



**OFFICE OF CLIMATE,
 LICENSING &
 RESOURCE USE**

INSPECTORS REPORT ON A LICENCE APPLICATION

TO:	The Board of the Agency
FROM:	Michael Owens - Licensing Unit
DATE:	17 July 2013
RE:	Application for a review of a waste licence from Padraig Thornton Waste Disposal Ltd., Licence Register No. W0195-02.

Application Details

Type of facility:	Compost Facility
7Class(es) of Activity (P = principal activity):	3 rd Schedule: 8, 15 4 th Schedule: 3 (P), 13
Category of Activity under IPPC Directive (2008/1/EC):	Not in Annex 1
Quantity of waste managed per annum:	40,000 tonnes
Classes of Waste:	Biodegradable waste
Location of facility:	Ballynalurgan, Kilmainham Wood, Kells, Co. Meath.
Licence application received:	26 May 2010
EIS Required:	Yes
Article 14 Notices sent:	10 August 2011
Article 14 compliance date:	25 February 2013
Article 16 Notices sent:	5 March 2013
Article 16 Compliance date:	16 May 2013
Site Inspection:	8 March 2013

Facility

Padraig Thornton Waste Disposal Ltd., operates a composting facility at Kilmainham Wood, Co. Meath (approximately 4km south of Kingscourt, Co. Cavan). The facility has been in operation since 2006. The original licensee (McGill Environmental Systems) was granted a waste licence (Licence Register No. W0195-01) in July 2005. The current licensee purchased the facility in September 2005. The licence was

transferred to the licensee in January 2006. The facility is located in a rural area and the nearest occupied dwelling is approximately 300m due north of the facility. The facility is located in the upper catchment of the River Dee within the Neagh-Bann River Basin District. The Company Registration Number (CRO) is 72366.

Reason for Licence Review

The facility is currently authorised to accept and process 20,800 tonnes of biodegradable waste per year and to produce stable soil-improver grade compost and bio-stabilised residual waste. The licence was technically amended in October 2006 to permit the import of organic fines and to produce bio-stabilised residual waste.

The licensee is proposing to accept and process an additional 19,200 tonnes of biodegradable waste per annum (the licence total will then be 40,000 tonnes per annum). This increase in waste acceptance will entail an extension to the current facility to provide sufficient processing capacity. Aside from the increased intake of waste, the licensee is also proposing to produce a new grade of compost at the facility. See section on 'Compost Quality Standards' below for more detail.

Operational Description

The facility processes a range of biodegradable wastes including source segregated brown bin waste, animal wastes, sludges and catering waste from hotels and restaurants. The majority of the feedstock (approximately 96%) is catering waste/brown bin waste. All waste importation is managed in accordance with the requirements of the existing licence. Waste is accepted only from pre-approved contractors and is delivered only in covered/enclosed vehicles. All waste storage and processing are carried out indoors. Other materials such as sawdust and woodchip are used in the composting process to provide a source of carbon and to control moisture in the compost. The facility uses an automated control system comprising forced aeration and temperature feedback.

The final compost is pasteurised and temperature treated in order to meet the requirements of the Animal By-Products Regulation and the Department of Agriculture, Food and the Marine (DAFM). The facility is approved by the DAFM to operate a composting facility in accordance with the Animal By-Products Regulation. Compost is stored indoors and is transported off-site directly from the process building. The compost is sold as a soil conditioner in the commercial agricultural and landscaping sectors. The licensee has established a bank of local long-term arable land in counties Meath and Louth that can accommodate all compost currently produced at the facility. According to the licensee the land bank is sufficient to cater for the additional compost produced from the proposed intake of waste.

On-site infrastructure includes a weigh bridge, a process building, site security, foul and surface water drainage networks, waste water treatment plant and rain water storage capacity. The proposed extension works will result in new and extended buildings and an increase in hard surface yard area. The rear of the extended process building will serve as a new treatment and storage area for animal by-product (ABP) material. This area will feature a covered area in which finished compost will be loaded for dispatch. A new administration building will also be constructed.

There are four employees at the facility including a facility manager. As per the existing licence, the facility operates on a daily basis from 0800 to 1800 Monday to

Friday and from 0800 to 1300 on Saturdays. These hours of operation remain unchanged in the RD. As per the existing licence, waste that arrives at the facility at, or near, closure of operating hours is held overnight in the waste reception area and is processed the next day. The facility is certified to the ISO14001 (Environmental Management) and ISO9001 (Quality) standards.

Planning permission has been obtained for the proposed works/building extension and for the increased intake of waste.

Compost Quality Standards

In 2009, the Composting and Anaerobic Digestion Association of Ireland (CRE), in association with the Agency through the 2007 – 2013 STRIVE Programme, developed a quality standard for compost. In 2011, the NSAI published an Irish quality standard for compost (IS 441:2011). The standard specifies requirements for a compost produced using source segregated, separately collected biodegradable materials including biodegradable municipal waste. The standard specifically prohibits the use of any materials that are contaminated with potentially polluting wastes or materials (e.g. contaminated wood, mixed municipal waste) and sewage sludges.

