EPA Application Form

1.2 – Non-Technical Summary Attachment

Organisation Name: *	Ormonde Organics Ltd
Application I.D.: *	LA007262

1. Introduction

Ormonde Organics Ltd operates a biological treatment plant comprising anaerobic digestion and composting at Killowen, County Tipperary under an Industrial Emissions Licence (Licence No: 287-01) issued by the Environmental Protection Agency (the Agency) and an approval from the Department of Agriculture Forestry and the Marine (DAFM) under the European Union (Animal By-Products) Regulations.

2. Licensing History

The licence was issued on 13th October 2016 and has not been amended.

3. Existing Installation

The Killowen facility is located approximately 3km north of Portlaw. It is in a rural area and dominant land use in the lands surrounding the site are agriculture and forestry. It is bounded by agricultural land to the north, by an area of forest to the south and east, and by the R680 regional road to the west.

The nearest dwellings are along/off the R680, with the closest being approximately 260 metres from the western side of the compost building. There is a farm 290m to the west of the compost building and a commercial orchard approximately 430 m south of southern boundary of the operational area. The stretch of the River Suir to the east of the site is designated as a Special Area of Conservation (Lower Suir River SAC Site code 002137).

The licence boundary encompasses 6.3 ha and comprises Building 1, which houses the composting waste reception area, enclosed forced aeration composting bays, maturation bay and offices; Building 2 which houses the AD waste reception area, packaged food debagging plant, digester feed line and digestate pasteurisation tank; An annex to Building 1, housing staff welfare facilities, office and hot water header room; 3 No. above ground fully enclosed AD digesters; and 4 No fully enclosed tanks (each 100m^3) at the northern end of Building 2 for storage of incoming liquid waste for the AD plant and a combined heat and power plant (CHP) comprising two biogas fired engines that generate electricity. The licensed area is surrounded by a stock proof security fence as required by the DAFM Animal By-Product Approval.

The compost process produces an end product that is spread on lands as a soil conditioner and fertiliser. The anaerobic digestion process generates a biogas and a liquid digestate. The biogas is used on-site as a renewable fuel to generate electricity which is fed to the national electricity grid and compressed and sent off-site for use as a renewable fuel. The digestate has a significant nutrient and soil enhancement value and is applied to land.

4. Proposed Changes

It is proposed to increase the annual waste intake to 80,000 tonnes. This will involve the provision of the following; a feedstock bunker building to the south of the anaerobic digestion intake building and the relocation of an existing liquid feed tank, an additional odour abatement unit, a maturation building and canopy to the south of the compost building, one new digester, one new digestate storage tank, paving of approximately 250m^2 of ground, additional storm water attenuation capacity, and the widening of internal access road to AD plant and extension of existing bund wall and 2.4m high perimeter fence around the facility.

5. Class of Activity

The class of activity as listed in the First Schedule of the EPA Act as amended is.

Class	Description
11.4 (b)	Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day involving one or more of the following activities, (other than activities to which the Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001) apply): (i) biological treatment; when the only waste treatment activity carried out is anaerobic digestion, the capacity threshold for this activity shall be 100 tonnes per day.

6. BAT Documents

The facility has been assessed against the BAT Conclusions in Commission Implementing Decision (EU) 2018/1147 establishing best available techniques (BAT) conclusions for waste treatment, under Directive 2010/75/EU.

7. Waste Management Policies

The foundation policy statement on waste management *"Changing Our Ways"* bases national policy on the EU Waste Management Hierarchy, which in descending order is:

- Prevention,
- Preparing for Reuse,
- Recycling,
- Other Recovery (including energy recovery); and
- Disposal.

The most recent Policy Statement *'A Resource Opportunity Waste Management Policy In Ireland 2012'* is also based on the EU Waste Management Hierarchy and encompasses a range of measures across all tiers namely, prevention and minimisation, reuse, recycling, recovery and disposal. It is a policy objective that when waste is generated, the maximum value must be extracted from it by ensuring that it is reused, recycled, or recovered.

