



O'TOOLE COMPOSTING LTD.

ENVIRONMENTAL IMPACT STATEMENT

NON-TECHNICAL SUMMARY

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INTRODUCTION

This is a non-technical summary for the Environmental Impact Statement that has been completed for O'Toole Composting Limited. This EIS has been completed as part of a Planning Application that is being submitted to Carlow County Council. An EIS is required for all waste facilities that propose to accept more than 25,000 tonnes of waste per annum.

OVERVIEW OF THE PROPOSED DEVELOPMENT

O'Toole Composting Limited (OTCL) is based in Ballinrane, Fenagh, Co. Carlow. This facility has been operational as a composting facility, and a waste transfer station since 2005. The facility operates under Waste Permit number WFP-CW-10-0003-01 as reviewed by WFP-CW-14-5, issued by Carlow County Council. It is now proposed to develop and expand operations at the facility. As part of this expansion an application will be made to the EPA for a Licence under the Industrial Emissions Directive, which, if granted, will supersede the Waste Permit for the facility.

OTCL wish to apply for planning permission and an EPA licence under the Industrial Emissions Directive in order to be able to accept up to 40,000 tonnes per annum of biodegradable waste for composting. They also wish to install a new bio-filter on both the composting and waste transfer (skip) buildings. The latter will accept up to 20,000 tonnes of household bulky waste, mixed dry recyclables, commercial and industrial wastes and allow them to expand their current waste management customer base. The proposed development also includes construction of a purpose built Bring Centre for use by members of the public for recycling.

O'Toole Composting Ltd. are proposing to expand, develop and upgrade their existing operations at Ballinrane Fenagh Co. Carlow to allow for the following;

- Increase in capacity of composting facility by up to 40,000 tonnes per annum
- Construction of new bio-filter for composting building.
- Development of a purpose built Municipal Bring Centre.
- Installation of bio-filter on waste transfer and processing facility (skip shed).

There are two proposed stages to this development. It is proposed that Stage 1 will include the expansion to the composting activities with an increase of permitted tonnage to 40,000 tonnes per annum. Stage 1 will also include the construction of a new bio-filter for the composting building.

Stage 2 includes the construction of a purpose built Bring Centre. This will be developed to allow for the acceptance of various waste streams from local residents including bulky waste, mixed recyclables, wood, metal, WEEE, batteries, textiles and others as deemed necessary. This facility will be open to members of the public. Stage 2 will also include the

construction of a bio-filter at the skip shed if deemed necessary by the waste types being accepted.

This EIS will accompany a planning application to Carlow County Council for an increase in tonnage to 60,000 tonnes per annum and a new bio-filter for the composting building, as well as the construction of a Bring Centre and the construction of a bio-filter for the skip shed.

NEED FOR THE PROPOSED DEVELOPMENT

OTCL is committed to the recycling of waste from all sources including Household, Commercial and Industrial, and Construction and Demolition. Currently there is no other waste recycling facility in County Carlow for the acceptance of commercial waste. The company is particularly focussed on the recycling/composting of biodegradable waste. If the facility operations are expanded as proposed then OTCL will have an increased capacity for composting tonnage that can be used by other waste operators. This will contribute to Ireland's efforts to meet EU targets of biodegradable municipal waste (BMW) accepted at landfill for disposal as set out by the EU Landfill Directive.

SITE DESCRIPTION

The facility is located in the townland of Ballintrane in Fenagh, Co. Carlow. The National Grid reference for the facility to which this application relates is S 7886 6762. The site which is 4.87 hectares is located in a rural area where the predominant land use is for agriculture. The closest dwelling is located approximately 170 meters south of the facility. The site itself was historically used as agricultural land until it was developed by O'Toole Composting as a composting facility in 2005. Currently the facility operates under Waste Permit Number WFP-CW-1-0003-01, which was granted by Carlow County Council on the 3rd of August 2010 with a maximum permitted tonnage of 10,000 per annum. (As reviewed by WFP-CW-14-5).

The site itself is well serviced with road networks. The site is located directly off the N80 Carlow/Rosslare Road, approximately 6km south east of the M9 Dublin/Waterford Motorway. The main entrance of the facility is located at the north - west corner of the site, just off a local access road Jocks Lane, which runs perpendicular to the main N80 roadway. Sufficient sightlines are at either side of the access lane for safe access and egress to the facility. O'Toole Composting is in a central location off the national transport corridor, close to Carlow Town, a county town which links the gateways of Waterford and Dublin and the hub towns of Kilkenny and Wexford.

