

White Young Green

Consultant to the Built, Natural and Social Environment

White
Young
Green

Ormonde Organics Ltd.

Environmental Impact Statement

for a

Proposed Waste Recovery and Recycling Facility

at

Unit 643 Greenogue Industrial Estate
Rathcoole Co. Dublin

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Prepared for

Ormonde Organics Ltd.



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INTRODUCTION

This is the Non Technical Summary (NTS) of the Environmental Impact Statement (EIS) for a proposed Waste Recovery & Recycling Facility at Unit 643 Greenogue Industrial Estate, Rathcoole Co Dublin. The facility is being developed by Ormonde Organics Limited (OOL).

The EIS has been prepared to accompany an application to South Dublin County Council (SDCC) for planning permission and the Environmental Protection Agency (EPA) for a waste licence.

The facility has been designed to process 45,000 tonnes of (mainly hazardous) hydrocarbon contaminated waste liquids including oily water, interceptor waste, waste oils, tank bottoms, bilge waste, drain cleaning waste, coolants, cutting fluids, fuel oils etc. Acids, alkalines, lime sludge leachate, process wash waters and solid wastes including filters, oily rags, lime sludge and batteries will also be processed. The facility will also be used for the short term storage of contaminated soils in quantities of 50-100 tons at any one time to a maximum of 1,000 tonnes per annum pending transfer to licensed treatment or disposal facilities.

The site presently comprises a warehouse and hard standing yards located in industrial surroundings. The existing building has never been used for its previously permitted logistical use. It is proposed that the hazardous waste recovery and recycling facility will process 10,000 tonnes of wastes per annum initially, rising to 45,000 tonnes after three to five years. It is proposed that acceptance of contaminated soils will remain constant from year 1 at 1,000 tonnes per annum.

The proposed facility will be the only facility of its kind in Dublin which will process acids, alkalines, spent oil filters and recovers waste oils to a reusable standard. This proposal represents a higher level of treatment than that currently provided at the recycling and recovery providers in the Greater Dublin Region.

The EIS outlines the scale and scope of the proposed development and describes the existing environment at the development site. The potential impacts resulting from the proposed facility are identified together with the proposed mitigation measures, which will prevent or reduce the identified potential impacts.

LOCATION AND SETTING

The development site (See Figure 1) is located in Greenogue Industrial Estate approximately 2km north of Rathcoole and 2km east of Newcastle in West Co Dublin.

The site measures approximately 0.41 hectares (ha), and its immediate environs are primarily industrial although Greenogue Industrial Estate is set within a diminishingly agricultural setting between Rathcoole and Newcastle villages. The general topography in the immediate vicinity of the site is low-lying and generally flat at an elevation of approximately 90-100m O.D. The landscape rises sharply to the south of Rathcoole reaching local peaks in the order of 180-200m.

The subject site was granted planning permission in March 2006 (Reg. Ref. SD06A/0035), for a warehouse building and associated yard for the purposes of storage and transhipment of goods. However, although the permitted building has been constructed, the

premises have not been used for the permitted purpose.

DESCRIPTION OF THE PROPOSED DEVELOPMENT

The facility will use state of the art technology to treat a variety of liquid wastes, oily rags and oil filters to recover oils for reuse or further reprocessing.

The nature of the proposed activity requires an increase to the size of the existing building on site, which currently consists of approximately 479 sq m of warehouse floor space and 52 sq m of ancillary / office space. The increase is to primarily be in the form of two proposed extensions, as well as some additional ancillary floor space in the existing building.

The larger of these two extensions to the existing warehouse will measure some 36 m long, 18.9 m wide by 9.55 m high (650 sq m) into which deliveries of unprocessed waste (into 3 no. underground sumps) are to be made (prior to pumping into 3 no. above-ground storage tanks, also contained within this building).

The second, smaller, extension is approximately 5.4 m long, 7.5 m wide by 8.4 m high (36 sq m), and is to be used for the short term storage of unprocessed waste in bulk containers and empty containers prior to removal off site. Both the proposed extensions are to match the existing building in external finish.

The additional ancillary floor space in the existing building will be in the form of a laboratory at first floor level (14 sq m). Internal modifications consisting of the provision of a kitchen (9 sq m), changing and wash room (13 sq m) and control room (15 sq m) at ground floor level will also be undertaken. The primary

use of this building will be for the processing of the waste.

Four bunded external storage tanks are proposed. These will measure approximately 4.4 m high with a 5.5 m circumference. A weighbridge and wash bay will also be installed.

The layout of the proposed development is shown on Figure 2.

The current access will be retained in its current form to provide access to the site from the link road off the R120 which is under construction.

The proposed facility will be constructed on the existing topography and the proposed concreting of the rear yard will be such as to meet the current ground level and maintain the existing run off.

The highest structure on site will be the flue from the boiler in the north western corner of the site at a height of 0.5m above the height of the main processing building. Additional buildings will be no higher than the existing building 9.55m high to the eaves.

The facility has been designed for operation from 08.00 to 18.00 hours Monday to Friday and half day 08.00-13.00 hours Saturdays. The proposed facility will provide direct employment for approximately 4-6 people during its operation with additional numbers employed indirectly.

Wastes accepted at the facility will be subject to prior analytical confirmation, so no special provision is required for reject materials arriving at the facility. An emergency buffer tank is available on site if this situation arose.

The facility will have three fully enclosed segregated intake units for Waste Oils, Oil Mixes and Acids/Alkaline and Process Wastes.

Any contaminated soils accepted at the facility will be temporarily stored in covered skips/packages in the yard to await collection for disposal/treatment.

Wastes are delivered directly from vehicles and containers to the appropriate reception sump. Oils from engine filters are separately extracted in a filter handling sump after crushing of the filter with a standard filter crusher assembly with heating and oil removal facilities; this oil passes into the waste oil intake sump and is transferred forward for processing. Crushed filters are retained in a skip for bulking and periodic removal off-site.

Waste oils are initially passed via a fine screen to a de-emulsifier tank with temperature controlled steam heating. Steam is supplied by a dual fuel (gas-oil) boiler with nominal burner rating of 400 kW (640 kg/h) @ 10 Bar. Oil temperature is then increased to 80°C - 90°C resulting in emulsion breaking and separation. The liquid then passes forward in a two-phase decanter solids separation system followed by a polishing D-type mechanical clarifier unit to maximise water / oil separation. Both separation stages are complete with in-line polymer addition. Separated solids from the decanter are conveyed to a cake skip and separated solids from the clarifier are transferred to the oil mixes balancing tank for processing on this waste circuit. The clean separated oils are pumped to a clean oil holding tank for periodic tanker removal and further distilling / re-use off-site.

For oil mixes, three primary processes namely polymer addition, flocculation and Dissolved Air Flotation (DAF) are proposed for the removal of organics, solid and oils/fats/greases down to concentrations acceptable for disposal of residual waste waters to sewer in combination

with the pre-treated acid wastewaters. The wastewater is clarified using dissolved air (at 5 bar pressure) and, on emission, the solids / scum is lifted to the surface and mechanically removed. The unit is fully roofed. Float sludge is taken to a sludge holding tank for periodic passage forward to dewatering by decanter and removal of solids off site in conjunction with the waste oil solids cake. Effluent overflows from a DAF system via an outfall sewer to a monitoring / sampling chamber upstream of the mains sewer inlet at this monitoring point flow, pH and temperature are monitored in-line and samples are taken for laboratory analysis. A valved connection is provided to a recycle pump sump, which will facilitate the recycling of unacceptable effluent to the emergency buffer tank for further processing.