At EU level, end-of-waste criteria for biodegradable waste subject to biological treatment are being developed. The criteria will set standards by which compost and digestate can achieve end of waste status. Work is on-going and the criteria are currently at draft stage.

The existing licence specifies a quality standard for compost that can be used as a soil improver. This standard was developed for use in EPA licences and includes limits for parameters such as carbon/nitrogen ratio, trace elements and pathogens. *Schedule E Standards for Compost Quality* of the RD specifies this quality standard with one proposed change in relation to a method that can be used to measure stability. Based on direction from the OEE Sectoral Advisor, it is proposed to include the OUR method (which measures oxygen uptake rate) in the Schedule. The standard as set out in the RD will provide for the continued production of this particular grade of compost at the facility.

The licensee refers to the compost that it is currently producing as 'finished' compost. The licensee is now proposing to also produce what is termed as 'agricultural' grade compost specifically for use as a fertiliser on agricultural land. Unlike 'finished' compost, 'agricultural' grade compost retains a higher nutrient content (i.e. the nutrient content has not been largely broken down by the composting process). A similar type of compost is produced in Germany in accordance with a relevant standard (known as the Rottegrad III standard).

Due to its higher nutrient content agricultural grade compost is less stable than the soil-improver 'finished' compost that the licensee currently produces. Consequently, unless sufficiently controlled, its use can pose a higher risk of odour and of pollution of nearby water courses due to run off. These concerns were also raised by the OEE. Therefore it is not recommended that the licence include a quality standard for agricultural grade compost. Condition 6.21.3 of the RD specifies that any compost not meeting the standard set in Schedule E of the RD must be either reused in the process or treated as waste. In effect, should the licensee produce agricultural grade compost then its further use off-site would require waste authorisation by the local authority to ensure adequate environmental controls on its use.

As stated above, the facility is also licensed to accept other biodegradable wastes, such as organic fines (from mechanical treatment of municipal waste) to produce

bio-stabilised residual waste. To date, however, no bio-stabilised residual waste has been produced at the facility as all feedstock to the facility is derived from source segregated wastes. Nonetheless, the RD continues to authorise the continued production of bio-stabilised residual waste. As required by condition 6.22.1 of the RD bio-stabilised residual waste must be treated as waste.

Emissions

Air

Composting of biodegradable waste presents a risk of odour nuisance. To counter this, all waste storage and processing takes place indoors. The inner building fabric has been lined with a layer of expanding foam which enhances the containment capacity of the process building and the process building itself operates under negative pressure. All odorous air is collected and treated in a bio-filtration system. Negative building pressure and bio-filtration are BAT for the biological treatment sector. As required by the existing licence, the licensee carries out monthly checks (using colour indicator tubes) for odorous compounds at the bio-filter beds, daily odour assessments and other frequent checks on the bio-filter system. These requirements are carried forward in *Schedule C.1.1 Control of Emissions to Air* of the RD.

As part of the EIS for the proposed extension to the facility an odour impact assessment was carried out to assess the potential for odour impact in the vicinity of the facility. The assessment used measured odour emissions data from the bio-filter beds and an odour dispersion model. The assessment addressed current operations and the proposed increase in activity. The assessment report also provided recommendations for the minimisation, mitigation and control of odour emissions at the facility. All recommendations have at this stage been implemented at the facility. These include:

- Enclosing the composting bays. Previously, waste was composted in open bays within the process building. In order to increase the efficiency of capture of odorous air in the process building each composting bay is now enclosed. The odorous air within the composting bays is captured and discharged directly to the odour abatement system (i.e. acid scrubber and bio-filter – see below).
- Installation of an acid scrubber unit between the composting bays and the biofiltration system. A biofilter is very effective at removing sulphur-based compounds (e.g. mercaptans) from the air but is not as effective in removing nitrogen-based compounds. Therefore, a scrubber unit was installed to remove odorous nitrogen-based compounds (such as ammonia) from the air. The scrubber unit also captures any particulate matter from the discharged air. The unit was installed in 2011.
- Installation of a SCADA-controlled air handling system.
- Replacement of bio-filter bed media and improvements in the management of the bio-filter beds to ensure more efficient distribution of air through the beds.

The modelling predicts that, following implementation of the recommendations, no odour impact will be perceived by residents in the vicinity of the facility.

The RD includes additional measures to control the emissions of odourous gases. In line with BAT for the sector condition 2.2.2.8 of RD includes a new requirement for

the development of leak detection and repair procedures for the air handling and odour management systems and in the waste processing building. In addition, *Schedule B.1 Emissions to Air* of the RD includes (for the first time) limit values for odourous off-gases from the biofilters which will ensure that emissions of such gases are controlled. Overall, these measures will act to reduce the likelihood of odourous air escaping from the waste processing building and from the air emissions abatement system.