8. Resource Consumption and Energy Use

Operations involve energy (electricity) and resource (groundwater) consumption. The resource consumption in 2020 was

- Electricity : 2,515 MWhrs,
- Water : 3,100 m^3

9. Sources of Emissions

Potential and actual emissions associated with the waste activities include vehicle exhausts, dust, noise, combustion exhaust gases from the CHP plant, odours and rainwater run-off to the River Suir.

The extraction and aeration fans are sources of continuous noise emissions. Waste transport vehicles, staff private cars and the mobile plant are sources of intermittent noise emissions occurring during the waste acceptance and processing.

The incoming wastes, the composting and anaerobic digestion processes and the biofilters are a source of odours. The composting process is also a source of bioaerosols. The two CHP gas engines and gas flare are point emission sources that contain the biogas combustion products. Potential dust sources include vehicle movement over the concrete yards during dry periods and compost screening.

Rainwater run-off from the paved areas and building roofs is collected and directed to an attenuation pond via an oil interceptor. The water in the pond outflows to the River Suir at a regulated rate (10.9 litres/second).

Leachate generated in composting process is collected and stored in underground storage tanks located inside the building from where it is recirculated in the process. Sanitary wastewater is mixed with the incoming waste and fed into the anaerobic digesters.

10 Environmental Monitoring

The environmental monitoring programme includes the CHP gas engine stacks, the biofilters, surface water, groundwater, dust, noise and air. The licence specifies the emission limit values that must be achieved.

11 Existing Environment, Potential Impacts, Mitigation and Residual Impacts

11.1 Climate

The climate in the area is mild and wet, with the prevailing wind direction from the south and south-west.

There is a link between direct and indirect greenhouse gas (carbon dioxide, methane and nitrous oxide) emissions and climate change. Direct emissions from waste management plants are associated with on-site processing and off-site electricity power generation, while indirect emissions are linked to the vehicles transferring wastes to and from the site and staff transport.

Composting is an aerobic process that reduces or prevents the release of methane during the breakdown of organic matter; however it does generate carbon dioxide that vents to atmosphere. The biogas from the anaerobic digestion consists largely of methane (60-65%) and carbon dioxide (35-40%). The gas is either combusted on-site, or compressed and sent off-site for use as renewable fuels.

Carbon dioxide arising from the composting of organic waste and the combustion of renewable fuels is deemed to be carbon neutral and not a net contributor to greenhouse gases. Furthermore, the reduction in the reliance on non-renewable sources as a result of the generation of electricity using the biogas has a positive impact.

Irish forests can sequester approximately 5 tonnes of carbon dioxide/ha/year and the loss of the 1ha of woodland inside the site boundary will have a knock-on effect of reducing the sequestering capacity.

11.2 Traffic

The site is accessed via a priority controlled junction off the R680. The site access arm is ca. 7.5 metres wide, with a large flare where it meets R680 allowing simultaneous two way truck movements. The access gate is 22 metres from the R680, allowing adequate parking space for trucks accessing the site. The sightlines to the south and north are adequate for vehicles leaving the site. The morning peak traffic period is between 8 and 9 am while the evening peak is between 5 and 6pm.

Construction phase impacts will be temporary term. Construction staff numbers will on average be ten, with a peak of twelve for a limited period. There will be an average of five daily truck movements, with peak movements rising to six to seven. All construction staff vehicle parking and truck loading/ unloading will be inside the development site boundary

The working hours will be 8am to 6pm, so construction personnel will generally arrive before the morning traffic peak and leave after the evening peak.

In the operational phase, traffic on R680 north bound will increase by 0.56% by 2021 with an increase of 0.10% on R680 south bound. An increase of 0.52% is projected on the R680 north bound in 2026, with an increase of 0.09% on R680 south bound. An increase of 0.46% is projected on the R680 north bound in 2036, with an increase of 0.08% on the R680 south bound during that year.