Acid wastes are delivered to an intake sump and balancing tank in the same fashion as the oil streams. The tank is equipped with forward pumping via a twin-walled rising main to treatment. The pH will be corrected using Caustic Soda (NaOH) on modulating pH control in a two-stage series flow system. This will ensure that pH will be corrected to a nominal value of 7.0 but all times within the limiting range 6 - 9 for sewer discharge. In the event of unacceptable quality the effluent will be automatically diverted into the dump – recycle pump sump for recycle to the emergency buffer tank. The system will be fully automated and emergency / alarm conditions will be designed during the hazop study.

ALTERNATIVES

The proposed development is considered industrial by nature and should be sited in an industrial estate. OOL's proposed facility will serve commerce and industry in the Dublin metropolitan area and south east Leinster. Its location in an industrial estate on the edge of the city is ideally positioned for this purpose.

On this premise, West Dublin was identified as the most suitable location for the site by OOL, and several other sites were considered including sites at Ballycoolin, Blanchardstown and in particular in Greenogue Business Park. No appropriate site could be found at Ballycoolin. The proposed site chosen was the last available site at Greenogue Industrial Estate.

Sites were also considered in Freshford in Co Kilkenny and at Newtownmountkennedy in Co Wicklow. The developers chose not to proceed with the site at Freshford for this use as they are currently in the early stages of developing another facility at this location. The site at Newtownmounkennedy was deemed unsuitable due to its proximity to the coast and rural location.

The location of recycling markets is varied and dynamic and siting a waste management centre based on markets alone is not feasible.

Four other facilities of a similar nature to the facility now proposed (insofar as they all deal with some aspect of waste treatment or recycling) have previously been granted planning permission in Greenogue Industrial Estate. These facilities include an Integrated Waste Management Facility, a Waste Transfer and Recycling Facility for Non Hazardous

Wastes, a Timber Recycling Facility and a Waste Transfer Station for Hazardous and Non Hazardous Wastes.

Vehicles which will transport the residual wastes generated by the facility either to the respective facilities in Ireland or for export can access the proposed facility at Greenogue via the M7 and the M50.

On this basis of the foregoing it was decided to proceed with the proposed development on the Greenogue site.

EXISTING ENVIRONMENT, POTENTIAL IMPACTS, MITIGATION MEASURES AND LIKELY SIGNIFICANT EFFECTS

The existing warehouse has to date been unused since its grant of planning permission and construction in 2006.

The proposed development has the potential to impact on the receiving environment. However, by designing the facility in accordance with the relevant health and safety regulations and by operating the facility under a Licence to be issued by the EPA, the potential for impacting on the environment is greatly reduced.

Human Beings

The site is located in the townland of Newcastle in South County Dublin. The population of South County Dublin according to the 2006 census is 246,935. This is an increase of 3.4 % on the 2002 census figure. The increase in population of the districts around the proposed facility at Greenogue to include are just under half the average increase for the South Dublin Region while the whole Dublin City and County region shows an increase in population for 2006 of 5.7%.

Potential impacts on the surrounding communities include; Health and safety of project operatives or nearby sensitive receptors, impacts from waste generation, storage and disposal, emissions to atmosphere, noise and water as well as potential economic impacts.

Assessments of these potential impacts have been undertaken as part of Chapters 4-15 of the EIS. The facility will operate under the control of an EPA Waste Licence and is not considered to represent a risk of generating a major accident involving dangerous substances, as outlined under the Seveso and Control of Major Accident and Hazards (COMAH). No harmful emissions will be permitted under the Waste Licence.

It is not anticipated that there will be any impact on the local economy. The proposed facility will employ up to 4-6 people directly and further numbers indirectly during both construction and operational phases. This will constitute a direct, positive impact.

Landscape

The general topography in the immediate vicinity of the site is low-lying and generally flat at an elevation of approximately 90-100m O.D. The landscape rises sharply to the south of Rathcoole reaching local peaks in the order of 180-200m. Peaks of close to 400m are located within 5-6km.

The visibility assessment found that although there are a number of long distance views of the southern façade of the existing building from the R120 there are no views of the site from the north and west due to surrounding industrial buildings. The eastern and southern façades of the building are visible to some residents living along the R120 close to the exclusion zone

around Casement Aerodrome although many of these dwellings are already screened by mature trees on their own property. At present construction works are underway on the latest extension to the industrial estate along the new link road from Greenogue to the R120 and it is anticipated that the views of the proposed Ormonde facility will be almost entirely obscured in the near future.

During construction, impacts will be at their most significant and intense. This is primarily due to the additional of the new buildings and the general presence of large-scale site machinery. This will have a significant although relatively short-term impact.

Once construction is complete, the perceived impacts will reduce and the mitigation measures will progressively integrate into this location as they establish with time.

Overall, it is expected that there will be no great change to the visibility of the site as a whole and in the context of the rest of the industrial estate and therefore potential impacts on the general landscape character are expected to be low. New buildings will be finished with side walls and roofs sympathetic to the environment in terms of texture and colour.

Soils /Geology

The proposed development site is situated on the edge of the structural domain of the Dublin Basin, which comprises of Carboniferous rocks comprising limestones with occasional interbeds of shale. Mapping of the bedrock geology by the Geological Survey of Ireland (1995) shows that the Calp limestone underlies the site in the Greenogue Industrial Estate.

The overburden at the development is reported to be composed of glacial tills or related till derived luvisols and gleysols. Ground investigations undertaken by WYG near to the site have proven this till to comprise predominantly of clay though is usually either silty or sandy clay. Previous excavations in the vicinity of the site have shown that the overburden is less than 4m in thickness.

The redevelopment of the site and concreting of the currently hardcore covered yard to the rear will result in an overall improvement in the level of protection to the soils at the site.

The potential impacts during the construction phase of the proposed facility would include spillages and leaks of potentially polluting substances.

Mitigation measures recommended during construction include:

- All domestic effluent generated on site during construction will be discharged to the existing foul sewer. Where modifications are occurring to the foul water line, portaloes will be provided.
- All oils, chemicals, paints, fuels or other potentially polluting substances used during the construction phase will be stored in designated storage areas with containment measures.

Mitigation measures recommended during the operational phase include;

- All potentially polluting substances will be stored in secured designated areas with containment measures

- All fuels will be stored in appropriately banded areas
- The integrity and enclosed nature of the proposed waste intakes and process area will ensure the containment of any potential spillages or leaks

Hydrogeology

The site is underlain by rocks of the Calp Formation. These rocks predominantly consist of basinal units of fine grained argillaceous limestone and shales and are generally considered unproductive. High yielding wells do occur in the Calp but it is interpreted that where this is the case it is primarily due to the presence of substantial faults, fractures or fissures.

Site investigation records from developments elsewhere in the Greenogue area have indicated between 1.5 and 3.3m of tills with limestone clasts which would indicate a potential vulnerability rating of extreme.

However the proposed facility has been designed for full containment of run off or spillages. All surfaces will be concreted and all run off/potential spillages directed to foul and storm drains via silt traps, interceptors and attenuation as appropriate. Therefore there is little or no potential for contamination of the underlying aquifer from the proposed development.

Surface Water

The site is situated in the River Griffeen/Liffey catchments, which would suggest that the predominant regional groundwater flow direction in the area is towards the east. On a local scale a tributary of the Griffeen River, the River Griffin

flows towards the north of Greenogue industrial estate.

The potential impacts of the development on the surface water environment are limited as the surface water bodies in the immediate environs of the site are culverted.

