



This Report has been cleared for submission to the Board by the Programme Manager P. Nolan
 Signed: A Kehoe Date: 29/9/08

DEPARTMENT OF ENVIRONMENT, CLIMATE,
 LICENSING & RESOURCE USE

INSPECTORS REPORT ON A LICENCE APPLICATION

TO:	Directors	
FROM:	Aoife Loughnane	- Environmental Licensing Programme
DATE:	26th September 2008	
RE:	Application for a Waste Licence from Padraic Thornton Waste Disposal Ltd. (Trading as Thorntons Recycling), Millennium Business Park, Dublin 11. Licence Register W0242-01	

<i>Application Details</i>	
Type of facility:	Non-Hazardous Materials Recovery Facility
Classes of Activity (P = principal activity)	3 rd Schedule: 11, 12 & 13 4 th Schedule: 2, 3, 4 & 13 (P)
Quantity of waste managed per annum:	100,000 tonnes
Classes of Waste:	Mixed dry recyclables, C&D waste and commercial/industrial skip waste
Location of facility:	Millennium Business Park, Cappagh Road, Townland of Grange, Dublin 11
Licence application received:	21/12/07
Third Party submissions:	None
EIS Required:	Yes
Article 14 Notice issued:	18/02/08
Article 14 responses received:	03/04/08, 14/08/08
Section 52 Notice issued:	04/04/08
Section 52 response received:	05/06/08
Site Inspection:	06/02/08 & 16/02/08 (site notice compliance)

This report outlines details of a waste licence application by Padraic Thornton Waste Disposal Ltd. (trading as Thorntons Recycling), for a proposed Materials Recovery Facility at Millennium Business Park, Dublin 11. The applicant proposes to accept up to 100,000 tonnes of non-hazardous waste per annum, which will be sorted into separate recyclable fractions prior to transport off-site for onward re-use or recycling.

Thorntons Recycling operate a number of waste facilities including licensed waste transfer stations at Ballyfermot (Reg. No. W0044-02) and Dunboyne (Reg. No. W0206-01), a licensed composting facility at Kilmainhamwood (Reg. No. W0195-01), and several permitted waste facilities. The company also operate waste collection services in the Dublin, North East and Midlands Regions and in Kildare, Galway & Wicklow.

1. Facility

The site of the proposed development is a greenfield site (1.26 ha) located in Millennium Business Park, in close proximity to a concrete batching plant, light industrial units and a licensed waste transfer station - Greenstar Ltd. (Reg. No. W0183-01). There is also a permitted waste recovery facility located within 500m of the site on the Cappagh road - Nurendale Ltd t/a Panda Waste (Fingal Co. Co. waste permit WPT95). There are a large number of commercial units within 1km of the site, in keeping with the industrial zoning of the area. There are three residential dwellings located within 500m of the site on the Cappagh road, the closest of which is only 14m east of the site boundary. In May 2008, the applicant completed the purchase of this property and its associated lands at The Grange. The nearest major residential zones are Finglas West (1.5km south-west) and Corduff (2km south).

The proposed site infrastructure includes the materials recovery building (divided into two sections: the dry recyclables area and the C&D area), office/canteen building, two weighbridges (entry & exit), truck wash facility, bunded fuel & waste oil storage area, waste quarantine area, electricity sub-station, security fencing, gates and drainage infrastructure. The entire site will be finished with an impermeable hardstanding surface consisting of a 200mm reinforced concrete slab.

The applicant proposes to accept waste at the facility on a 24-hour basis, Monday to Sunday, inclusive of Public Holidays, and to process waste (sorting, mixing, etc.) between the hours of 07.00 and 22.00 Monday to Saturday inclusive. There will be approximately 40 staff employed at the facility.

The applicant has applied for Classes 11,12 & 13 of the Third Schedule and Classes 2, 3, 4 & 13 of the Fourth Schedule of the Waste Management Acts 1996 to 2008. Class 13 of the Fourth Schedule (which deals with waste recovery activities) is identified as the principal activity:- *Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced.*

On 6th August 2008, Fingal County Council refused planning permission (Ref. No. F07A/1472) for the proposed Materials Recovery Facility for two reasons:- (i) the proposed development would seriously injure the amenities of the residential property immediately to the east of the site, and (ii) the Planning Authority is not satisfied that the proposal would not cause flooding of sensitive waters downstream of this development. The applicant's proposals for storm water management are discussed in section 4 of this report. These include a proposal to attenuate the storm water discharge and to harvest the roof rainwater for use as wash water at the facility. The applicant has appealed the decision to An Bord Pleanála (PL06F.230770).