With the exception of increased turning movements to/from the development site via the site access junction with R680, the proposed development will have minimum impact upon the operation of the local road network during both construction and operational phases. Traffic through the site access/ R680 junction is projected to increase by 0.70% in 2021, 0.65% in 2026 and 0.58% in 2036 compared to the baseline scenario, representing a small overall increase in road traffic. Therefore no mitigation measures are required.

The proposed development will have minimum impact upon the operation of the local road network during both construction and operational phases. The additional truck movements on the local road network represents a small increase in traffic relative to the predicted background traffic and will not be significant. The proposed development will have an on-going, slight, negative impact on the local road network.

11.3 Land & Geology

The subsoils underlying the majority of the site comprise Carboniferous limestone tills and range from 34m in the north central part of the site to 12.5 m in the north east. The bedrock beneath the site comprises limestone and dark-grey calcareous shale of the Ballymartin Formation.

The proposed changes will involve the loss of 1ha of woodland and some amenity grass land and the excavation of soils and subsoils for the foundations of the new buildings, the digestate tank and digester together with the associated services including surface water drains and underground ductwork.

In the construction stage there is the potential for spills/leaks to occur when refuelling vehicles and mobile plant that could impact the exposed subsoils. In the operational stage, there is the potential for leaks/spills to ground to occur during the delivery and handling of the incoming wastes, the storage and removal of the digestate and in the event of a fire contaminated firewater would run-off to ground.

If the proposed development does not proceed the facility will continue to operate in its current configuration, there will be no land take, soils will not be excavated and there will be no change to the potential for impact on land and geology.

The Outline Construction Environmental Management Plan (CEMP) prepared for the planning application will be revised and updated before construction works begin to ensure that all of the construction mitigation measures set out in this EIAR and any additional measures required by the conditions attached to a planning permission granted by the Council are referenced and implemented to ensure the works do not result in any significant adverse impacts on soil. In the operational stage, the prevention and mitigation measures required by the current licence to protect soils will be implemented.

The proposed changes will involve the permanent loss of 1ha of woodland and some amenity grassland and the excavation of subsoils in the construction stage. There are no direct or indirect emissions to ground and the proposed development will not give rise to any new discharges. The development will have a slight negative impact on the soils, have no impact on the bedrock and will have a permanent, imperceptible negative impact on land.

The proposed development will have a permanent, slight, negative impact on land and soils, but no impact on the bedrock.

11.4 Water

The site is in the catchment of the River Suir. Two unnamed tributaries of the Suir join the river approximately 500m to the north and south of the site, with the confluence of the River Clodiagh and the Suir approximately 2km to the south of the site. The bedrock is a locally important aquifer and the vulnerability to pollution from the ground surface is low. The local direction of groundwater flow is to the east.

In the construction stage there is the potential for spills/leaks to occur when refuelling vehicles and mobile plant that could impact surface water and infiltrate to groundwater. In the operational stage there will be no direct or indirect emissions to groundwater. Rainwater run-off will continue to discharge to the Suir. There will be no change to the quality of the run-off, but there will be a slight increase in the volume due to the additional roofs and paved areas. There will be a slight decrease in the groundwater recharge rate inside the site boundary due to the expansion of the impermeable areas.

During the construction stage the measures specified in the revised CEMP will be implemented to ensure the works do not result in any significant adverse impacts on water. In the operational stage, the prevention and mitigation measures required by the EPA licence to protect surface water and ground will be implemented. A flow attenuation system that limits the rainwater run-off rate to greenfield conditions and there is a shut-off valve that can be closed to prevent contaminated run-off from entering the river.