The proposed surface water drainage system on site has been designed to deal with any precipitation falling on site, even during flood events. Surface water runoff from all hard standing areas at the facility will be directed to the surface water collection system, through a silt separator and class 1 klargester petrol interceptor and then discharged via storm water attenuation to the main storm sewer along the western boundary of the site.

Roof drainage from buildings will also be drained via silt trap and interceptor prior to the 166m³ storm water attenuation tank, and into the storm water drainage system. The storm water attenuation tank has been conservatively designed to handle all storm events up to a 100 year flood event. Flow from the attenuation tank will be restricted to 2 litres per sec.

Potential impacts as a result of the proposed development could include run-off from bare earth surfaces during construction phase as well as spillages/leaks from the process creating hydrocarbon or other contaminated waters. Fire fighting water runoff also has the potential to impact in the event of a fire.

The following mitigation measures will be implemented at the site during the construction phase:

- All surface run-off from the site will be drained to the existing surface water

drainage network via silt trap interceptor and attenuation

- All oils/fuels or other hazardous substances stored on site will be stored in bunds
- Sewage or effluent from site uses will be directed to the existing foul water drainage system. Where modifications are occurring to the foul drainage system portals will be provided.

The following mitigation measures will be implemented during the operation phase:

- Surface water run-off from all hard standing areas including roofs will be collected into the surface water drainage system and attenuated. A storm water attenuation lagoon with a capacity 166m³ and a restricted outflow of 2 litres/second
- All fuels oils or other hazardous substances will be stored in tanks located in bunds.
- An emergency response procedure will be implemented in the unlikely event of a large scale leakage or spillage on site. This will include immediate containment procedures, contacting relevant authorities and employing specialist consultants to remediate the spill
- Unloading and processing of the wastes will be undertaken internally under a roofed area.
- Any firewater generated by a fire event will be contained within the bunding built into site buildings or by the low kerbing around the site perimeter. Once any potential fire has been dealt with firewater can be pumped to temporary storage or directly to tankers for disposal.

Ecology

The proposed site is not covered by any ecological designation and no protected species were recorded at the site. A review of the National Parks and Wildlife Service database (www.heritagedata.ie), revealed that six Natural Heritage Areas (NHAs), one Special Protection Area (SPA) and one Scientific Area of Conservation (SAC) are found within a 10km radius of the Greenogue site but not within 4.5km. Based on the results of the desktop study prepared for the EIS, the site at Greenogue is of extremely low ecological value

As the proposed development will be undertaken within an area which has previously been developed the potential impact on the local flora and fauna is low although may result in general disturbance and loss of habitat to common species

The following mitigation measures are recommended:

- Construction should follow best practice and water pollution control measures such as Masters-Williams *et al.* (2001).
- Only uncontaminated surface water should be discharged, as the adjacent lands form the catchment of the salmonid Griffin River system.
- All effluents, grey water and truck washes should discharge to foul sewer.
- Excavation and removal of soil for construction or landscape works should use best practice and systems should be put in place to prevent silt or other debris entering drainage ditches.
- Mitigation measures will be put in place to reduce the movement of dust associated with the site works to adjacent habitats.
- All surface waters from the site and access road is to be restricted to pre-development rates and should be channelled through adequately sized petrol/oil interceptors and be subject to attenuation prior to discharge.
- All waste oil, empty oil containers and other hazardous wastes are disposed of in conjunction with the requirements of the Waste Management Act 1996.
- Native trees and shrub species should be incorporated into any landscape plan following species identified on site during the baseline survey.

Air

An extensive ambient air quality baseline assessment was conducted at the site. Air emissions from the proposed plant have the potential to interact with both human beings and ecological habitats. However, emissions are predicted to comply with all standards and guidelines and therefore will have no adverse impact on either human beings or habitats. There is a potential risk of negative impact on human beings and habitats from dust generation during the construction phase. However, the implementation of astringent and comprehensive mitigation measures will ensure that any impact will be minimised.

All emissions from the operational phase of the development were assessed using air dispersion modelling techniques. The results for all parameters modelled were below air quality standards and relevant criteria.

The primary sources of emissions from the site are from the on site boiler and air extraction systems from buildings. Minor sources included fugitive emissions from the waste intake balancing tanks.

Stringent mitigation measures will minimise these emissions and avoid any impact on the receiving environment including.

- Implementation of a regular and documented maintenance and inspection programme for all plant equipment
- On-site good house keeping and raw material handling practices will be stringently controlled through agreed protocols
- Preparation of an odour management plan to ensure odour emissions are minimized
- Regular internal and external odour patrols
- Scrubbing units (charcoal or other appropriate abatement) will be installed on all 3 balancing tanks to remove odorous or organic emissions
- The process will be fully contained, well ventilated and each intake tank will be sealed
- All buildings will be completely enclosed with high speed roller shutter doors to prevent fugitive releases to atmosphere
- Air will be extracted at a rate of 4 air changes per day
- If required, following delivery vehicles will be washed in the wash bay to remove any residual waste material

Climate

The climate of the area was assessed using the meteorological measurements collected by the National Meteorological Service from the nearby station at Casement Aerodrome. This noted that the annual average wind speed in this area is 5.66 m/s and the annual average rate of

precipitation in this area is 711.4mm over the period from 1968- 1996. Air temperatures ranged from a mean daily minimum of 4.9 in January to a mean daily maximum of 15.2°C in July.

The main potential impacts on climate during construction will arise from site traffic entering and leaving the site and machinery in use on-site. However, levels of these gases will be extremely low and therefore the impact on climate will not be significant. Mitigation measures will be implemented to ensure emissions are minimised. There will be no ozone depleting substances used or emitted during the construction or operational phase of the project.

Impacts from the operational phase will arise from emissions of CO₂, SO₂ and NO_x from the boiler running on gas or fuel oil and traffic. To minimise their impacts the following mitigation measures will be implemented;

- Emissions of CO₂, NO_x, SO₂ from the boiler emission point will be controlled by regulatory emission limits
- Advanced technology and process abatement will ensure emissions of CO₂, NO_x, SO₂ are minimised and monitored
- All personnel entering/leaving the proposed facility will be advised of the site speed limits and requested to comply.

Noise

A comprehensive quantitative assessment of the potential noise impacts resulting from the construction and operation of the proposed development has shown that no adverse impacts resulting will occur as a result of the proposed development. Mitigation measures

recommended during the construction phase include;

- Working hours during site development and construction will be restricted as outlined in previous sections.
- Where practicable the use of quiet working methods will be selected and the most suitable plant will be selected for each activity, having due regard to the need for noise control.
- All contractors will employ the best practicable means to minimise noise emissions and will be obliged to comply with the general recommendations of BS 5228, 1997. To this end all contractors will use “*noise reduced*” plant and/or will modify their construction methods so that noisy plant is unnecessary.
- Where possible, position potentially noisy plant or operations as far as possible from a NSR to minimise the transmission of sound. Similarly, where practicable, all machines and/or noisy equipment will be positioned so that the quietest side faces the NSR.
- All mechanical plant used on site will be fitted with effective exhaust silencers and will be maintained in good working order. Where practicable, machines will be operated at low speeds and will be shut down when not in use.
- Where practicable the number of machines in simultaneous operation will be minimised.
- Plant and machinery used on-site will comply with the EC (Construction Plant and Equipment) Permissible, Noise Levels Regulations
- Machines in intermittent use shall be shut down in the intervening period between works or throttled down to a minimum
- Where particular ‘noisy’ work is expected to occur, these will be scheduled between the hours of 8.00 – 18.00. Enclosures to usually noisy activities will be provided where these works cannot be scheduled for the hours 8.00 – 18.00
- It is also recommended that periodic noise monitoring be undertaken during the initial construction phase to determine levels at noise sensitive receptors, in particular during ‘noisy’ activities. If the community noise exposure levels are exceeded further mitigation measures will be employed including temporary enclosures or screens around particularly ‘noisy’ plant.
- Cognisance will also be taken from the ‘Environmental good practice *site guide*’ 2005 compiled by CIRIA and the UK Environment Agency. This guide provides useful and practical information regarding the control of noise emissions at construction sites