All waste processing takes place indoors and there are no point sources of dust at the facility, however, there is potential for dust arising from roadways. Consequently, roadways are wetted during periods of dry weather and a road sweeper is used on a regular basis at the facility. As required by the existing licence, dust deposition is monitored on a quarterly basis using Bergerhoff gauges at three locations in the vicinity of the facility. All reported results to date are comfortably within the limit of 350 mg/m²/day. The RD requires that measures are taken to control fugitive dust emissions and that dust deposition monitoring continues to be carried out on a quarterly basis.

Waste that is being composted has the potential to generate bio-aerosols. The existing licence requires an annual assessment of bio-aerosol levels in the vicinity of the facility. Although results demonstrate that there is an increase in average measured levels of micro-organisms at locations downwind of, and close to, the process building and bio-filter beds, measured levels are within the range for natural ambient levels of micro-organisms. The applicant's reports conclude that there is no significant bio-aerosol impact in the vicinity of the facility. It is important to note that other activities (both natural and man-made) can affect local ambient concentrations of bio-aerosol. For example, natural woodland or crop harvesting can elevate local bio-aerosol levels.

As it is proposed to double the amount of biodegradable waste to be accepted at the facility, it is proposed to increase the frequency of bio-aerosol monitoring from an annual to a bi-annual basis. *Schedule C.4 Ambient Monitoring* of the RD includes the monitoring requirements for ambient dust and bio-aerosols.

There is on-going research into bio-aerosol monitoring techniques and into the levels of bio-aerosols in the vicinity of composting facilities. In that light, condition 6.18 of the RD requires the licensee to consult with the Agency with a view to examining the possibility of utilising an alternative bio-aerosol monitoring technique or methodology that may now be available following recent research.

Emissions to Sewer

There are no process emissions to sewer. Sanitary effluent is treated in the existing on-site waste water treatment plant and associated percolation area. The sanitary effluent drainage network will be extended as part of the on-site works. The existing treatment plant is adequate to treat the additional effluent from the extended administration building.

Emissions to Surface Waters

There are no process emissions to surface waters.

Storm Water Runoff

There are two separate storm water collection networks at the facility. One collects runoff from the facility yard and the other collects rainwater running from roofs. Yard

runoff is treated in an oil and grit interceptor before being discharged to a drainage ditch which runs along the eastern boundary of the facility. The drainage ditch runs in a southerly direction for 1 km to the River Dee. Runoff from roofs is stored and reused where required for cleaning process areas and site vehicles. Excess roof runoff that is not reused is piped directly to the drainage ditch. At present there are two separate storm water discharges to the drainage ditch, one each for roof and yard runoff. The quality of the water in the drainage ditch is currently monitored at points upstream and downstream of the storm water discharge. Results do not indicate that significantly polluted storm water is being discharged to the ditch from the facility.

The development of the site will increase the hard-standing and roofed areas at the facility. The surface water collection network will be extended in order to collect the additional roof and yard runoff. The separate discharge points for roof and yard runoff will be combined into one discharge point.

Schedule C.3 Monitoring of Storm Water Emissions of the RD includes a new requirement to monitor the storm water discharge itself while *Schedule C.4 Ambient Monitoring* of the RD includes the monitoring requirements for the receiving water in the drainage ditch. In addition, condition 5.3 sets trigger levels for the quality of the discharge while condition 6.14.2 requires the licensee to develop a programme to respond to instances where a trigger level is exceeded.

Emissions to ground/groundwater

There are no direct process emissions to ground. The facility has extensive hard-standing areas and the process building itself is bunded. There is only one tank at the facility which is used to store leachate from the bio-filter and water from the wash bay. There are no fixed fuel tanks at the facility. Diesel is provided from a bunded mobile tank. Groundwater quality is monitored at three monitoring boreholes. Overall, results reflect the natural groundwater quality within the area and indicate that the facility has not had a significant impact on groundwater quality. The existing groundwater monitoring requirements are carried forward in *Schedule C.5 Groundwater Monitoring* of the RD.

Sanitary effluent is treated in the existing on-site waste water treatment plant and associated percolation area. Condition 3.23 of the RD requires that the treatment system satisfies the criteria as set out in the Agency Code of Practice.

Wastes Generated

It is a requirement of the RD that all wastes generated at the facility are sent off site to authorised facilities for disposal or recovery.

Noise

The facility is located in a rural area. The nearest occupied dwelling is approximately 300m due north of the facility. To date, as required by the existing licence, noise monitoring is carried out on quarterly basis. Measured levels are generally compliant with licence limits and indicate that there is no significant noise impact in the vicinity of the facility. For the proposed extension, all new fans and the majority of new plant will be located indoors. The potential for noise impact due to the extended facility was examined in the EIS and it is predicted that although there will be a slight increase in residual noise levels in the locality (i.e. after mitigation measures have been implemented) there will not be a significant noise impact on the nearest

sensitive receptor. The RD continues to require a quarterly noise survey to be carried out in accordance with the Agency guidance document.