The proposed development will result in a slight increase in the volume of storm water run-off to the Suir River, but the discharge rate will not change and it will have no impact on the quality. It will not give rise to any new discharge to groundwater and will have no discernible impact on surface water and groundwater quality. There will be a slight decrease in groundwater recharge rates.

The proposed development will have an imperceptible, permanent impact on water flows in the River Suir, but will have no impact on water quality. It will have an imperceptible negative impact on the quantitative status of the bedrock aquifer, but no impact on the qualitative status.

11.5 Biodiversity

The development site is not located within or adjacent to any designated conservation sites, but there are a number of European and Nationally designated sites present in the wider area. These are the Lower River Suir Special Area of Conservation (SAC), Hugginstown Fen SAC and Comeragh Mountains SAC. The closest of these is the Lower River Suir SAC which is 280m to the east, which is also a pNHA.

Storm water run-off from the facility discharges to the Suir providing a direct hydrological connection between the development site and the Lowe River Suir SAC. Of the species relevant to the Lower River Suir SAC only otters have the potential to occur at the development site; however field surveys have never identified their presence.

There are no Annex I habitats listed under the EU Habitats Directive present and the dominant habitats are primarily of moderate or low ecological value. No protected botanical species were recorded in the field surveys and all species observed are considered common for similar habitats.

The existing structure comprises steel-clad buildings, and metal tanks and are of low intrinsic ecological importance. There are areas of managed broadleaf woodland in the north-east and south-east of the site. These are approximately 20 years old and consist of two distinct blocks of ash and sycamore respectively. The northern site boundary is delineated by hedgerow and treeline. Tree species include sycamore and birch, while hedgerow species are predominantly hawthorn, gorse and bramble. On the western side of the site are areas of amenity grassland. These are species poor and regularly mown.

The habitats within the site include highly modified and unnatural (buildings and artificial surfaces and amenity grassland. Treelines are present which offer small amounts of semi-natural habitat, but are not significant in a local context. These habitats are considered to be of Local Importance (Lower Value). The broadleaf woodland represents a semi-natural habitat which, although modified by drainage and on-going maintenance, presents relatively high biodiversity and is considered to be of Local Importance (Higher Value).

The proposed development involves the loss of areas of semi-natural, sycamore and ash dominated broadleaf woodland. There will be no additional removal of existing habitat during the operational phase. The overall impact on the habitats and flora at the site and surrounding locality are considered minor negative. Although there are suitable habitat exists at site, there is a relatively low diversity of mammal species, most likely due to existing operations as well as the stock proof fence surrounding the site. There will be some displacement of terrestrial mammals (fox and hedgehog) in the construction stage. There will be no additional habitat loss during the operational phase.

The development area is not within the footprint of a designated site and the development does not require any resources from any designated sites, thereby ruling out any direct habitat loss at the conservation sites.

The development site is close to the Lower River Suir SAC and the overlapping Lower River Suir proposed National Heritage Area. Rainwater run-off from the building roofs and paved areas of the site not susceptible to contamination does and will continue to discharge to the river via an oil interceptor and flow attenuation system that regulates the discharge rate. The total volume of the storm water discharge will increase; however the actual flow rate will remain the same and there will be no change to the storm water quality.

In the construction phase indirect habitat loss or deterioration in the Suir could occur as a result of increased siltation, nutrient release and/or contamination in the storm water discharge to the river. There is no potential for significant negative impacts on the Lower River Suir pNHA. Otters are the only species relevant to the Lower River Suir SAC that could potentially occur within the operational site.

The proposed development involves the loss of areas of semi-natural, sycamore and ash dominated broadleaf woodland. There will be no additional removal of existing habitat during the operational phase. The overall impact on the habitats and flora at the site and surrounding locality are considered minor negative.

Although there are suitable habitat exists at site, there is a relatively low diversity of mammal species, most likely due to existing operations as well as the stock proof fence surrounding the site. There will be some displacement of terrestrial mammals (fox and hedgehog) in the construction stage. There will be no additional habitat loss during the operational phase.