Mitigation measures recommended during the operational phase include;

- The interior plant layout and design, where possible will be constructed to minimise noise output from plant machinery. The walls of the production building will be acoustically cladded with Tegral Insulated Panels to reduce noise levels
- Machines in intermittent use shall be shut down in the intervening period between works or throttled down to a minimum

- A regular maintenance programme will be implemented for all plant items to ensure they are operating effectively
- All vehicle engines will be switched off when not in use.

Traffic

The site is located to the north of the R120 which links Greenogue Industrial Estate with the N/M7. The N/M7 is a major route composed of both motorway and national primary route elements from Dublin to the Mid-lands and the south-west of the country including Limerick, Kilkenny, and Cork. Greenogue Industrial Estate presently exits on to a roundabout junction with the R120 which terminates at its interchange with the N7. A road network consisting of regional roads and lower class roads expands between the N7 and the N4 in the locality surrounding the proposed site.

The existing traffic environment on the R120 and at the site access noted the following

The traffic flows on the R120 illustrated that its busiest times correlate with the typical commuter morning and evening peak periods. Traffic in the morning peak predominantly travels in a southeast direction towards the N7 and Rathcoole. This pattern is reversed in the evening. The annual average daily traffic for the R120 was extrapolated based upon existing data to approximately 14,404.

It is considered that the total level of traffic generated by the proposed development <0.27% of the projected AADT is low in the context of the traffic using the local road network.

A new link road is presently being constructed directly to the south of the access to OOLs

proposed facility. This will provide easy access for vehicles using the site to the R120 and N/M7. Based upon the traffic assessment presented in the EIS, there will be no requirement for any works to the existing access or upgrades to the local road network to accommodate the proposed development.

Cultural Heritage

There are no known archaeological sites of interest on or in the immediate vicinity of the site. There are records of several archaeological sites within 1-2.5km of the site including Enclosures, Ring Forts, Burial sites, Field systems and a village site at Rathcoole.

The proposed development area will be contained within the existing site boundaries and will not include any significant ground disturbance or visual impact outside of the existing footprint.

Material Assets

The material assets assessment found that the site is currently serviced by existing electrical and public water main supply and has drainage systems on site for disposing of surface water run off and foul water effluent.

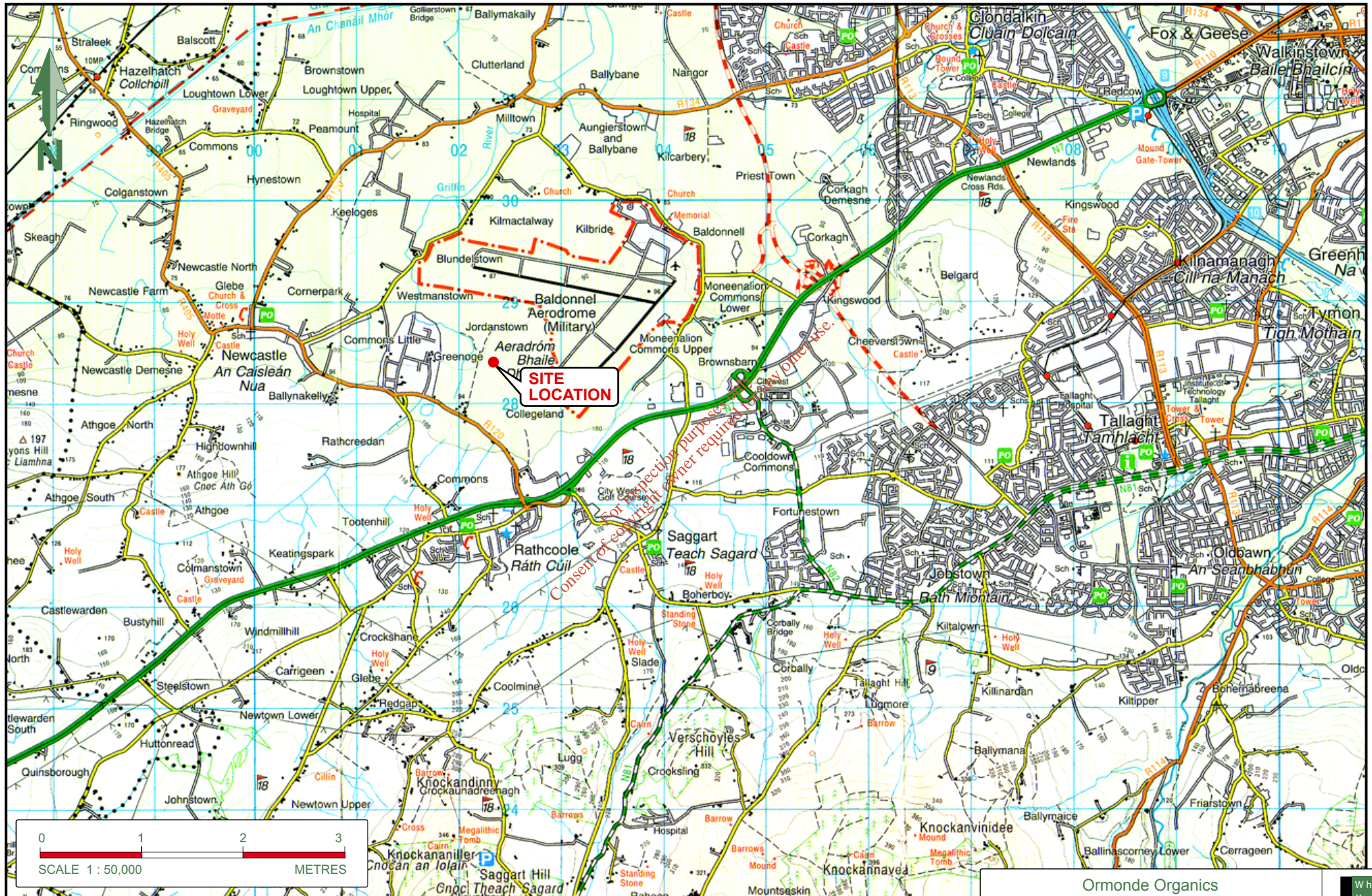
As part of the proposed development it is intended to upgrade the drainage system to accommodate the proposed process. Waste management on-site will be conducted in accordance with best practice to encourage waste minimisation and recycling on site. Non renewable construction materials will be sourced locally and all imported material that will be used on site will be from approved sources.

Overall it was concluded that there will be no significant negative impact on material assets.

CONCLUSION

The EIS concludes that provided the facility is operated in line with the mitigation measures outlined in the respective sections of the EIS and under the control of an EPA licence, there will be no significant effect on the environment arising out of the proposed development of the Waste Recovery and Recycling Facility at Greenogue.