Nuisance

Given the nature of the activities at the facility, there is potential for nuisance. All waste processing activities at the facility are carried out indoors. The RD includes controls in relation to prevention and monitoring of nuisance.

Closure and Restoration

Condition 10 of the RD stipulates measures for decommissioning and closure of the site.

Use of Resources

There are two main energy sources at the facility, mains electricity and diesel. The facility is not connected to mains water supply. Drinking water is supplied by an external contractor and is supplemented from an onsite borehole (BH3). Rainwater running from roofed areas is collected in a storage tank and used for cleaning of process areas and site vehicles. The facility building is fully bunded and all process area and vehicle wash water is collected and reused in the composting process. The RD requires an energy efficiency audit and an assessment of resource use efficiency.

North East Regional Waste Management Plan

The provision of increased treatment capacity at the facility will address one of the primary objectives of the North East Regional Waste Management Plan (2005 – 2010), this being to increase the separate collection and treatment of organic waste in the region. There will be an increase in the amount of organic waste requiring treatment due to the continuing roll out of a brown bin system in the North East Region.

Waste Management Policy 2012

Activities at the extended facility will be in accordance with the most recent national Waste Management Policy Statement¹. In this policy it is recognised that, as the separate collection of organic waste increases nationally, there will be a need for adequate national infrastructure and capacity to recycle biodegradable waste.

Compliance with Directives/Regulations

The Recommended Decision takes account of the requirements of the following Directives/Regulations:

Waste Framework Directive [2008/98/EC]

The RD will be in accordance with the Directive for the following reasons:

- It will allow for more waste to move up the waste hierarchy as it increases the recycling of separately collected bio-waste that might otherwise have been disposed of by landfill.
- The State is obliged to take appropriate measures to establish an integrated network of installations for the recovery of waste collected from private

1 A Resource Opportunity – Waste Management Policy in Ireland (DOECLG 2012)

households and from other waste producers. The extended facility will contribute to this overall national objective.

- It will contribute towards compliance with Article 22 of the Directive, whereby Member States must take measures to ensure the environmentally safe composting of bio-waste.
- It will contribute towards the general development of a sustainable and self-sufficient approach to the management of waste in accordance with the proximity principle.

Condition 8.18 of the RD proposes that the licensee is prohibited from disposing of any waste that can be recovered and is required to maximise all opportunities to recover waste generated at the facility.

Water Framework Directive [2000/60/EC]

A number of measures have been included in the RD to prevent any significant impact on water quality. Such measures include a prohibition on the discharge of process leachate to surface water, the setting of trigger levels for the quality of the storm water discharge, monitoring requirements for storm water runoff and the development of a response programme with mitigation measures to ensure that there will be no storm water emissions of environmental significance.

European Communities Environmental Objectives (Surface Water) Regulations, S.I. No. 272 of 2009

As per the existing licence a process emission to surface water is not permitted. Treated storm water runoff discharges to a drainage ditch which runs along the eastern boundary of the facility and eventually flows to the River Dee. The RD sets requirements to monitor the quality of the storm water discharge and the water in the drainage ditch. These are measures that will prevent any significant impact on surface water quality.

European Communities Environmental Objectives (Ground Water) Regulations, S.I. No. 9 of 2010

There is no process emission to ground water at the facility. Sanitary effluent is treated in the existing on-site waste water treatment plant and associated percolation area. Condition 3.23 of the RD requires that the treatment system satisfies the criteria as set out in the Agency Code of Practice.

EU Animal By-Products Regulation

The licensee will be obliged to comply with this Regulation and obtain the appropriate permits on an on-going basis from the Department of Agriculture, Food and the Marine to accept and treat animal by-products.

Environmental Liabilities Directive (2004/35/EC)

The activities at the facility fall under the scope of the Directive (Schedule 3 Interpretation 2(b)(i) *Waste management operations including – collection, transport, recovery and disposal of waste and hazardous waste*). The RD requires the preparation of an environmental liabilities risk assessment and making of financial provision against potential environmental liabilities. The RD generally imposes a proactive and preventative approach to environmental protection and requires that any environmental incidents (as defined in the RD) are reported to the Agency.

Habitats Directive (92/43/EC) & Birds Directive (79/409/EEC)

There are no European designated sites within 10km of the facility. The nearest SAC to the facility is Kilconny Bog at a distance of 14km. There is no direct or indirect discharge from the facility to Kilconny Bog. Having regard to the nature and scale of the activity and the lack of connectivity with a European Site, as well as the location, nature and level of emissions from the facility, which are not predicted to increase significantly, it is not considered likely that activities at the facility will have a significant impact on Kilconny Bog.

Environmental Impact Statement

The applicant submitted an Environmental Impact Statement (EIS), dated May 2010, which was prepared in support of a planning application (Ref. KA901007). Planning Permission was granted for the development by Meath County Council in February 2010. The planning decision was appealed to An Bord Pleanala who, having considered the objections, granted permission in January 2011.