2. Operational Description

Waste materials will be brought to the proposed Materials Recovery Facility (MRF) for sorting, processing and recovery as recyclables. The MRF will have a capacity for a maximum annual intake of 100,000 tonnes of waste, comprising 50,000 tpa of C&D waste and 50,000 tpa of dry recyclable waste. It is proposed to phase operations by handling 70,000 tpa in year 1, increasing to 100,000 tpa by year 3 (estimated as 2011). Table 1 shows the breakdown of waste materials to be handled.

Table 1. Waste Categories & Quantities

Waste Type	Tonnes per annum		
	Year 1	Year 2	Year 3
C&D Waste	40,000	45,000	50,000
Dry Recyclables	30,000	40,000	50,000
Total	70,000	85,000	100,000

The proposed processing plant for C&D waste includes a shredder, conveyors, overband magnets, picking stations, trommel drum, windshifter system, ballistic separator and a compactor. The C&D waste will be separated into various grades of aggregates, soils, metal and timber for re-use.

The proposed processing plant for dry recyclable waste includes a vibrating hopper, ballistic separator, conveyors, picking lines, overband magnets, eddy current separator and balers. The dry recyclables will be segregated into paper, cardboard, metals and plastics for onward shipment to reprocessing/recovery plants.

The applicant estimates that waste processing will result in approximately 13,000 to 17,000 tonnes per annum of residual waste which will require disposal off-site. This facility will not be open to the general public; it is for commercial use only. All waste sorting and processing will take place indoors. The only outdoor activities will be re-fuelling and truck washing.

The applicant has proposed an environmental monitoring programme for noise emissions, dust deposition and discharges to the foul and storm water sewers from the site. Condition 1 of the Recommended Decision (RD) authorises the waste acceptance and processing hours sought by the applicant.

3. Use of Resources

Annual use of resources is estimated as follows, based on consumption at a similar Thornton's facility:

- Electricity 990,500 kWh
- Water 730,000 litres (domestic & cleaning use only)
- Diesel Oil 900,000 litres.

The applicant also proposes to use lubricant oil (4,000 litres), coolant/antifreeze (1,000 litres) and cleaning chemicals (200 kg disinfectant).

With regard to reducing the climate impact of the facility, the RD requires an energy efficiency audit and an assessment of resource use efficiency. The EMS objectives and targets (Condition 2.2.2.2) include use of cleaner technology (including production related carbon footprint) and cleaner processing.

4. Emissions

4.1 Air

Dust

There is potential for dust generation arising from waste activities on site, in particular the handling & processing of C&D waste. However, all waste acceptance and processing activities will take place within the MRF building which will be fitted with roller shutter doors. The applicant states that dust collection filters will be placed on processing equipment that has the potential to generate dust. This requirement has been specified in Condition 3.19 of the RD. The applicant has proposed 3 dust monitoring locations along the site boundary, however as the processing of waste will be carried out indoors, I am of the view that one monitoring station at a suitable location is sufficient. Schedule B.5 of the RD specifies a dust deposition limit of 350 mg/m² per day based on a 30 day composite sample at station D1 (or as may be amended under Condition 6.6). Dust monitoring is to be carried out biannually.

Odour

There is minimal risk of odour nuisance as this facility will not be processing any putrescible waste. If any putrescible/biodegradable waste inadvertently arrives at the MRF, it must be held in the waste quarantine area and removed from the premises within 48 hours of arrival or 72 hours in the case of a public holiday (Condition 6.16).

4.2 Emissions to Sewer

Effluent will be collected from the re-fuelling area, truck wash area and 7 no. gullies in the materials reception building. The effluent will be directed through a silt trap and Class I full retention oil interceptor before being discharged to the municipal foul sewer network along with sanitary effluent from the office/canteen building. A consent to discharge to sewer was issued by the Water Services Authority, Fingal County Council, under Section 52 of the Waste Management Acts 1996 to 2008. The RD includes their requirements as specified, with the following exceptions:

- The licensee shall maintain (or have maintained) effluent treatment systems on site to ensure compliance with the conditions in this consent.
- Best Available Technology (BAT) shall be used by the licensee to treat wastewater prior to discharge to foul sewer.

No effluent treatment is proposed at the facility, with the exception of the silt trap and oil interceptor. This treatment is sufficient to ensure compliance with specified ELVs. Maintenance of emission control equipment is sufficiently provided for under Condition 6.5 of the RD. The installation satisfies BAT, as confirmed under the "*Best Available Techniques (BAT)*" section of this report. Therefore it is not necessary to include these specific conditions in the RD.