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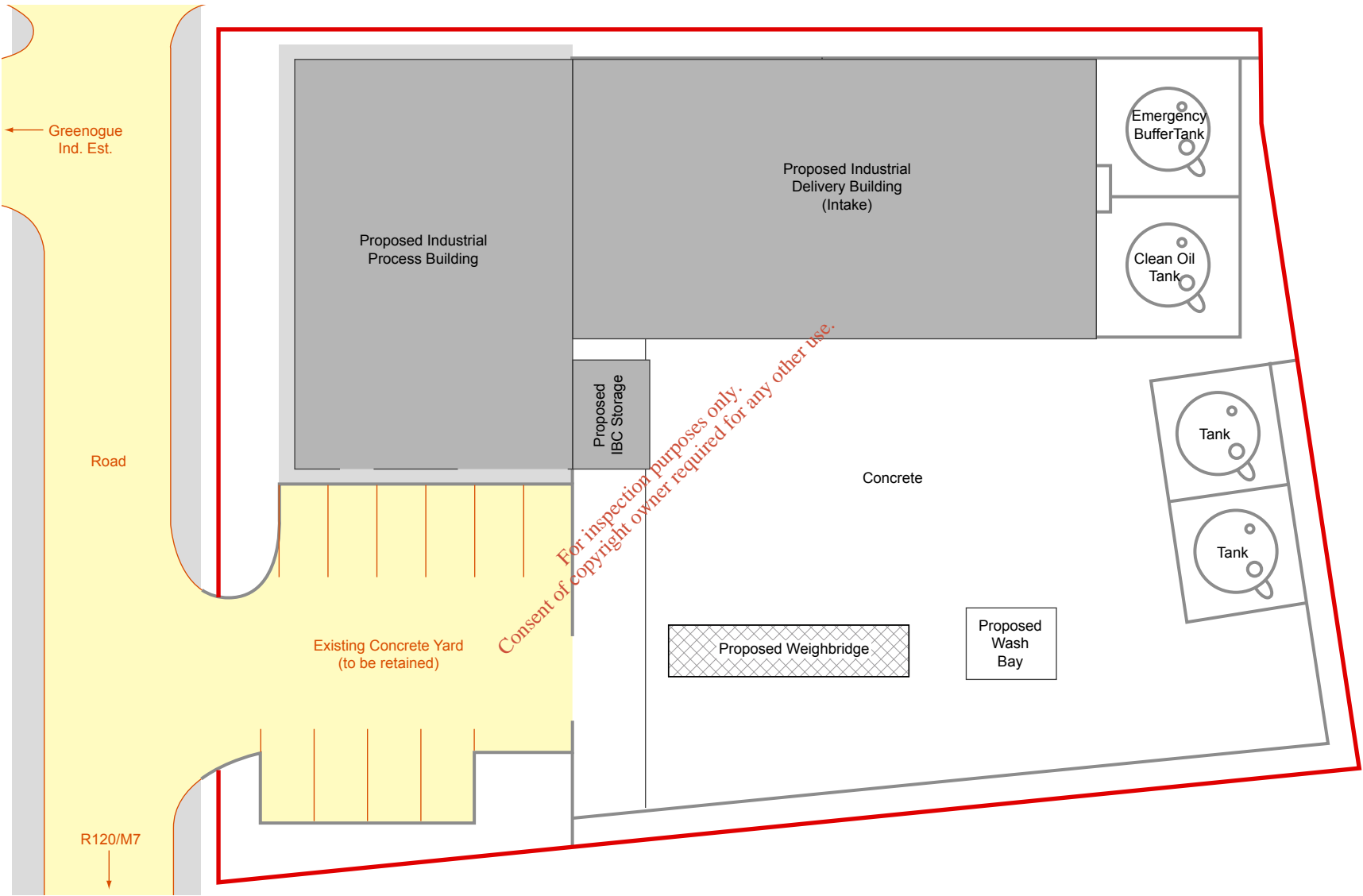
**Ormonde Organics
Site Location Map (NTS)**

Figure No. 1	Job No. CE05690	Date. June 2007
Finalised By - NM		

NOTE: OSI Licence No. EN0004906

LEGEND

— Site Boundary (Fence)



Ormonde Organics Proposed Site Layout (NTS)			
Figure No. 2	Job No. CE05690	Date. June 2007	
			Finalised By - NM

NOTE: Drawing is for diagrammatic purposes only. No measurements to be taken.

1. INTRODUCTION

1.1 OVERVIEW OF THE PROPOSED DEVELOPMENT

Ormonde Organics Ltd is a recently established company incorporating Ormonde Environmental and Land Organics Ltd. The company provides a dedicated waste management service and has been involved in the waste business for 10 years and currently employs 45 people.

Ormonde Organics Ltd. (OOL) plan to develop and operate a hazardous waste recovery and recycling facility at Greenogue Industrial Estate in Rathcoole, Co. Dublin. A comprehensive liquid hazardous waste recovery service will be provided by the proposed facility. The waste types proposed to be accepted are; hydrocarbon contaminated waste liquids including oily water, interceptor waste, waste oils, tank bottoms, bilge waste, drain cleaning waste, coolants, cutting fluids, fuel oils etc, acids, alkaline, lime sludge leachate, process wash waters and solid wastes including filters, oily rags, lime sludge and batteries. The facility will also be used for the short term storage of contaminated soils (<50 tons at any one time) pending transfer to licensed treatment or disposal facilities.

The site presently comprises a building and hardstanding yards located in industrial surroundings. It is proposed that the plant will process 10,000 tonnes of wastes per annum initially, rising to 45,000 tonnes of liquids and up to 1,000 tonnes of soils per annum after three to five years

The proposed facility will serve the greater Dublin region but given the site location in west Dublin along the M7, the facility will also serve much of south Leinster and beyond. A waste licence from the EPA is required for the operation of the hazardous waste recycling and recovery centre and this environmental impact statement (EIS) will accompany Ormonde Organics Ltd's applications for both Planning Permission and a Waste Licence.

This Environmental Impact Statement (EIS) examines the potential impacts and significant effects on the environment of the proposed hazardous waste recycling and recovery facility. The EIS has been prepared in accordance with the European Communities (Environmental Impact Assessment) Regulations (S.I. No. 349 of 1989 amended by S.I. No. 84 of 1994, S.I. 351 of 1998 and S.I 93 of 1999).

1.2 LOCATION AND SETTING

The location of the site is shown on Figure 1.1 and has a National Grid Reference of O 3020 2285. The proposed development site is located in the Greenogue Industrial Estate, Rathcoole, Co. Dublin. This area lies within the local authority jurisdiction of South Dublin County Council.

The towns of Newcastle and Rathcoole lie c.2km to the west and south of the proposed development. There is just one residential dwelling within 500 metres of the proposed site and there are a small number of single dwellings along the main routes in the vicinity of the area.

The site is outlined in red on Figure 1.2 Ormonde Organics Ltd. own all of the lands outlined in red on this drawing.

1.3 ADJOINING LAND USE

The adjoining land is shown on Figure 1.2 Surrounding activity is primarily industrial although there are a significant number of commercial units with offices in the industrial estate. There is one access point on the western margin of the site for vehicular access to the facility by OOL contracted vehicles and staff.

The lands to the north, west and south comprise industrial lands either established or currently under construction. The Griffeen River and its tributaries are culverted in the environs of the site although where exposed flows in a northerly direction (approximately 300 m north west of the site). To the east of the site are open grassed fields which will remain undeveloped as they are within an exclusion zone of nearby Casement Aerodrome at Baldonnell. The area is dominated by industrial warehouse units within an ever diminishing agricultural setting. Residential land use is generally restricted to along the main routes off the N7 and towards Newcastle and Rathcoole Villages. The R120 has direct access to the M7, serving the M50 and Dublin Port tunnel to the east.