The construction phase will result in the loss of 1ha of commercial broadleaf woodland. Preliminary roost inspection of trees which will be removed as a result of the proposed development was carried out, and there was no evidence of the use of the trees by bats. . Depending on the timing of works there is potential to impact upon nesting and/or roosting birds. The operational phase will not result in any additional habitat loss or any additional disturbance relative to the current operations.

The revised CEMP will contain all of the construction mitigation measures set out in this EIAR and any additional measures required by the conditions attached to a planning permission granted by the Council.

Tree protection measures will be identified by a suitably qualified Arborist and will be specified in the CEMP. Unless absolutely necessary the felling and clearance of woodland areas should not be carried out within the bird breeding season (March 1st to August 31st). All of the trees to be removed will be inspected by a bat specialist prior to felling. A minimum of 10 bat boxes and 10 bird boxes will be erected at selected locations in the woodland habitats within the development boundary.

No works will be carried out at the existing outfall to the Lower River Suir, which is approximately 4km upstream of the pNHA site. Therefore there is no potential for significant negative impacts on the Lower River Suir (Coolfin, Portlaw) pNHA.

There is likely to be marginal localised increases in noise and dust in the construction phase; however, the likelihood of any significant disturbance of otter or the aquatic species and habitats for which the Lower River Suir SAC is designated is low.

The design of drainage scheme for the development ensures that there is adequate storage capacity to accommodate the increased volume of rainwater run-off due to the additional buildings and paved areas and maintain the flow rate to that of 'greenfield'. The development will not result in any

significant additional noise or air quality impacts, thereby ruling out any indirect disturbance of waterbirds occurring in the wider area. Therefore the effects on the Lower River Suir SAC arising from the proposed development will be neutral.

Overall the development will result in the loss of an area of1 ha of commercial broadleaf woodland. This habitat is of moderate ecological value and the surrounding habitats that support a good diversity of bird and bat species.

The removal of the existing trees has little potential to affect roosting bats in the short and medium term. The loss is likely to marginally diminish the feeding resource at the site; however, there is a considerable amount of woodland in the wider area and the species diversity and abundance are unlikely to be impacted.

The construction phase will result in the permanent loss of woodland and other habitats. Construction related disturbance (vibration, noise, light, dust) can cause localised displacement of mammals in the construction phase. The new infrastructure is likely to present low value nesting/roosting and foraging habitat for birds and therefore the overall impact on birds at the site and surrounding locality is considered to be slight negative.

The loss of semi-natural habitats during construction is likely to lead to a localised decrease in the diversity of Lepidoptera and other insect species.

The development site is of Low-Moderate Value (Locally Important) as it contains some semi-natural habitat used by a good diversity of bird and mammal species. The site also has some ecological connectivity with habitats associated with the Lower River Suir SAC. The proposed development will have no significant effects on designated sites. There will be a minor localised impact on habitats, as well as highly localised impacts on the diversity of flora and fauna during the construction stage.

11.6 Air

The EPA conducts ambient monitoring at stations around the country to establish regional air quality. The monitoring station in Kilkenny is the nearest active ambient monitoring point to the site. Continuous monitoring is carried out for ozone and nitrous oxide, particulates, benzene and toluene and the results for and the results are used to update the Air Quality Index for Health (AQIH).

The AQIH is a number from one to 10 that indicates the air quality currently in a region and whether or not this might affect human health. A reading of 10 means the air quality is very poor and a reading of 1 to 3 inclusive means the air quality is good. In August 2020 the AQIH was 2 meaning the air quality was good.

Emissions from construction works with the potential to impact on air include dusts and vehicle/mobile plant exhausts. Point and fugitive emissions from the biological treatment processes with the potential to adversely impact on air quality include, odours, particulates, dust, bioaerosols, combustion gases from the gas engines and vehicle exhaust.