4.3 Emissions to Surface Waters

There are no direct emissions to surface water from the proposed development.

4.4 Storm Water Runoff

The entire site will be covered in an impermeable concrete surface. 'Clean' surface water from roof areas will be collected in a rainwater harvesting system for re-use onsite in low-grade operations such as floor and truck washing. The clean storm water will drain to a 25m³ storage tank which will overflow, if necessary, to the proposed surface water attenuation system. 'Dirty' surface water from yard areas will drain to a 741m³ capacity attenuation tank prior to discharge, via a silt trap and class I full retention oil interceptor, into the Millennium Business Park drainage system. This drainage system consists of a central culvert under the main business park road and a large underground tank to provide temporary storage of surface water, which is then pumped at a steady rate to the surface water drainage system in the Northwest Business Park on the other side of Cappagh road.

The collected surface water ultimately discharges into the River Tolka near Blanchardstown. The river is not a designated habitat or statutory protected area. The river discharges to Dublin Bay at Clontarf. This area is a designated SPA (South Dublin Bay & River Tolka Estuary). It is not anticipated that the proposed development will have any significant impact on the River Tolka or the Tolka Estuary SPA.

Storage / Bunding

Considering the dry nature of waste materials to be handled on site, the risk of spills and contamination is negligible. Diesel, lubricant/hydraulic oils and any small volumes of cleaning chemicals will be stored in a bunded area. Condition 3 of the RD specifies the standard requirements for bunding of tank, container and drum storage areas.

Firewater Retention

In the event of a fire, firewater will drain to the surface water drainage system. An attenuation tank is proposed as part of the surface water drainage design and there is also an attenuation tank at the entrance to Millennium Business Park. The applicant states that a firewater retention plan will be prepared prior to commencement of operations. Condition 3.8 requires the licensee to prepare and implement a suitable firewater retention risk management programme, with the agreement of the Agency.

4.5 Emissions to ground/groundwater:

There are no proposed emissions to ground from the facility. The nature of the proposed activities on-site poses a low risk to groundwater, with no significant quantities of polluting matter to be stored on site. Diesel, other fuels and lubricants will be stored in a bunded area and the applicant proposes a designated hardstanding area for re-fuelling operations, which will drain to the foul sewer network. Given the low risk to ground/groundwater posed by the proposed activity, the RD does not require groundwater monitoring to be carried out.

The applicant does not propose to abstract groundwater from the existing well on site as water will be supplied via the municipal water main servicing the business park. Condition 3.11 requires that any wellheads present be adequately protected to prevent contamination or physical damage within three months of the date of grant of licence.

4.6 Noise:

The existing noise profile at the site is typical of an industrial area and is heavily influenced by road traffic, construction activities and proximity to the western flight-path from Dublin Airport, as the main runway is located c. 3.5km to the north-east of the site. The applicant undertook a baseline noise survey at two site boundary locations, close to the nearest noise sensitive locations. NSL1 is a residence located at the south-eastern site boundary (14 m from site) and NSL2 are commercial units located to the west. Daytime noise at NSL1, measured as L_{Aeq} , was 59 dB(A) and night-time noise was 48 dB(A). Daytime noise at NSL2 measured 58 dB(A), while night-time noise measured 47 dB(A).

A noise model developed for the site has predicted that operational noise from the facility will result in an imperceptible impact on noise levels, with complaints unlikely to occur. With the appropriate site management, the site is capable of operating with no significant increase in the existing ambient noise levels. The RD sets daytime/night-time noise limits of 55/45 dB(A) measured at the site boundary and requires annual noise monitoring to be carried out.

4.7 Waste

The applicant estimates that approximately 13,000 to 17,000 tonnes of residual waste will be generated at the facility each year, i.e. contaminants that are removed from the waste stream and small quantities of municipal waste generated in the canteen & office on-site. Any residual waste will be stored in wheelie bins and collected regularly for transfer to an appropriate licensed facility. Condition 8 of the RD specifies requirements for materials handling and waste sent off-site for recovery/disposal.

4.8 Nuisance:

Based on the proposed nature of the waste accepted at the facility, and considering that all waste unloading, sorting & processing will take place indoors, it is considered that there is a low risk of environmental nuisance associated with this facility. Condition 5 of the RD specifies controls in the event of potential nuisance arising from waste activities on-site.

5. Decommissioning & Residuals Management

The operation of the facility will be ongoing with an open-ended lifespan. If and when operations cease, the bulk of the site infrastructure will be sold and works will be carried out to ensure the site is free from continuing emissions and free of contamination from waste. Successful decommissioning of the MRF would result in no requirement for long term aftercare management at the site. Condition 10 of the RD requires a fully costed Decommissioning Management Plan to be submitted to the Agency in advance of the commencement of waste activities at the facility.