1.4 FACILITY DESIGN PARAMETERS

The proposed facility has been designed to maximise recovery of wastes accepted at the site in accordance with Best Available Techniques (BAT). BAT places emphasis on pollution prevention techniques and therefore the facility has been designed to include appropriate measures to minimise nuisances such as dust, odours, water discharges, noise and fires. Only liquid wastes and contaminated soils will be accepted at the facility. No domestic or other putrescibles will be accepted at the site therefore reducing the potential to create typical nuisances associated with these waste streams.

Surface run-off from the facility will be directed to the local drainage network via appropriate treatment and monitoring infrastructure as further detailed in Section 8. A wheel-wash is not proposed at the facility as vehicles serving the site are fully enclosed and covered and unlikely to generate dusts. A wash bay will be provided for wash down where required. All surface and foul water discharges from the facility may be shut off via an automatic and manual closure device located prior to the respective discharge points.

1.5 SITE FACILITIES

The existing site comprises the following infrastructure:

- Pre constructed warehouse with reception, office space & canteen
- Hard standing yards with storm and foul drainage infrastructure
- Car Parking area

Buildings are composed of concrete floors, lower block walls and cladded upper walls and roof. All yards and building floors have bund kerbing/ramps to retain run off or spillages. As part of the proposed development it is proposed to add two additional buildings to the existing warehouse to act as an intake building and a storage building for the proposed process. An ancillary tank farm will be also be constructed. Some modifications to the existing foul water and surface water drainage systems from the site will also be required. These are detailed in Section 2.

Site operations will primarily be concerned with the acceptance and processing of liquid wastes for recovery of the reusable fractions and disposal of residual liquids. A small quantity of contaminated soils typically 50-100 tonnes will be held at the site at any one time prior to transfer off site for processing or disposal.

The main changes from existing site to the proposed facility are as follows:

- Construction of the additional industrial intake building & storage building
- Installation of Recovery & Recycling Plant in the main process building
- Installation of Weighbridge & Washbay
- Upgrading of ancillary infrastructural features including concreting of rear yard and upgrade to sewerage and surface water drainage

1.6 TRAFFIC ACCESS TO THE FACILITY

The site is located to the north of the R120 regional road which runs along the southern margin of Greenogue Industrial Estate, c.2km east of Newcastle village.

The junction of the industrial estate road with the R120 is a simple roundabout junction. Access to the facility is currently via the main link road in the industrial estate. A new link road which will run along the western margin of OOL's proposed site will be completed shortly and vehicles accessing the site will use this route to the M7 and beyond.

1.7 SERVICES INFRASTRUCTURE

The road network is described briefly in Section 1.2 above and is detailed in Section 13 of the EIS. Other infrastructure currently in place at the site includes the following :

- three phase electricity,
- telecommunications infrastructure,
- water mains,
- storm water drains, and
- foul sewerage.

1.8 PLANNING & DEVELOPMENT CONTEXT

The subject site is located within the Greenogue Industrial Estate, Rathcoole, County Dublin. As such it is subject to the provisions of the South Dublin County Development Plan, 2004 – 2010.

The Plan designates land within the Greenogue Industrial Estate as being subject to Zoning Objective E, which seeks 'To provide for enterprise and employment and related uses'. Under this Zoning Objective, a number of use classes are 'permitted in principle', including 'Industry – Special', which refers to 'The use of a building or part thereof or land for any industry which requires special assessment due to its potential for detrimental environmental effects'. It is our view that the proposed waste treatment facility falls within this definition and can, therefore, be considered 'permitted in principle'.

Further to this general Zoning Objective, a Local Zoning Objective relating to lands zoned as Objective E is contained in section 10.3(11) of the Development Plan. This Objective specifies that stand alone Office-Based Industry and Office uses are not permitted to exist independent of industrial/ warehousing type uses, but ancillary offices are allowed at a rate of no more than 20% of total floor space. In the case at hand, the proposed activity is to primarily make use of an existing building which was designed in accordance with this Local Objective. As such, it will be fully compliant with this office floorspace restriction.

In addition to the above, the application site is also subject to the provisions of the Greenogue Industrial Estate Masterplan, 2006, which was prepared in respect of 61.8 hectares of land newly zoned for 'enterprise, employment and related uses' under the most recent Development Plan. Whilst recognising that the market conditions influencing the development of the lands will change over time, the Masterplan nonetheless sets out a range of development principles which must be adhered to in the context of the overall development of the lands. The Masterplan notes that a wide range of businesses have traditionally been located within what was the original Greenogue Industrial Estate and envisages

that there will be a similarly varied range of uses within the extension to which the Masterplan relates. A number of Development Standards are specified in the Plan, although the fact that the proposed activity largely utilises an existing building (albeit one that is to be extended) means the relevance of these Standards is limited. However, the degree of compliance with the relevant standards is covered in the individual chapters of the EIS and set out in more detail in the Cover Letter accompanying this application.

In terms of the planning history relating to the area, the application site is occupied by a c. 530 sq m building which was constructed under Planning Reg. Ref. SD06A/0035 (granted on 16th March 2006). The building was originally permitted for the purposes of storage and transhipment of goods, but has not previously been used for this purpose. This being the case, the planning application which this EIS accompanies is seeking an amendment to the existing planning permission (including an extension to the permitted building).

There are also four other facilities within the Greenogue Industrial Estate that have previously been granted planning permission that are similar in nature (insofar as they all deal with some aspect of waste treatment or recycling) to the facility now proposed.

These include:

- An Integrated Waste Management Facility, consisting of four components: a hydrocarbon recycling facility, a drum reconditioning facility, a hazardous wastes transfer station and a commercial waste recycling facility. Permission for this facility was granted to SITA (Ireland) Ltd by SDCC on 11th December 2002 (Reg. Ref. SD02A/0313) and by An Bord Pleanála on 18th July 2003 (ABP Ref. PL06S.201534) following First and Third Party Appeals. Permission to increase the amount of annual throughput of contaminated soil at the site was granted permission by SDCC (Reg. Ref. SD07A/0260) on 5th June 2007. The applicant in respect of this most recent application was RILTA Environmental Ltd (formerly known as SITA)
- A waste transfer and recycling facility for receiving, unloading, storing, loading and transferring non-hazardous wastes (including a civic amenity area/ bring centre for use by the public). Permission for this facility was granted to Burns Waste Recycling Limited on 27th May 2002 by SDCC (Reg. Ref. S01A/0868)
- A facility for the dry recycling of waste timber to manufacture pulp substitute fibre. Permission for retention was granted under Reg. Ref. SD03A/0205 to Bailey Waste Recycling Limited on 20 November 2003
- A Waste Transfer Station for the handling of hazardous and non-hazardous waste. Planning permission for this facility was granted on 6th November 2002 to Cara Environmental Technology Ltd (Reg. Ref. SD02A/0301)

The significance of these decisions is that it has previously been demonstrated that subject to meeting the relevant development management standards, activities that are not dissimilar in nature to the type now proposed have been deemed to be acceptable within the Greenogue Industrial Estate by both South Dublin County Council and An Bord Pleanála. As such, and in keeping with both the land use zoning and associated matrix, we consider that there are no 'in principle' reasons for disallowing the proposed activity. The degree to which the proposed waste treatment facility meets other more site-specific constraints is set out in later Chapters of this EIS.

