Management Plan Region made up of four Dublin local authority areas- Dublin City Council, Fingal County Council, South Dublin County Council and Dun Laoghaire-Rathdown County Council. The Waste Management Plan for the Dublin Region was adopted by each of the four local authorities in 1999. The plan is based on a 20-year strategy for waste management in the region and will be reviewed after 5 years. The Plan is grounded on National Policy and EU principles and it includes policies on:

- waste minimisation,
- waste collection,
- waste recycling and recovery,
- disposal, and
- hazardous waste.

The Plan is guided by the following principles:

- Precautionary Principle – preventative action should be taken if serious risk exists
- Proximity Principle – Waste should be treated or disposed of close to its source i.e. within the Dublin region if possible,
- Polluter Pays Principle – the costs of waste management are borne by those who generate the waste

It is the aim of the strategy to prevent and minimise waste and where this is not possible recycle more and dispose of less.

The Waste Management Plan includes a number of possible scenarios for the integrated management of Dublin's waste.

It is intended to halt the increase in waste generation per capita by 2007. When the Waste Management Plan was drawn up household waste generation per capita was increasing annually by up to 3%. It is clear that existing recycling centres in Dublin must expand significantly and new facilities must be developed to enable the required level of recycling.

Waste Management Centres, such as Greenclean Waste Management Ltd., are an important component of Dublins Waste Management Infrastructure. They serve a dual purpose. Firstly, is the removal of recyclable material from the waste stream and the beginning of the recycling process. Secondly, co-ordination of waste transfer i.e. a reduction in the number of vehicles travelling to waste disposal facilities by using larger haulage trailers. The Greenclean Waste Management Ltd. proposed facility uses state of the art technology to efficiently, effectively and cleanly collect, sort, and distribute for recycling, various types of waste material, including those that may need to be sent abroad for processing. The most suitable locations for these facilities are in industrial areas either within the city or on the periphery. The Coldwinters site fits well with this description and its location is consistent with the proximity principle and is therefore considered to be a suitable location for this particular type of activity.

The 'polluter pays principle' is implemented by Greenclean Waste Management Ltd. in that the full costs of recycling and/or disposal of wastes is currently borne by the customers of the Company by collection fees.

1.7 Alternatives

1.7.1 Alternative Waste Management Practices

The EU's hierarchy on waste treatment options as presented in the Council Resolution on Waste Policy (90/C 122/02) and reiterated in the Council (amending) Directive on Waste (91/156/EEC) is as follows:

1. Prevention
2. Recycling / Reuse
3. Energy Recovery
4. Disposal

Waste Prevention

Greenclean Waste Management Ltd. is not a waste producer and therefore has no control over the prevention of waste.

Recycling / Reuse

Greenclean Waste Management Ltd. provides facilities to allow for the recycling/reuse of ferrous and non-ferrous metal, wood, paper, cardboard, plastics, glass, construction and demolition waste.

Energy Recovery

There is currently no incinerator or other energy recovery facility in the Dublin region and Greenclean Waste Management Ltd. does not handle a large enough quantity of waste to economically justify construction of such a facility. The Greenclean facility can produce material suitable for energy recovery.

Waste Disposal

This is the least preferred alternative. The portion of waste received at the facility that is not capable of being recycled is bulked up into large vehicles and transported to licensed landfills.

1.7.2 Alternative Locations

Greenclean Waste Management Ltd. made preliminary enquires about a number of alternative site locations for their recycling business prior to acquiring the Coldwinters site and applied for planning permission at a site in Rathmooney, Lusk, Co. Dublin. However, the company did not proceed with this site as the access roads were deemed to be too narrow. The Coldwinters site is considered an optimum location in terms of access, proximity to waste sources and taking into account all environmental considerations.

The Coldwinters site is located proximal to the area serviced by Greenclean Waste Management Ltd., namely the Dublin City and County region and has excellent access by way of the N1 national primary road, the M1 motorway and the M50 motorway.

The location of recycling markets serving the Dublin Region is varied. Reprocessing facilities used by waste management companies in Ireland include the following;

Paper & Cardboard - Smurfit, Clonskeagh, Dublin.
Bailey Waste Paper Ltd, Dublin.
Cardboard - Recyclers in Britain and the Far East.
Aluminium Cans - Alcan, Warrington United Kingdom.
Glass - Rehab Recycling, Ballymount, Dublin.
Glass – Quinn, Fermanagh, Northern Ireland
Wood - Finsa Fine Products, Scariff Co Clare.
Plastic Bottles - Wellman International, Mullagh Co Cavan (via washing plant in Holland)
Waste Oil - Atlas Oil Company, Portlaoise, Co. Laois
Metals - Hammond Lane Metal Co, Ringsend, Dublin
C & D waste – Concrete, blocks and bricks recycling at Balleally landfill, recovery of clean clays and soils at waste permit sites.
Refuse Derived Fuel - SRM and Fibre Fuels, U.K.