I have examined the content of the EIS and other material (e.g. information submitted in the licence application, the planning permission, planning inspector's reports (both from Meath County Council and An Bord Pleanala). I consider, having examined the relevant documents and with the addition of this Inspector's Report, that the likely significant direct and indirect effects of the activity have been identified, described and assessed in an appropriate manner as required in Article 3 and in accordance with Articles 4 to 11 of the EIA Directive as respects the matters that come within the functions of the Agency. I consider that the EIS also complies with the Waste Management (Licensing) Regulations 2004, as amended.

Environmental Impact Assessment (EIA)

An EIA, as respects the matters that come within the functions of the Agency, has been carried out as detailed below. The submitted EIS and the assessment as described in this Inspector's Report address the likely significant direct and indirect effects arising from the activity, as respects the matters that come within the functions of the Agency.

Likely significant effects

This section identifies, describes and assesses the main likely significant direct and indirect effects of the proposed activity on the environment, as respects the matters that come within the functions of the Agency, for each of the following factors: human beings, flora, fauna, soil, water, air, climate, the landscape, material assets and cultural heritage. The main mitigation measures proposed to address the range of predicted significant impacts arising from the activity have also been outlined.

Table 1 - Likely significant effects and associated mitigation measures

Likely significant effect	Description of effect	Mitigation measures proposed by applicant in EIS or waste licence application and/or as outlined in this report

Likely significant effect	Description of effect	Mitigation measures proposed by applicant in EIS or waste licence application and/or as outlined in this report
1. Human Beings		
Traffic	Traffic and its associated emissions, risks and dis-amenity effects.	<p>Traffic impact assessment predicts no significant increase in traffic volumes.</p> <p>Provision of adequate on-site parking. Provision of warning signage at facility entrance.</p> <p>Maintenance of adequate visibility at facility entrance.</p> <p>RD sets hours of operation and waste acceptance.</p>
Socio-Economic	No negative impact predicted. Positive effect in terms of provision of employment.	Proposed extension will generate two additional jobs at the facility.
Impact on air quality	Emissions of dust, odour, bio-filter off-gases and bio-aerosols.	<p>Licensed activities are carried out indoors.</p> <p>Implementation of recommendations and upgrade of facility as recommended in odour modelling report. Odour impact modelling does not predict an impact on the locality.</p> <p>RD sets ELVs on emissions to air and requires control and monitoring of air emissions. RD also sets controls in relation to odour prevention.</p> <p>RD requires biannual bio-aerosol monitoring.</p>
Noise	Dis-amenity from noise emissions due to licensed activity and during	Construction activities will be temporary.

Likely significant effect	Description of effect	Mitigation measures proposed by applicant in EIS or waste licence application and/or as outlined in this report
	<p>construction activities.</p> <p>A permanent but non-significant increase in noise levels is predicted during operation of extended facility.</p>	<p>Licensed activities must take place indoors.</p> <p>RD sets noise limit values and requires noise surveys.</p> <p>Lack of proximity to a significant number of residences.</p>
2. Flora & fauna		
<p>Loss of nearby woodland.</p> <p>Impact on water in drainage ditch adjacent to the facility.</p>	<p>Removal of section of adjacent mixed woodland to construct building extensions.</p> <p>Removal of woodland will lead to reduced area for animals to forage and for birds to nest.</p> <p>Reduction in water quality in land drain.</p>	<p>No impact is predicted on habitat outside facility boundary.</p> <p>Area of woodland to be removed is small and not considered likely to impact significantly on flora or fauna as adequate woodland areas will remain.</p> <p>Treatment of yard run off prior to discharge to water drain.</p> <p>RD requires control and monitoring of yard run off and monitoring of water in the drainage ditch.</p>
3. Soil		
<p>Contamination of soil.</p>	<p>Accidental spillage or discharge to ground.</p>	<p>RD requires that waste processing is carried out indoors. Process building is bunded.</p> <p>RD includes requirements for safe storage and handling of wastes, fuels and materials.</p> <p>RD requires accident prevention policy and</p>

Likely significant effect	Description of effect	Mitigation measures proposed by applicant in EIS or waste licence application and/or as outlined in this report
		<p>emergency response procedure.</p> <p>RD requires that WWTP and percolation area meet criteria in EPA guidance.</p>
4. Water		
Contamination of surface water.	Discharge to drainage ditch of potentially contaminated yard runoff ultimately leading to River Dee.	<p>There are no process emissions to surface water.</p> <p>RD requires control and monitoring of yard run off and monitoring of water in the drainage ditch.</p>
Contamination of groundwater.	Contamination of groundwater due to accidental spillage or discharge to ground.	<p>There is no direct discharge to groundwater.</p> <p>Site uses hard-standing areas throughout much of the facility.</p> <p>RD includes requirements for safe storage and handling of wastes, fuels and materials.</p> <p>RD requires accident prevention policy and emergency response procedure.</p> <p>RD requires that WWTP and percolation area meet criteria in EPA guidance</p>
5. Air		
Impact on air quality.	Emissions of dust, odour, bio-filter off-gases with reduction in air quality	<p>Licensed activities are carried out indoors.</p> <p>Implementation of recommendations and upgrade of facility as recommended in odour</p>