1.8.1 Regional Planning Guidelines for the Greater Dublin Area

Advances have been made in the preparation of Regional Planning Guidelines for the Greater Dublin Area issued jointly by the councils of the Dublin, Kildare, Wicklow and Meath regional Authorities. A recent update was prepared in 2007 with a specific document on Waste Management produced in September 2006.

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 documents 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

“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:

“Planning Authorities should: (inter alia)

- 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 Ormonde Organics Ltd's development 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 the Dublin Waste Management Region within the GDA and this function is in keeping with the objectives of each of the regional/county waste management plans; and
- This facility will play a part in an inter-regional solution to waste management in the GDA.

1.8.2 Waste Management Policy and Plans

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.

1.8.2.1 Changing Our Ways

The proposed development would assist in achieving the following objectives as set out in Changing Our Ways (Section 5.1.2):

- Prevent and minimise the production and waste and its harmful effects,
- Encourage and support the recovery of waste
- Ensure that such waste as cannot be prevented or recovered is safely disposed of and
- Address the need to give effect to the polluter pays principle, in relation to waste disposal

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."

1.8.2.2 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"

1.8.2.3 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.

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 Recovery & Recycling Centre is designed to handle hazardous waste from a catchment area that includes waste management regions within the Greater Dublin Area.

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. 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."*

1.8.2.4 National Hazardous Waste Plan

The Environmental Protection Agency (EPA), under Section 26 of the Waste Management Act (1996) is required to prepare a National Hazardous Waste Plan. The plan is reviewed every five years. The present National Hazardous Waste Plan outlines the priorities for 2001 to 2006 and is due for review this year. The main objectives of the plan in conjunction with Section 26 of the Waste Management Act are as follows:

- The prevention and minimisation of hazardous waste;
- The recovery of hazardous waste;
- The collection and movement of hazardous waste;
- The disposal of such hazardous waste as cannot be prevented or recovered

The Plan also stresses the need for Ireland to become self-sufficient with the recovery/disposal of hazardous waste as a substantial percentage of Irish hazardous waste is exported from the country (Section 6.1)

The export of hazardous waste for recovery and disposal would be occurring in a stable market although individual states' national policy can alter at any time, affecting one or more waste streams. This uncertainty leaves Ireland in vulnerable position in relation to our reliance on foreign government and other authorities and emphasises the need for our adoption, where feasible, of the principle of self sufficiency

The issue of self-sufficiency within Ireland is a key factor throughout the National Hazardous Waste Plan. The proposed Ormonde Organics Facility is in line with the goal of self sufficiency for Ireland's hazardous waste.

1.8.3 Regional Waste Management Policy

1.8.3.1 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. The proposed facility is located in the Dublin Waste Management Plan Region made up of the four Dublin local authority areas- Dublin City Council, Fingal County Council, South Dublin County Council and Dun Laoghaire-Rathdown County Council. The first 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 is review on a five year

basis. The first review of the Plan occurred in 2005. 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.

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.

Hazardous Waste Recycling Facilities such as the Ormonde Organics Ltd. proposed facility are an important component of Dublin's Waste Management Infrastructure. As mentioned in section 1.2 above, the proposed facility intends on accepting a variety of mainly hydrocarbon contaminated waste liquids. As stated in section 11.4.3 *Liquid Wastes* of the Dublin Region Waste Strategy (2005)

A number of companies are involved in collection of liquid waste generated for example by cleaning of drains and de-sludging of equipment and grease traps. At present there is poor access to facilities within the Region for treatment of this waste, which forces additional transportation and cost to access other regions.

Not only the greater Dublin Region, but also the southeast region of Ireland will be able to access the proposed facility due to its convenient location to the M7 and M50. The location of the proposed site offers a greater catchment area for hazardous waste industry.

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

1.9 ALTERNATIVES

1.9.1 Alternative Waste Management Practices

'Changing Our Ways', discussed in 1.6.2.1 above, outlines our National objectives for the management of waste for a fifteen year period from 1998. These objectives are based on the internationally recognised hierarchy of waste management options, i.e.

- prevention

- minimisation
- reuse/recycling
- energy recovery
- disposal

where the most favourable option is prevention and the least favourable is disposal. Ormonde Organics Ltd are not a waste producer and therefore has no opportunity to prevent or minimise waste.

1.9.2 Alternative Sites

The facility is industrial by nature and ideally should be located in an industrial estate. The three most important criteria in locating a hazardous waste recycling facility

- proximity to waste arisings,
- access to recycling markets, and
- access to disposal facilities.

OOL's proposed facility will serve commerce and industry in the Dublin metropolitan area and south east Leinster. Its location in an industrial estate on the edge of the city is ideally positioned for this purpose.

As West Dublin was identified as the most suitable location for the site by OOL, several other sites were considered including sites at Ballycoolin, Blanchardstown and in particular in Greenogue Business Park. No appropriate site could be found at Ballycoolin. The proposed site chosen was the last available site at Greenogue Industrial Estate.

Sites were also considered in Freshford in Co Kilkenny and at Newtownmountkennedy in Co Wicklow. The developers chose not to proceed with the site at Freshford for this use as they are currently in the early stages of developing another facility at this location. The site at Newtownmounkennedy was deemed unsuitable due to its proximity to the coast and rural location.

The location of recycling markets is varied and dynamic and siting a waste management centre based on markets alone is not feasible.

The proposed facility will recover clean oils which will be readily reusable. The primary component of the wastes accepted will be water, which following treatment will be discharged to foul sewer. A small quantity of sludges will also be generated by the proposed process. Disposal facilities for this quantity of residual waste generated by the facility are limited and the majority will likely be exported for treatment and disposal.

Vehicles which will transport the residual wastes generated by the facility either to the respective facilities in Ireland or for export can access the proposed facility at Greenogue via the M7 and the M50. Where landfilling of wastes is required, the majority of existing landfills and any new landfills in the region are likely to be located close to the national primary routes. Currently the M50 links the N1, N2, N3, M4, M7 and N11 national primary routes. Therefore access to the M50 is the key to accessing existing and future residual landfills in east Leinster.

In summary, the proposed location of the Ormonde Organics facility in an industrial estate with good access to the M7 is considered a very favourable location for a waste management centre. The proposed facility will be the only facility of its kind in Dublin which will process acids, alkalines, spent oil filters and recover waste oils to a reusable standard. This proposal represents a higher level of treatment than that currently provided at the recycling and recovery providers in the Greater Dublin Region.

1.9.3 The Do-Nothing Alternative

If the proposed hazardous waste recovery and recycling centre is not developed, hazardous liquid wastes will continue to be transported to sites outside the Dublin Region and in some cases exported.

A second consequence of permission to the existing facility not being commissioned would be the loss of an opportunity to recycle a significant amount of hazardous waste within the region. This would be against the aims of the national and regional strategies which promote recycling.

1.10 REQUIREMENTS FOR AN EIS

Environmental Impact Assessment (EIA) procedures are required for certain types and scales of development, as set out in the European Directive (85/226/EEC) amended by the Council Directive 97/11/EC and effected by the Statutory Regulations in Ireland (S.I. No. 349 of 1989 and SI No's. 92 & 93 of 1999). The fifth Schedule of the Planning and Development Regulations 2001 (SI No 600 of 2001) also sets out a comprehensive list of project type and development thresholds where relevant subject to Environmental Impact Assessment for the purpose of the Regulations.

This Environmental Impact Statement has been prepared to accompany an application for Planning Permission and to the EPA for a Waste Licence in accordance with the Waste Management Act, 1996.