In the construction stage the control measures will include damping down of exposed soils in dry weather and limiting vehicle speeds. In the operational stage the control measures specified in the EPA licence, which are designed to ensure waste activities do not give rise to negative impacts on air quality will be implemented. These include the provision of odour abatement controls on the buildings where the wastes are handled and ensuring emissions from the gas engine stacks meet the specified emission levels.

The trucks that deliver the wastes are typically fitted with nitrous oxides reduction systems and it is Ormonde Organics policy not to allow engine idling.

The potential for dust to be emitted during construction works depends on the type of construction activity being carried out in conjunction with ambient conditions, including rainfall, wind speed, wind direction and on the distance to potentially sensitive locations. Most of the dust generated is deposited close to the source and any impacts are typically within a hundred metres of the construction area.

The design of the new odour control system will meet the emission limits specified in the EPA licence. When operated in compliance with the EPA licence conditions the odour control system will ensure that operations do not give rise to odour nuisance outside the site boundaries. The proposed development will have an ongoing imperceptible, negative impact on air quality, but will have no permanent impact.

11.7 Noise

The site is in a rural area and the surrounding land use is a mix of pasture/tillage and woodland. The nearest private houses are along the R680 and side roads and all are more than 250 metres from the site. The EPA licence requires annual noise surveys to assess the impacts associated with the facility operations and also specifies limits for noise sensitive locations. The surveys are conducted at four on-site and two off-site locations agreed with the EPA and confirm that noise emissions from the site are consistently less than the day, evening and night-time limits.

In the construction stage, the primary noise sources will be the construction plant and equipment, with secondary sources being vehicle movements associated with the delivery of construction materials and the on-going waste activities at the facility. The development will involve the provision of an additional extraction fan for the new odour abatement unit and this will be the only additional noise source in the operational stage. As the odour treatment is continuous the fan will operate 24/7. The delivery vehicles and mobile plant are usually only active between 8.00 am to 7.00 pm Monday to Friday and between of 8.00 am to 2.00 pm on Saturday.

All construction will be carried out in accordance with the noise mitigation measures specified in the CEMP. The noise from the new extraction fan will be similar to those already installed. Ormonde Organics implements the control measures specified in the EPA licence that are designed to ensure waste activities do not give rise to noise nuisance outside the facility boundary and these will continue to be applied.

The noise emissions from the proposed development will be below the day, evening and night-time limits specified in the EPA licence. The proposed development will have an on-going, imperceptible, neutral impact over its lifetime.

11.8 Landscape & Visual Impact

The landscape in the vicinity of the site is dominated pasture/tillage field systems, forestry and the River Suir and its tributaries. The topography slopes generally from west to east towards the river, which is east of the site.

The lands immediately to the north-east, east, south-east and south of the facility is covered with deciduous woodland. The R680 runs along the site's western boundary. The nearest private houses

are along the R680 and its side roads, with the closest being approximately 270 metres to the north-west. There is a farm 260m to the west

The proposed structures are proximate to the existing structures and very similar in terms of design, height and scale. The proposed extensions to the buildings and the additional digester and digestate storage tanks will be located in areas of the site that are substantially screened from public viewing points due to a combination of the existing buildings, the topography and the woodland planting.

The new building will be finished with an external cladding similar to that already used on site. Additional lighting required in the operational areas to allow safe access in the darker winter months will be directed towards the operational area and not the site boundary

Given the location and scale of the development additional prevention and mitigation measures, including a boundary landscaping plan are not required.

11.9 Population &Human Health

The lands surrounding the site are primarily used for agricultural purposes, with the area immediately to the east and south planted with trees. There is a farm 260m to the west and a commercial orchard 500m to the south. The nearest houses are located along and to the west of the R680, and there are none within 250m. Portlaw, which is 2.6 km to the south, is the closest population centre, with 1,696 residents.