The bedrock in the underlying area of the facility is that of granite and other igneous intrusive rocks which act as an impermeable barrier to groundwater from the facility.

The site is located in the River Barrow Catchment, within the South Eastern River Basin District. The River Burren flows in a north, north-westerly direction along the eastern site boundary. The Graiguealug stream flows in an easterly direction to the north of the site and joins the River Burren. Because the River Burren is part of the River Barrow system and the former is a candidate Special Area of Conservation a screening for Appropriate Assessment

was carried out. This screening determined that the development will not have any impact on the SAC.

PROPOSED SITE LAYOUT

In general the site layout will remain unchanged, save for the addition of an airlock and new bio-filter at the compost building, a proposed bio-filter attached to the skip shed and a purpose built Bring Centre located adjacent to the site entrance. The proposed site layout is shown in Appendix 2.

The proposed site development works will be undertaken as follows:

- 1) Identification of existing services on site;
- 2) Diversion of necessary services e.g. electricity supply, etc.;
- 3) Undertaking of earthworks cut and fill to include cart away of topsoil to establish ground level; (minor requirement);
- 4) Construction of below ground services to the new building-surface;
- 5) Construction of additional hardstanding area surrounding proposed building;
- 6) Construction of Mechanical and Electrical above and below ground services such as Telecom and Electricity in agreement with service providers as required;
- 7) Construction of a new Bring Centre and bio filters;
- 8) Installation of all plant and machinery in new buildings.

ENVIRONMENTAL IMPACT

Environmental Nuisances

As with any waste facility it is possible that some environmental nuisances may occur within the site, and within the surrounding environment. Potential nuisances may possibly include noise, vermin, dust, odours or litter. However this impact will be minimal due largely to the control measures adopted on site to combat the effect of these environmental nuisances. Strict adherence to the conditions of the waste license, good management practises, control over individual procedures, and maintenance of the odour abatement systems are essential to ensure the site will not impact on receptors in the area. The existing site has a good environmental record which O'Toole Composting Ltd. strives to maintain. It is not expected that the expansion of operations at the facility will give rise to nuisance's offsite.

Vermin and Pest Control

Control of rodents is a mandatory prerequisite for any waste management facility and strict mitigation measures will adhered to to control vermin and pests on the site. A Pest control system is currently in place with eleven bait points positioned around the facility. The bait stations are monitored by on-site staff and vermin is monitored during daily facility inspections as per the Environmental Management System (EMS) for the facility. At present these control measures are considered sufficient as there is no vermin activity on-site. If vermin are found present at the facility an external contractor can be employed at the facility.

Dust

Waste handling operations on the site ensure that all tipping of waste occurs within the buildings where possible and any dust emissions are therefore contained. Dust curtains will be installed on the entry/exit points to the proposed shed to minimise fugitive dust emissions. The negative extraction odour control with bio filter unit will result in the removal of dust particles from the air in the building before it is released through the bed or stack. In dry weather the yard will be sprayed with water and as when required to minimise airborne dust nuisance. OTCL will implement additional dust monitoring and control procedures at the facility as per the monitoring requirements of the EPA licence.

Waste at the Bring Centre will be stored in enclosed containers and monitored daily to ensure it is not giving rise to dust at the facility. Dry dusty materials will be dampened down where necessary. Dust monitoring is ongoing at the facility and all dust emissions are within the necessary limits. This monitoring will continue to be conducted.

Odour

Odour is the most significant potential environmental impact of this proposed development. Therefore OTCL have undertaken a number of mitigation measures to minimise any impact. The primary mitigation measure is the proposed odour control system which is based on bio-filters and will be a simple and effective way of controlling the odour of the waste air coming from the buildings. OTCL have a mobile atomised probe unit at the facility. This unit is a self-contained transportable system which is powered by a motor and disperses odour neutraliser to give immediate odour suppression to confined areas if odour is detected. Other measures include:

- Ensuring where possible that the building is constructed without any gaps in the building fabric using combined flashing and expanding foam,
- Installation of roller doors on the entrance and exit of the waste reception hall,
- Give consideration to the installation of PVC plastic curtains inside the doors to reduce the available door area once the roller door is opened if necessary,
- Zoned extraction within the building to remove odorous air from the most odorous sources within the building.

As all processes will take place in a fully enclosed building which will be kept under negative air pressure at all times it will therefore avoid any odour nuisance. An odour dispersion model was carried out by RPS Consulting Engineers and predicts that the emissions from the proposed development will not give rise to reasonable cause for odour annoyance once the proposed mitigation measures are put in place.

