

**GLENSIDE ENVIRONMENTAL SERVICES**

**Acoustic & Environmental Consultants**

24 The Heathers  
Classes Lake  
Ballincollig  
Cork  
Ireland  
T: 021-4875183  
M: 086-3819387  
E: info@glenenv.ie

Administration  
Environmental Licencing Programme  
Office of Climate, Licencing & Resource Use  
Environmental Protection Agency  
PO Box 3000  
Johnstown Castle Estate  
Co. Wexford  
19th September 2011

RE: W0214-01 Notice In Accordance with Article 14(2)9b)(ii) of the Waste Management (Licencing) Regulations 2004 as amended.

Dear Sir/Mme.,

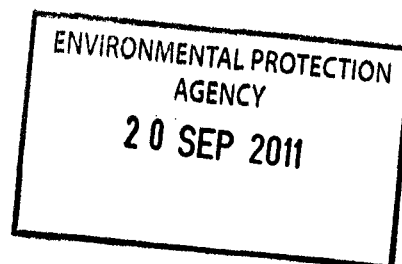
As requested in your letter dated 10th August, in relation to the waste licence licence review application for Mr. Ted O' Donoghue & Sons, Knockpoge, Waterfall, Cork, (W0214-01), I am pleased to provide the requested information below.

1. Revised Table B.7.1 (Third and Fourth Schedules of the Waste Management Acts 1996 to 2010) and revised Table H.1(a). (Quantities of Waste in Relation to Each Class of Activity Applied for)
2. Information regarding how the waste hierarchy in Section 21A of the amended Waste Management Acts 1996 to 2011 is applied.

If you have any queries or require clarification on the information please contact me.  
Yours sincerely,



Pat Power



**TABLE B.7.1 THIRD AND FOURTH SCHEDULES OF THE WASTE MANAGEMENT ACTS 1996 TO 2010**

Waste Management Acts 1996 to 2010					
Third Schedule Waste Disposal Operations		Y/N	Fourth Schedule Waste Recovery Operations		Y/N
D 1	Deposit into or on to land (e.g. including landfill, etc.).		R 1	<p>Use principally as a fuel or other means to generate energy: This includes incineration facilities dedicated to the processing of municipal solid waste only where their energy efficiency is equal to or above:</p> <ul style="list-style-type: none"> <li>- 0.60 for installations in operation and permitted in accordance with applicable Community acts before 1 January 2009,</li> <li>- 0.65 for installations permitted after 31 December 2008,</li> </ul> <p>using the following formula, applied in accordance with the reference document on Best Available Techniques for Waste Incineration:</p> $\text{Energy efficiency} = (E_p - (E_f + E_i)) / (0.97 \times (E_w + E_f))$ <p>where—</p> <p>‘E<sub>p</sub>’ means annual energy produced as heat or electricity and is calculated with energy in the form of electricity being multiplied by 2.6 and heat produced for commercial use multiplied by 1.1(GJ/year),</p> <p>‘E<sub>f</sub>’ means annual energy input to the system from fuels contributing to the production of steam (GJ/year),</p> <p>‘E<sub>w</sub>’ means annual energy contained in the treated waste calculated using the net calorific value of the waste (GJ/year), ‘E<sub>i</sub>’ means annual energy imported excluding E<sub>w</sub> and B<sub>f</sub>(GJ/year), ‘0.97’ is a factor accounting for energy losses due to bottom ash and radiation.</p>	
D 2	Land treatment (e.g. biodegradation of liquid or sludgy discards in soils, etc.).		R 2	Solvent reclamation/regeneration.	
D 3	Deep injection (e.g. injection of pumpable discards into wells, salt domes or naturally occurring repositories, etc.).		R 3	Recycling /reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes), which includes gasification and pyrolysis using the components as chemicals.	
D 4	Surface impoundment (e.g. placement of liquid or sludgy discards into pits, ponds or lagoons, etc.).		R 4	Recycling/reclamation of metals and metal compounds.	