The combustion gases from the gas engines and vehicle exhaust gases can affect air quality with consequent implications for human health. While odours, noise and dusts do not present a direct risk to health, they can be a significant nuisance and cause of discomfort that may indirectly affect human health.

Biological treatment plants are potential sources of nuisance (birds, vermin and insects) that can significantly adversely impair the amenity value outside the site boundaries if they are not properly controlled. Traffic movement to and from waste management facilities can, depending on the size, location and capacity of the local road network, be a cause of congestion that affects local residents.

A major accident, such as a fire, presents a risk to site staff and there is the potential, depending on the weather conditions, for smoke to affect residential and commercial premises in the vicinity of the site.

Ormonde Organics has engaged a specialist pest and vermin control contractor who visits the site regularly to ensure pests and vermin are properly controlled. Fire prevention, detection and suppression measure are in place to minimise the risk of fire outbreak and ensure that in the event of a fire there is an appropriate and rapid response to bring it under control.

The air quality in the vicinity of the site is good. The additional traffic will increase vehicle exhaust gases, which will contribute to an imperceptible decrease in air quality. The traffic impact assessment has established that the development will not have a significant adverse impact on the local road network. The existing operational controls, and those conditioned in the revised EPA licence, will ensure that the site will not be a source of odour, dust or noise nuisance outside the boundary. Appropriate measures are already in place to prevent, detect and suppress a fire outbreak.

The proposed development will have an imperceptible, negative impact on population and human health, which will continue over its operational lifetime.

11.10 Archaeology, Architecture and Cultural Heritage

There is no record of any archaeological feature, protected structure, or cultural heritage feature within the site boundary.

The development involves ground disturbance inside the site boundary; however the development areas have previously been disturbed when the trees were planted. There is no record of any archaeological feature, protected structure or cultural heritage feature at the site.

As the proposed development is unlikely to have any impact on any archaeological, architectural or cultural feature, prevention and mitigation measures are not required. In the unlikely event that archaeological finds are discovered, the construction works programme will be amended to allow a thorough examination by an experienced competent archaeologist. No further mitigation measures are required.

The development will have no impact on any known archaeological, architectural or cultural feature and the likelihood of impacts on unknown features is very low. If any such features are identified in the construction stage, they will be examined and recorded. When operational the facility will not impact on archaeological features in the vicinity of the site.

11.11 Material Assets & Resource Consumption

Lands surrounding the site are used for agricultural purposes and forestry. The agriculture is a mix of pasture and tillage. The northern and eastern areas of the site are planted with commercial deciduous woodland, which extends outside the site boundary.

The closest community venue is the Portlaw GAA club which is 1.1km to the south. Portlaw, which is the nearest population centre. Historically, industry and manufacturing played an important role in shaping the town and community; however recently the town has experienced limited investment in the industrial/enterprise sectors. Ormonde Organics is one of the largest employers in the Portlaw area, with approximately 40 full time employees based at the facility.

Current waste processing involves the use of diesel fuelled waste transport vehicles and mobile plant and electricity for lighting and heating of the offices and yard lighting. Private wells and rainwater are used to supply water.

The development will contribute to maintaining local employment levels. The materials used in the construction stages will, in so far as is practical, be sourced locally. There will be an increase in traffic movements, which will result in an increase in diesel consumption and the expansion will increase electricity and fuel consumption.

Ormonde Organics implements the nuisance control measures specified in the EPA Licence to prevent impacts on local amenities and also applies resource consumption control measures to minimise usage.

The current operations are not a source of adverse environmental nuisance or impairment of amenities outside the site boundary. They have not adversely affected the existing economic activities in the surrounding area, nor have they reduced the potential for the future expansion of such activities. The local and regional road networks have the capacity to accommodate the existing traffic

and the increased traffic due to the proposed development. The development will result in an increase in resource consumption

11.12 Interaction of the Foregoing

The proposed development has the potential to impact on human beings from, odour, air quality, noise, dust, vehicle exhaust emissions and accidents. The site design and proposed method of operation has taken account of these emissions and the impacts of accidents and effective mitigation measures have been identified. The increase in traffic will contribute to an imperceptible impact on air quality at a local level.