Litter

Vehicles entering the site have the potential to cause a litter nuisance. Litter procedures are currently in place to prevent litter nuisance at the facility or in the immediate area of the facility. Site practices for the proposed development will include the following;

- The road network is kept free from debris caused by vehicles entering or leaving the facility, any debris is removed immediately.
- Daily litter patrols of the overall site and the access roads are carried out.

- Waste collection vehicles entering and exiting the facility will be covered to prevent any fugitive litter.

Water

An environmental assessment was carried out by Enviroguide Consulting to determine the impact that this proposed development would have on surface and ground water. The geology was examined with all published information that was available.

This section is divided into sub-sections, so as to describe the various aspects relating to the water environment.

Surface Water

This section deals with the potential impacts on surface water resulting from the construction of an extension at the waste facility and the proposed control measures to minimise such an impact.

All surface water from the facility runs to a stream that runs along the eastern boundary of the site. This stream flows into the Burren River. As the facility is currently operational surface water sampling is carried out at two locations on this stream. Results of this sampling is included in the main body of the EIS. All results are below recommended EPA's Interim Guidelines limit levels. ('Towards Setting Guideline Values for the Protection of Groundwater in Ireland' – EPA 1993)

Groundwater

There are no proposed discharges to ground water from the facility. There are no source protected zones in the vicinity of this facility. All liquids and fuels stored on-site are stored in bunded containers to prevent penetration to ground water in the event of a spillage. Concrete hardstand at the facility and the underlying bedrock act as protection barriers to groundwater.

Waste Water

Wastewater from the operation of the facility is collected in holding tanks on-site. This wastewater is either reused in the composting process for moisture in the composting tunnels or it will be tankered offsite to an approved waste water treatment plant. Foul water discharges from the offices is diverted to a septic tank on-site.

During the construction phase there is a potential for sediment laden water to run off from the site. Due to control measures on-site the predicted impact of the construction phase on surface water quality is minimal.

Surface water monitoring is proposed to continue at the facility to ensure that the operation of the facility does not cause any adverse effects on water quality.

Human Beings

Human beings are one of the most important elements of the 'environment' to be considered. One of the principal concerns in any proposed development is that the local population experiences no reduction in the quality of life as a result of the development on either a permanent or temporary basis. As the facility is currently operational it is expected that any impacts on human beings will be minimal.

The facility is located just off the N80 main Carlow to Wexford road. The nearest dwelling is approximately 170 meters to the south. The facility has a low visibility impact on the residents due to the screening surround the site. Potential impacts could include impacts on noise, traffic, fire safety, human health, land use, odour and socio-economic impacts.

Due to the location of the facility and considering that it is currently operational, and has been since 2005, the predicted impacts on noise, traffic, safety, human health, land use, odour and socio-economic impacts are considered to be of negligible. Several fire safety measures have been implemented at the subject site to control any potential impacts in the unlikely event that a fire would occur at the facility. These controls include six 5,000 gallon (22,000 litre) water tanks for holding water specifically for firefighting purposes. Appropriate fire extinguishers have been installed at various points throughout the facility so that fires can be extinguished rapidly to limit fire damage.

Air Quality

This section of the EIS outlines the current baseline conditions of air quality at the facility. Possible predicted impacts from the proposed increased activity at the facility are odour, dust and bio-aerosols. All wastes are processed within the facility buildings which will reduce the potential of these impacts. In addition to this, a bio-filter has been installed in the waste composting building. This bio-filter will greatly eliminate any odour, dust or bioaerosol particles that may be otherwise emitted from the building. As part of the proposed extension to the waste transfer building it is proposed to install a bio-filter in this building also to minimise dust and odour impacts. With these control measures in place the impact to air quality is considered negligible. An Air Dispersion Model was prepared by RPS consulting to predict possible patterns of air dispersions from the facility. A copy of this report is included in the EIS document Appendix 4.

Climate

30 year averages for the site (from Kilkenny weather station) show the following relevant information:

1. The mean daily temperature is 9.3 degrees Celsius with a mean daily maximum of 13.4 degrees C and a mean daily minimum of 5.2 degrees C.
2. The mean annual rainfall is 822.8 mm
3. The mean monthly windspeed is 6.5 knots.

Given the above it is determined that the climate for the area of Ballintrane is regarded as normal with no exceptional values shown.

Carbon dioxide from the processing of biodegradable waste is not regarded as a net contributor to greenhouse gas emissions because the carbon had a short carbon cycle in

other words it was stored in the biomass for a limited number of years as opposed to the hundreds of thousands of years for fossil fuels.