Likely significant effect	Description of effect	Mitigation measures proposed by applicant in EIS or waste licence application and/or as outlined in this report
		modelling report. Odour impact modelling does not predict an impact on the locality. RD sets ELVs on emissions to air and requires control and monitoring of air emissions and prevention of odour.
6. Climate		
Increase in traffic emissions.	Traffic and its associated emissions	Traffic impact assessment predicts no significant increase in traffic volumes.
Increase in greenhouse gases.	Possible increase in emissions of greenhouse gases	Composting does not result in a net increase in CO ₂ emissions as decomposition would occur naturally anyway. Composting reduces the amount of waste going to landfill and the amount of methane gas that would be produced.
7. Landscape, Material Assets & Cultural Heritage		
Visual impact on nature of landscape.	No significant impact on the nature of landscape due to extended buildings is predicted.	Implementation of a planting plan to screen the building from certain viewpoints.
Impact on material assets and cultural heritage.	No significant impact is predicted.	Strategy on-site to respond to occurrences where items of archaeological interest are uncovered during site clearance works for new build.

The detailed assessment set out in the remainder of the Inspector's Report fully considers the range of likely significant effects of the activity on human beings, flora,

fauna, soil, water, air, climate, landscape, material assets and cultural heritage, as respects the matters that come within the functions of the Agency, as identified in Table 1 above, with due regard given to the proposed mitigation measures.

An EIA, as regards the functions of the planning authorities, was carried out by the planning authority when granting planning permission for the development.

Assessment of Parts 1 to 7 of Table 1 and the interaction of effects and factors

The potential for significant impact due to the interaction of the effects identified above was assessed in the EIS. It is concluded in the EIS that significant interactive effects are unlikely.

I have considered the potential for interaction between the factors and effects outlined above in Table 1 above and I am satisfied that the proposed mitigation measures are adequate. I do not consider that the interactions identified are likely to cause or exacerbate any potentially significant environmental effects due to the activity. The RD includes conditions as considered appropriate to address key interactions associated with the licensed activity.

Overall Conclusion on Environmental Impact Assessment

All matters to do with emissions to the environment from the proposed activity (existing activity and proposed new development), the licence application documentation and EIS have been considered and assessed by the Agency.

I consider that having examined the relevant documents and with the addition of this Inspector's Report that the likely significant direct and indirect effects of the activity have been identified, described and assessed in an appropriate manner as required in Article 3 and in accordance with Articles 4 to 11 of the EIA Directive, as respects the matters that come within the functions of the Agency.

It is considered that the mitigation measures as proposed and the licence conditions included in the RD will adequately control any likely significant environmental effects from the activity.

Cross Office Liaison

In preparing this report and Recommended Decision the following technical and sectoral advisors were consulted:

Inspector	Assistance provided
Jim Moriarty (Waste Manager OEE)	Odour management
Caoimhin Nolan (OEE)	Composting sectoral advisor, odour management, BAT
Eamonn Merriman (OEE)	Bio-aerosol monitoring
Stuart Huskisson (OCLR)	Odour management, BAT

Best Available Techniques (BAT)

I have examined and assessed the application documentation and I am satisfied that the site, technologies and techniques specified in the application and as confirmed, modified or specified in the attached RD comply with the requirements and principles of BAT as stipulated in the Reference Document on the Best Available

Techniques for the Waste Treatments Industries (IPPC Bureau 2006). I consider that the technologies and techniques as described in the application, in this report, and in the RD, to be the most effective in achieving a high general level of protection of the environment having regard - as may be relevant - to the way the facility is located, designed, built, managed, maintained, operated and decommissioned.

Fit & Proper Person Assessment

The licensee has been prosecuted on three occasions for breaches of another waste licence to which the licensee is subject (Reg. No. W0044-02) – the last time being in 2005. The licensee has not been prosecuted for any breaches of the licence which is the subject of this review. Overall, the legal, technical and financial standing of the licensee qualifies them to be considered Fit and Proper Persons.

Complaints

There is a history of odour complaints in relation to the facility. In 2010, 14 odour complaints were received by the Agency. In 2011, after the installation of the new air management and air emissions abatement systems the number of odour complaints reduced to 7. However, in 2012, 15 odour complaints were received, all from the same two individuals.

The licence includes many requirements to prevent and investigate odour nuisance. Condition 11.4 of the licence requires the licensee to record and investigate all complaints of an environmental nature. The facility has been the subject of 7 unannounced odour assessments by the OEE in 2012 and 2013. All were deemed to be compliant.

Recommended Decision

The RD if granted will authorise the acceptance of 40,000 tonnes per annum of biodegradable waste for processing at the composting facility. The RD includes a wide range of conditions that will ensure proper handling of wastes, protection of off-site surface water and minimisation of the emission of odourous gases. Overall, I am satisfied that the conditions set out in the RD will adequately address all emissions from the facility and will ensure that the carrying on of activities in accordance with the conditions will not cause environmental pollution.