The assessment of the impacts of the proposed development took into consideration the impacts of the existing operations, the developments that have been permitted but not yet constructed, the proposed developments and other existing and proposed commercial activities within 1km of the site. The predictive assessments include the impacts of both the existing emissions and those associated with the proposed development.

12. Proposed technology and other techniques to prevent or eliminate, or where this is not practicable, limit, reduce or abate emissions from the installation

The current licence specifies the manner in which the facility must operate so as to ensure that pollution and or nuisance to neighbours and the general public is prevented. The licence conditions require the site management team to have the appropriate training and qualifications; they specify the types of wastes and processes that can be carried out; stipulate how wastes and raw materials that have the potential to cause pollution are handled and stored; describe the control measures that must be applied to prevent nuisance, for example litter and dust control, and require appropriate emergency response procedures to be in place.

13. Measures to Comply with Waste Management Hierarchy

The proposed development will contribute to the implementation of the principles of the waste hierarchy through the provision/expansion of waste recovery infrastructure which will facilitate the management of wastes generated within the region and nationally, in an EPA approved facility incorporating the best available techniques to ensure environmental protection, thus supporting the self-sufficiency and proximity tenets of the Waste Directive.

14. Abnormal Operating Conditions

Ormonde Organics has adopted an Emergency Response Procedure (ERP) that identifies the responsibilities and actions required to deal quickly and efficiently with an emergency.

15. Avoidance of the Risk of Environmental Pollution due to Closure of the Facility

The EPA has determined that Ormonde Organics is not currently required to agree costs and financial provisions for environmental liabilities.'

16. Environmental Monitoring

Ormonde Organics currently conducts monitoring of the following:

- Combined storm water / Surface water discharge
- Groundwater
- Dust
- Air
- Noise

17. Measures to Comply with an Environmental Quality Standard

The emission limit values set in the current licence are based on achieving compliance with the relevant EQS. The measures also effectively minimise the risk of pollution over long distances.

The environmental quality standards that are relevant to the overall assessment for the licence application are those specified in:

- European Communities Environmental Objectives (Surface Water) Regulations S.I. No 272 of 2009, as amended;
- European Communities Environmental Objectives (Groundwater) Regulations S.I. No 9 of 2010, as amended;
- Air Quality Standards Regulations (S.I. No 271 of 2002), and
- Directive 2008/50 EC on ambient air quality and cleaner air for Europe.

18. Measures to comply with Council Directive 80/68/EEC and 2006/118/EC in relation to the protection of groundwater.

There are no direct discharges to groundwater.

19. The Main Alternatives to the Proposed Technology, Techniques and Measures

The Waste Management Plan for the Southern Region does not identify specific locations for future waste related activities, but does state that the proper siting of these activities, including expansion of existing facilities, is the most appropriate method of the planning hierarchy to address the potential for impact on the environment.

The development of a new biological treatment facility on a vacant commercial premises / greenfield site requires the acquisition of land; the construction of new waste processing buildings or alterations to an existing building and the provision of offices, maintenance workshops, weighbridges new site services (surface water, foul water, power, water supply and security) and the recruitment and training of new staff. This offers no environmental advantage compared to the expansion of an existing authorised facility.

There is sufficient space to accommodate the additional processing capacity needed to handle 80,000 tonnes of waste annually, the facility is already authorised to accept and biologically treat organic waste and it has a proven track record of operating in a manner that does not give rise to significant impairment of the amenity values of the surrounding area.

The existing and proposed site layout and design comply with best practice and allows the implementation of effective mitigation measures. The current composting process is industry standard and meets the Best Available Technique (BAT) requirements specified at EU level.