Similarly the processing of MSW and removal of all biodegradable waste from this waste stream will reduce the potential for methane generation should residual amounts of this material be landfilled prior to this treatment. This process therefore has a slightly positive impact on the climate.

As the impacts of the current and future activities will have a positive impact on climate no mitigation measures are required.

Traffic

The facility is located on the main N80 Carlow to Wexford Road. A Traffic Impact Assessment was carried out to determine the impacts the proposed increased activity would have on overall traffic volumes. The survey indicated that the annual average daily traffic on the west (Carlow) side of the facility is 4,292 vehicles per day with a HGV content of 8.6%. The average daily traffic on the east (Wexford) side of the facility is 4,089 vehicles per day with a 9.7% HGV content. While it is predicted that the traffic to and from the facility will increase as a result of the proposed expansion of activities at the facility, the overall increase in traffic is less than 1% of the current traffic volumes.

The entrance to the facility is located off a local access road (Jock's Lane) just off the N80 roadway. There will be no queuing of vehicles on the main roadway. Safe sightline visibility exist to allow for safe access and egress from the junction.

Noise

The main source of noise at the facility is the background noise created from traffic movement on the N80 roadway. However day and night time monitoring is carried out at the facility on an annual basis. All noise limits are within the recommended noise limits. Full copies of the noise reports are included as part of the EIS document.

Flora & Fauna

An assessment of flora and fauna was carried out at the facility. The existing flora on site is limited due to the extent of the existing hardstanding area. However within the small areas of managed grassland there are several dominant grass species. The surrounding land is used exclusively for agriculture with fields immediately adjacent to the facility.

Due to the developed nature of the facility there is a lack of Fauna species. Fauna present on the site are mainly birds using the hedgerows adjacent to the site for shelter or winter roosts. None of the bird species identified are a protected species.

The survey found that there were no sensitive or protected flora or fauna present at the site. In addition there are no significant additional groundworks proposed as part of the application therefore it is considered that there will be no resulting impacts on flora or fauna.

Soil & Geology

Published geological information for the site identifies the bedrock as Caledonian Granite. There are no geological features of significance either at or beneath the site and therefore the proposed development will have little or no impact on local geology.

The site and its immediate surrounds have historically been used for agricultural grazing and it is not expected that there is potential for previous contamination of the subsurface.

There will be no discharges to the subsoil as part of this proposal and therefore no impacts to the underlying subsurface. There will be no extraction or removal of sub-soils. The potential interaction with groundwater is low due to the low porosity of granite.

Mitigation measures will include the storage of all liquids, fuels etc. in appropriate bunds.

Cultural Heritage

There are no known sites of archaeological interest located in the environs of the site and there are no additional excavation groundworks proposed as part of the development. Therefore there will be no impact on archaeology in the area. None of the archaeological sites identified in the EIS can be seen from anywhere within the development site and as such the proposed development will not result in any negative visual impact to these features.

The proposed development will not impact on features or events of historical interest.

There are no structures of archaeological interest located in the defined study area and as such there will not be any negative impact resulting from the proposed development.

Material Assets

The facility is not designated as a Natural Heritage Area or Special Area of Conservation.

Property prices are expected to be unaffected by the proposed development as the facility has been in operation since 2005. The extra traffic movements may cause very slight disruption to road users but this is expected to be countered by the extra employment created at the site.

Interaction of the Foregoing

Human Beings/Fauna

Waste facilities have the potential to attract unwanted fauna such as rats, flies, and birds. Mitigation measures to protect against these potential impacts are proposed in the EIS, after which effects on the local community are expected to be insignificant.

Human Beings/Water

Mitigation measures to address potential impacts on water quality are addressed in the chapters dealing with Soils and Geology and Hydrology.

Water/Flora and Fauna

Contamination of surface water has the potential to impact on water quality of streams and rivers. This impact has the potential to affect the aquatic life of these water courses. Mitigation measures are detailed in the relevant chapters.

Water/Soil

Soil beneath the site can act as a pathway for contaminants reaching both the groundwater and surface water. Mitigation measures and monitoring controls are detailed in the relevant chapters.

The facility will be operated to the Best Available Technology (BAT) as per EPA recommendations and under the conditions of the Industrial Emissions Licence.

The EPA carry out regular environmental audits and compliance monitoring is carried out by both the Agency and the licensee. These reports are available to the public and will allay any public concerns regarding the environmental performance of the site and will result in a positive interaction with respect to human beings.

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