D 5	Specially engineered landfill (e.g. placement into lined discrete cells which are capped and isolated from one another and the environment, etc.).		R 5	Recycling/reclamation of other inorganic materials, which includes soil cleaning resulting in recovery of the soil and recycling of inorganic construction materials.	
D 6	Release into a water body except seas/oceans.		R 6	Regeneration of acids or bases.	
D 7	Release to seas/oceans including sea-bed insertion.		R 7	Recovery of components used for pollution abatement.	
D 8	Biological treatment not specified elsewhere in this Schedule which results in final compounds or mixtures which are discarded by means of any of the operations numbered D 1 to D 12.		R 8	Recovery of components from catalysts.	
D 9	Physico-chemical treatment not specified elsewhere in this Schedule which results in final compounds or mixtures which are discarded by means of any of the operations numbered D 1 to D 12 (e.g. evaporation, drying, calcinations, etc.).		R 9	Oil re-refining or other reuses of oil.	
D 10	Incineration on land.		R 10	Land treatment resulting in benefit to agriculture or ecological improvement.	
D 11	Incineration at sea (this operation is prohibited by EU legislation and international conventions).		R 11	Use of waste obtained from any of the operations numbered R 1 to R 10.	
D 12	Permanent storage (e.g. emplacement of containers in a mine, etc).		R 12	Exchange of waste for submission to any of the operations numbered R 1 to R 11 (if there is no other R code appropriate, this can include preliminary operations prior to recovery including pre-processing such as, amongst others, dismantling, sorting, crushing, compacting, pelletising, drying, shredding, conditioning, repackaging, separating, blending or mixing prior to submission to any of the operations numbered R1 to R11).	
D 13	Blending or mixing prior to submission to any of the operations numbered D 1 to D 12 (if there is no other D code appropriate, this can include preliminary operations prior to disposal including pre-processing such as, amongst others, sorting, crushing, compacting, pelletising, drying, shredding, conditioning or separating prior to submission to any of the operations numbered D1 to D12).	Y	R 13	Storage of waste pending any of the operations numbered R 1 to R 12 (excluding temporary storage (being preliminary storage according to the definition of 'collection' in section 5(1)), pending collection, on the site where the waste is produced).	Y
D 14	Repackaging prior to submission to any of the operations numbered D 1 to D 13.	Y			
D 15	Storage pending any of the operations numbered D 1 to D 14 (excluding temporary storage (being preliminary storage according to the definition of 'collection' in section 5(1)), pending collection, on the site where the waste is produced).	Y P			

**H.1 Waste Types and Quantities – Existing & Proposed**

Provide an estimation of the quantity of waste likely to be handled in relation to each class of activity applied for. This information should be included in Table H.1(a).

**TABLE H.1(A). QUANTITIES OF WASTE IN RELATION TO EACH CLASS OF ACTIVITY APPLIED FOR**

Waste Management Acts 1996 to 2010 3rd Schedule (Disposal) Operations			Waste Management Acts 1996 to 2010 4th Schedule (Recovery) Operations		
Class of Activity Applied For		Quantity (tpa)	Class of Activity Applied For		Quantity (tpa)
Class D 1			Class R 1		
Class D 2			Class R 2		
Class D 3			Class R 3		
Class D 4			Class R 4		
Class D 5			Class R 5		
Class D 6			Class R 6		
Class D 7			Class R 7		
Class D 8			Class R 8		
Class D 9			Class R 9		
Class D 10			Class R 10		
Class D 11			Class R 11		
Class D 12			Class R 12		
Class D 13	✓	16,000	Class R 13	✓	10,000
Class D 14	✓	20,000			
Class D 15	✓	36,000			

### **Compliance with Waste Hierarchy;**

Section 21A of Act of 1996. (1) states;

The following waste hierarchy shall apply as a priority order in waste prevention and management legislation and policy:

- (a) prevention;
- (b) preparing for re-use;
- (c) recycling;
- (d) other recovery (including energy recovery); and
- (e) disposal

### **RESPONSE**

The Ted O' Donoghue facility at Waterfall, Cork is committed to following the waste hierarchy as a priority order in waste prevention and management legislation and policy.