6. Cultural Heritage, Habitats & Protected Species

There are two proposed NHAs within 5km of the site; Liffey Valley (3.5km distance) and the Royal Canal (5km distance). The impact assessment carried out as part of the application found that the facility will not have a significant environmental impact on any designated sites.

7. Waste Management Plan

The Dublin Regional Waste Management Plan 2005–2010 advocates further increases in the region's capacity to accept, sort and process recyclable waste. The development of further MRF capacity by the private waste management industry is encouraged in the plan. The regional capacity requirement for commercial MRFs has not been determined. However, the plan states that the private sector manages the majority of commercial & industrial waste and is expected to continue to expand MRF capacity.

The plan also aims to achieve more sustainable waste management practices in the C&D sector. It identifies an additional 4 million tonnes per annum regional capacity requirement for C&D waste recycling, in the form of material recovery plus soil beneficial use projects. In this regard, the development of C&D recycling facilities is encouraged and the private sector is expected to lead this. The applicant's proposal complies with the objectives of the plan.

8. Environmental Impact Statement

I have examined and assessed the EIS and having regard to the statutory responsibilities of the EPA, I am satisfied that it complies with Article 94 and Schedule 6 of the Planning and Development Regulations 2001 (S.I. No. 600 of 2001) and EPA Licensing Regulations (S.I. No. 85 of 1994, as amended).

9. 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 Recommended Decision comply with the requirements and principles of BAT. I consider 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 to the way the facility is located, designed, built, managed, maintained, operated and decommissioned.

10. Compliance with Directives/Regulations

The facility does not fall under the scope of the IPPC, Landfill, Groundwater or Seveso Directives. BAT for Materials Recovery Facilities is taken to be represented by the guidance given in the Agency's *Draft BAT Guidance Note for the Waste Sector: Transfer Activities (April 2003)*.

11. Fit & Proper Person Assessment

The Fit & Proper Person assessment requires three areas of examination:

(i) Technical ability

The applicant's management structure includes a Managing Director, Operations Director, Environmental Manager and Health & Safety Manager. The management team are considered to be appropriately qualified and experienced with regard to the technical ability required to carry out the proposed waste activities. Thorntons Recycling has an Integrated Management System (IMS) which has been certified at all of their current sites by Certification Europe for ISO 14001 (Environmental), ISO 9001 (Quality) and OHSAS 18001 (Health & Safety).

(ii) Legal Standing

Padraig Thornton Waste Disposal Ltd. have been prosecuted three times under the Waste Management Acts for breaches of waste licences W0044-01 and W0044-02 relating to their Ballyfermot (Killeen Road) waste transfer station.

- W0044-01: failure to provide reports to the Agency and other procedural matters. The company states that at that time, it was not adequately staffed with environmental personnel to service the licence. The facility now has a full time, suitably qualified environmental manager and a deputy manager.
- W0044-02: failure to comply with conditions relating to the licence limit on tonnage for 2005. Since then, the company has invested in other licensed and permitted facilities to allow for the processing of this excess waste from the Killeen Road facility.
- W0044-02: failure to comply with condition 6.2 of the licence and causing an odour nuisance on 7th November 2005. Since then, the company has invested in approved technology and resources for the treatment of odorous air at the facility.

(iii) Financial Standing

The applicant has submitted a consolidated balance sheet for the year ending 31st December 2006, which shows a profit for the period. The accounts indicate that the company is financially capable of meeting the requirements of a waste licence.

It is my view, and having regard to the provisions of Section 40(8) of the Waste Management Acts 1996 to 2008, that the applicant can be deemed a Fit & Proper Person for the purpose of this licence.

12. Recommended Decision

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 the activities in accordance with the conditions will not cause environmental pollution.

13. Submissions

No submissions were received in relation to this application.

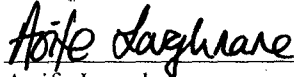
14. Charges

The financial charge proposed in the RD is €9,803. This has been calculated based on the enforcement effort predicted for the facility.

15. Recommendation

In preparing this report and the Recommended Decision, I have consulted with Agency technical advisor Dr. Jonathan Derham. I have considered all the documentation submitted in relation to this application and recommend that the Agency grant a licence subject to the conditions set out in the attached RD and for the reasons as drafted.

Signed



Aoife Loughnane

Office of Climate, Licensing & Resource Use

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 1996-2008.