Submissions

Three submissions were received on the review application.

1. Health Service Executive, Navan, Co. Meath (Received August 2010)

This submission is signed by the Principal Environmental Health Officer and the Senior Environmental Health Officer. It is stated that they have no objections to the waste licence subject to a number of conditions. These conditions have been formed into two groups as follows:

Group 1 – Relevant to the licence

Topics raised are:

- Air emissions monitoring.
- Appropriate training and awareness of facility personnel.
- Elements of the EMS.
- Emergency response.

- Authorisation of waste delivery vehicles.
- Types of waste to be accepted at the facility.
- Waste acceptance, inspection and processing procedures and practices, including use of covered vehicles, waste quarantine area and rejection of non-conforming waste loads.
- Vehicle cleaning.
- Process building air containment.
- Record keeping and reporting to the Agency.
- Maintenance and availability of spare parts.
- Availability of spare processing capacity.
- Control of airborne dust and nuisance during construction and operation.
- Impact from the facility on local people and the locality.
- Operation of the oil separator and silt trap.
- Waste water treatment.
- Contamination of local ground water resources and drinking water wells.
- Noise impact.
- Control of vermin.

Response

It is considered that the RD adequately addresses all of the concerns raised in relation to these matters.

With specific reference to the potential for impact on groundwater and local drinking water wells the nearest drinking water abstraction point is 1.3 km north east of the facility. The facility does not discharge directly to ground water nor is it permitted to do so. There is a discharge of treated rainwater from the yard to a nearby drainage ditch which runs in a roughly southerly direction to the River Dee (i.e. away from drinking water wells). Overall, it is considered that there are adequate controls in the licence to protect groundwater resources and wells from contamination.

Group 2 – Not relevant to the licence

Topics raised are:

- Drinking water quality at the facility.
- Ventilation of the administration building.
- Provision of local extraction over dust emitting equipment in the processing building.
- Prior notification of the Agency prior to use of the compost on land.

Response

The quality of drinking water at the facility and ventilation in the administration building are not within the competency of the Agency or scope of the licence. In relation to air extraction in the processing building, the composting bays are covered and air is extracted directly to the air abatement system. The waste processing building itself operates under negative pressure.

In relation to the use of the compost, the licence applies to activities within the licence boundary and does not set any requirements in relation to the further use of the compost other than it *can* be used as a soil improver. Notwithstanding that, condition 11.6(xiv) of the RD requires that records of the destination of the compost are maintained at the facility

2. Irish Wildlife Trust (Received February 2011)

The Irish Wildlife Trust (IWT) states that the nearby Newcastle Lake which lies within the property of a nearby landowner is an Irish Wildlife Nature Reserve. They requested that the Agency communicate with the IWT regarding any matters that may affect the integrity of the reserve.

Response:

Newcastle Lake lies just over 1 km from the facility building. It is part of the River Dee river system. The lake is not a European Site, neither is it a National Heritage Area (NHA) or a designated NPWS nature reserve. Newcastle Lake is listed on the IWT website as a private 'nature reserve'. The IWT is a conservation charity and manages a network of such nature reserves around the country.

The IWT requested that the Agency make contact with them in order to clarify their concerns. The IWT was contacted by phone and email. No additional information was submitted by them. In any case there is no direct discharge from the facility to the lake. Treated storm water runoff discharges to a drainage ditch that runs along the eastern boundary of the facility. This drainage ditch flows to the River Dee at a point upstream of the lake. Monitoring of the water in the drainage ditch to date does not indicate any impact on water quality. As outlined above, the RD includes various controls in relation to monitoring of the storm water discharge and for protection of the water in the drainage ditch. Consequently, it is not considered likely that there will be any significant impact on Newcastle Lake.

3. Peter Brittain (Received October 2010)

Mr Brittain lives in the locality (approximately 1 km south west of the facility). He wrote to the OEE in October 2010 and, on request from the OEE, the letter is to be treated as a submission for this review. Overall, Mr Brittain is concerned that airborne emissions from the facility may be affecting his health and that of his family. A number of specific points are raised in the submission and are dealt with in turn below.

(i) Bio-aerosol monitoring

Mr Brittain questions whether an annual frequency of monitoring (i.e. over one day a year) is adequate to confirm that the levels of bio-aerosol in the local environment are 'acceptable'.

Response

The existing licence requires an annual assessment of bio-aerosol levels in the vicinity of the facility. The reports conclude that there is no significant bio-aerosol impact in the vicinity of the facility and that measured levels are generally within the range for natural ambient levels of micro-organisms.

However, as it is proposed to nearly double the amount of biodegradable waste to be accepted at the facility, it is proposed to change the requirement for bio-aerosol monitoring to a bi-annual basis (i.e. twice a year). In addition, in light of recent research into bio-aerosol monitoring condition 6.18 of the RD requires the licensee to consult with the Agency with a view to examining the possibility of utilising an

alternative bio-aerosol monitoring technique or methodology that may now be available.