From this we can see that it would be unreasonable to site a recycling centre purely on proximity to recycling markets. The proposed site at Coldwinters located adjacent to the N1 national primary road with good access to the M1 and M50 motorways and the Dublin Port tunnel access route make it a very favourable location for a waste management centre in terms of access to recycling markets.

It is also located favourably in terms of disposal facilities for residual waste from waste management centres in the Dublin Region which include the following:

Balleally Landfill, Lusk, Co Dublin,
KTK Landfill, Kilcullen Co Kildare,
Knockharley Landfill, Co. Meath

In the longer term, the Dublin region has plans to construct a waste incinerator at Poolbeg on the eastern side of Dublin. The Port Tunnel (nearing completion) will link the M50 to this location. The Greenclean facility will produce some materials suited to this type of operation and is ideally placed to supply such a facility.

The following sections of this EIS discuss the existing environment of the Coldwinters site in detail. The conclusions reached indicate that there are no significant environmental impediments to expanding the recycling centre at the existing industrial site as proposed. The EIS shows that the proposed development with mitigation measures as stated will not have any significant impact on the local or regional environment and therefore, the site location is deemed suitable for the expansion of a recycling centre on environmental grounds.

1.7.3 The Do-nothing Alternative

If Greenclean Waste Management Ltd. do not proceed with the expansion at Coldwinters, wastes proposed to be handled at the site may be transported directly to landfill in refuse collection vehicles, skip lorries, commercial vans and private cars. This would use up valuable void space in landfills with materials that could otherewisw be recycled and also have an impact in terms of traffic volumes and consequently the use of fossil fuels by these vehicles.

In addition, increased landfilling of wastes in preference to recycling and reduction of waste would be contrary to EU, Irish and the Dublin Region Waste Management Plan policies on waste management.

1.8 Requirement for an EIS

The EIS has been prepared in accordance with the requirements of the following statutory documents:

(i) The European Community Directive on Environmental Impact Assessment as amended by Directive 97/11/EC.

(ii) The European Communities (Environmental Impact Assessment) Regulations, 1989 to 1999.

(iii) The Local Government (Planning & Development) Regulations, 1994(S.I. No. 86/1994), as amended.

(iv) The Local Government (Planning & Development) Regulations, 1999 (S.I. No. 92/1999).

The EIS is required to be submitted to the EPA with the Application for a Waste Licence in accordance with the Waste Management Act, 1996.

1.9 Structure of the EIS

The EIS is presented in the Direct Format Structure as set down in the Draft Guidelines produced by the Environmental Protection Agency (EPA-1997). In general it follows the framework presented in the EPA Advice Notes on Current Practice in the preparation of Environmental Impact Statements. The structure employed allows individual examination of the main components of the EIS, namely:

(i) Overview of the Project and Planning Context (Section 1).
(ii) the receiving (existing) environment (Section 2).
(iii) the proposed development (Section 3).
(iv) environmental impacts and mitigation measures (Section 4).

1.10 Contributors to the EIS

This EIS was prepared by a number of consulting firms. Detailed below are the contributors and a description of their respective inputs:

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Address: Unit B19
KCR Industrial Estate,
Kimmage,
Dublin 12.

Trafficwise Ltd.

Traffic

Address: Bracetown Business Park,
Clonee,
Co Dublin

Redox Ltd

Plant Design

Address: Stevinstaat 11,

PO Box 218
7100 AE Winterswijk,
The Netherlands

In addition to the main contributors to the EIS a number of firms/agencies provided services to the project as follows:

Enterprise Ireland - Dust Analyses

Alcontrol Geochem - Water Analyses

Meteorological Office – Met. Data

Geological Survey of Ireland – Geological/Hydrogeological information

Fingal County Council – Public water supplies

1.11 Scoping of the EIS

All aspects of the environment were considered and are detailed in the EIS.

1.12 Data Necessary to Identify and Assess Environmental Effects of Development

The data necessary to identify and assess the environmental effects of the development are:

(i) the existing environment, as described in Section 2 by the specialists in various fields,

(ii) the characteristics of the development as described in Section 3, including its physical dimensions, nature of material being handled, processes involved and the emissions from the facility.

(iii) the potential environmental effects of the project are assessed and proposed mitigation measures are presented in Section 4.

Information on all aspects of the environment was obtained from published information and from specially commissioned field surveys.

1.13 Difficulties Compiling Specified Information

Baseline information for the development site and its environment was readily compiled by the EIS contributors. The cultural resources element of the EIS could not be completed as the lands on the eastern side of the Ballough stream were under crop and could not be accessed/surveyed in detail. However, the archaeological report recommends investigations and mitigation measures to be carried out in advance of any development on this part of the proposed site. No difficulties were encountered in compiling data for the remainder of the EIS.

1.14 Forecasting Methods used to Assess the Effects on the Environment

The methods employed to forecast the effects on the various aspects of the environment are standard techniques used in the professional disciplines. The general procedure employed was to describe the receiving environment in a dynamic fashion, to add to that a projection of the loading placed on all aspects of the environment by the development in its mitigated form and thereby arrive at the net likely significant effect of the development on the environment.