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

- (i) The European Community Directive on Environmental Impact Assessment (No. 85/337/EEC), 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).
- (v) The Local Government (Planning & Development) Regulations, 1999 (S. I. No. 600/2001).

1.11 STRUCTURE OF THE EIS

The EIS is presented in the "Direct Format Structure" as set down in the "Guidelines on Information to be Contained in an EIS" produced by the Environmental Protection Agency (March 2002). In general, it follows the framework presented in the EPA Advice Notes on Current Practice in the Preparation of Environmental Impact Statements (September 2003).

1.12 CONTRIBUTORS TO THE EIS

This EIS has been prepared by White Young Green with contributions from Tom Phillips & Associates and Treatment Systems Limited. The members of the study team and their respective inputs are as listed in Table 1.1 Contributors to the EIS below

Table 1.1 Contributors to the EIS

Section	Contributor
Air Quality	White Young Green Environmental (Ireland) Ltd
Climate	White Young Green Environmental (Ireland) Ltd
Construction	White Young Green Environmental (Ireland) Ltd
Cultural Heritage	White Young Green Environmental (Ireland) Ltd
Ecology	White Young Green Environmental (Ireland) Ltd
Human Beings	White Young Green Environmental (Ireland) Ltd
Interactions	White Young Green Environmental (Ireland) Ltd

Landscape and Visual Appraisal	White Young Green Environmental (Ireland) Ltd
Material Assets	White Young Green Environmental (Ireland) Ltd
Noise	White Young Green Environmental (Ireland) Ltd
Non-Technical Summary	White Young Green Environmental (Ireland) Ltd
Orchestration of Statement	White Young Green Environmental (Ireland) Ltd
Planning Issues	Tom Phillips & Associates
Project Development and Description	Treatment Systems Ltd
Roads and Traffic	White Young Green Ireland Ltd
Soils and Geology	White Young Green Environmental (Ireland) Ltd
Ground Water/Hydrogeology/Surface Water	White Young Green Environmental (Ireland) Ltd

In addition to the main contributors to the EIS a number of organisations provided services/information and are detailed in alphabetical order as follows:

Item	Contributor
Air Sampling/Analysis	Analytical Environmental Services Gradko International Asbestos Consultancy Services Ltd Bord Na Mona Environmental Ltd
Dust Analysis	Geotesting Ltd
Geological/Hydrogeological Information	Geological Survey of Ireland (GSI)
Meteorological Data	Met. Eireann
Survey maps	Ordnance Survey of Ireland (OSI)
Water Analyses	Alcontrol Laboratories Ltd

1.13 DATA NECESSARY TO IDENTIFY AND ASSESS ENVIRONMENTAL EFFECTS OF DEVELOPMENT

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

- the existing environment, as described throughout Section 4 to 15 by the specialists in various fields,
- the characteristics of the development as described in Section 2, including its physical dimensions, infrastructure, volumes and nature of materials being handled, the processes involved and the emissions from the facility.
- The potential environmental effects of the project are assessed and proposed mitigation measures are presented and discussed within the individual sections.

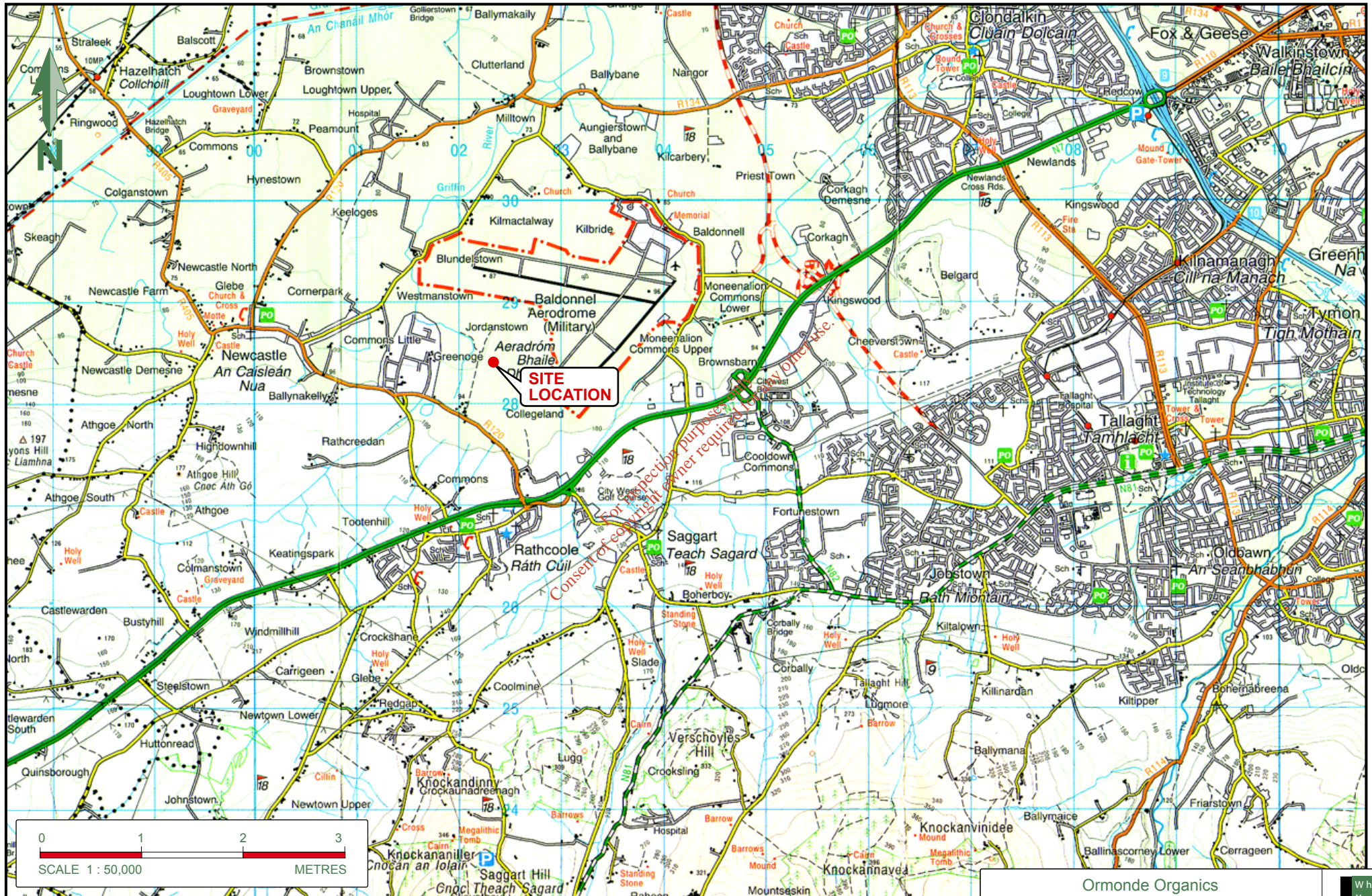
Pre planning meetings were held on 20th of March and 13th of June 2007 to establish the main aspects of the development that were of concern to South Dublin County Council.

1.14 DIFFICULTIES COMPILING SPECIFIED INFORMATION

Baseline information for the development site and its environs was readily compiled by the EIS contributors and no such difficulties were encountered.

1.15 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.



Ormonde Organics Site Location Map			White Young Green
Figure No. 1.1	Job No. CE05690	Date. June 2007	
Finalised By - NM			

NOTE: OSI Licence No. EN0004906