(ii) Biofilters are 'faulty'

Mr Brittain makes a contention that the 'biofilters are known to be faulty'.

Response

No evidence has been offered to confirm that the biofilters are faulty as contended. *Schedule C.1.1 Control of Emissions to Air* of the RD includes a wide range of performance-related monitoring requirements for the air handling and air emissions abatement systems (including the biofilters). These measures will ensure that any fault with the performance of the biofilters is quickly detected.

(iii) Mass balance of emissions

Mr Brittain refers to correspondence between An Bord Pleanála (ABP) and the licensee whereby ABP queried the materials mass balance at the facility. Mr Brittain presents the same query to the Agency as part of his submission. Based on his understanding of the process and the materials mass balance he asks what it is that the gaseous emissions at the facility contain.

Mr Brittain also asks whether the Agency would be communicating his concerns to ABP.

Response

Any input material that is not converted to compost is accounted for as either solid waste or gaseous emissions (as mostly water vapour and carbon dioxide). As required by the existing licence (and also the RD) gaseous emissions at the facility are monitored on an on-going basis and reported in the AER. Therefore the constituents of the air emissions are known and information on them is available to the public.

The Agency received and replied to correspondence from ABP in relation to this review in September 2010.

(iv) Waste collection

Mr Brittain presents a number of questions in relation to the brown bin waste collection service provided by 'Thorntons' and the checking of brown bin for suitability of contents.

Mr Brittain raises his concern that 'contaminated material' will be processed at the facility and that he will subject to the resulting 'vapours and gases'.

Response

Any concerns in relation to the brown bin collection service are a matter for the local authority, which is the competent authority for enforcement of waste collection permits.

The existing licence requires that all waste loads arriving at the facility are inspected for suitability for composting. Unsuitable waste must be removed off site as soon as possible. Condition 8.4 of the RD maintains the requirement for waste acceptance and characterisation procedures. These measures will prevent unsuitable wastes from being composted at the facility.

(v) Rejected loads

Mr Brittain states that there does not appear to be any record kept of 'rejected material' or of reasons as to 'why it was rejected'.

Response

It is a requirement of the existing licence that details of rejected waste loads are recorded and maintained. This requirement is carried forward in Condition 11.11 of the RD. On-going queries on the content of these records should be directed to the licensee or the Office of Environmental Enforcement.

(vi) Liquid waste

Mr Brittain submits that he has observed tankers entering the facility and asks whether the tankers contain liquid waste and how liquid waste could be used for composting.

Response

Condition 1.5 of the existing licence clearly prohibits the acceptance of liquid waste at the facility. This requirement is carried forward as condition 8.3 of the RD.

(vii) Correspondence from Health Service Executive (HSE)

Mr Brittain refers to correspondence received by the Agency from the HSE in August 2010. Mr Brittain asks whether the Agency will be bringing the HSE correspondence to the attention of An Bord Pleanála (ABP).

Response

This particular correspondence from the HSE was received by the Agency as a submission on the review and is dealt with as submission No.1 above. As stated above, the Agency replied to questions from ABP in relation to this review in September 2010. ABP did not request a copy of the HSE submission, which in any case, is publicly available on the Agency website.

(viii) Regulation of the facility

Mr Brittain asks who it is that is responsible for regulating the facility and for protecting the health of nearby residents.

Response

The facility is regulated by a number of agencies including the EPA, the Department of Agriculture, Food and the Marine, the local authority. The overall objective of this regulation is to protect the environment and human health.

(ix) Use of the compost

Mr Brittain presents a query in relation to the use of the compost on a nearby farm and whether it is a legitimate commercial use or convenient disposal of a material with no 'real commercial outlet'.

Response

The commercial viability of the further use of the material is outside the scope of the licence. The licence controls the activity and its emissions. Where the compost produced at the facility meets the standard stipulated in Schedule E of the existing licence (and the RD) it can be used as a soil improver otherwise it must be regarded as a waste. That is the limit of control of the licence over use of the compost.

(x) Impact of the facility

Mr Brittain contends that his health is being affected by the facility and submits that the Agency should regulate the facility 'properly' and that the extension should 'not be allowed' until it is 'properly regulated'.

Response

As required by law, the activity at the facility is regulated by a waste licence which is granted and enforced by the Agency. The licensee cannot proceed to intensify the activity (i.e. increase the annual waste intake) unless and until a revised licence is granted.

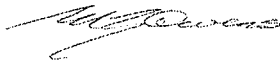
Charges

The annual charge specified in the RD is €10,897 which is equivalent to the current charge for 2013.

Recommendation

I have considered all the documentation submitted in relation to this application and recommend that the Agency grant a revised licence subject to the conditions set out in the attached PD and for the reasons as drafted.

Signed



Michael Owens

Inspector

Procedural Note

In the event that no objections are received to the Proposed Decision on the application, a licence will be granted in accordance with Section 43(1) of the Waste Management Acts 1996-2013.