In 2010 the facility received planning permission for the extension to the main facility building for the storage and baling of waste paper and cardboard.

The management also installed new waste separation equipment to comply with the waste hierarchy. This equipment included a shredder and trommel with 7-bay picking station for separation of household and C&D waste. The equipment also includes Eddy Current Separation for separation of ferrous and non-ferrous metals.

In the past 5 years the facility has achieved up to 70% recovery at the premises and it is believed that the recoverable fraction can be increased significantly since the introduction of this equipment thereby complying with the waste management hierarchy.



# **Waste Licence Review Application**

## **Non-Technical Summary**

### **Section A**

<b>EPA Ref. N<sup>o</sup>:</b>	<input type="text"/>
--------------------------------	----------------------

**Review of Waste Licence Application by Ted O' Donoghue & Sons Ltd. for a Existing Waste Transfer Facility at Knockpoge, Waterfall, Cork.**

---

# **NON-TECHNICAL SUMMARY**

## **REVIEW OF WASTE LICENCE APPLICATION W0147-01**

---

### **Location of Facility**

The site is located in south County Cork, approximately 6.5 km southwest of Cork City. The site currently comprises an operational non-hazardous materials recovery facility consisting of a waste transfer building, small workshop, wheelwash and concreted yard.

### **Project Description**

Ted O' Donoghue & Sons Ltd operates a waste management and recycling centre at Knockpoge, Waterfall, Co Cork. The company has provided a dedicated waste management service to the Cork region for almost 30 years. The facility currently processes dry non-hazardous waste. The waste is delivered to the facility where recyclables such as paper, steel, wood and construction and demolition waste are segregated with the residual non-recyclable waste being transferred to landfill.

The facility serves the greater Cork region and is primarily used as a recycling centre for commercial, industrial, household and construction and demolition material. The management propose to increase the waste handling capacity onsite in order to meet the increase need for recycling infrastructure in the Cork region.

Ted O' Donoghue & Sons Ltd. is seeking a review of their Waste Licence (WL0147-01) the EPA. The application for the review of the waste licence is to seek approval from the EPA for the following:

- Increase the annual tonnages from current licensed figure of 23,000 tonnes to 60,000 tonnes per annum and;
- Use of the facility as a civic amenity centre

The Company is optimistic that it can expand its business and operations and is now applying to Cork County Council for Planning Permission and to the Environmental Protection Agency (EPA) for a waste licence to process 60,000 tonnes of waste at the facility. This volume is required to cater for the existing and future needs of the business.

## **Sanitary Authority**

The existing facility is located in the functional area of Cork County Council, County Hall, Carrigrohane Road, Cork. There is currently no discharge to sewer from this facility.

No effluent will be discharged to a sewer of the sanitary authority or other body as all domestic effluent generated on site will be discharged to a proprietary treatment unit to be installed on site.

Run-off from the treatment unit will discharge to percolation. All surface water will be discharged into a 2m<sup>3</sup> intercepting trap and then onto a 180m<sup>3</sup> holding tank before discharge to a land drain.

All roof water is diverted into a 10,000 gallon stainless steel tank at the southern end of the transfer station building. This water will be used to wash vehicles and equipment on site and will also be used as a water source for fire fighting. An overflow pipe will be installed onto this tank so that excess water can be discharged to the local land drain. Any run-off generated from the waste tipping activities in the Waste Transfer & Recovery Building will be collected in a 4,300 gallon tank located underneath the main floor of the transfer building. The level of run-off in the tank will be monitored on a weekly basis and when full an authorised liquid waste disposal operator will be contacted to empty out the tank and transfer to either a local authority waste water treatment plant or for incineration abroad.

## Hours of Operation

The following are the proposed hours of operation, waste acceptance and handling at the facility at Knockpoge, Waterfall, Co. Cork.

The following are the proposed hours of acceptance of waste at the facility:

- Monday 8am to 6pm
- Tuesday 8am to 6pm
- Wednesday 8am to 6pm
- Thursday 8am to 6pm
- Friday 8am to 6pm
- Saturday 8am to 1pm

## Infrastructure

Because the whole site will be on a hard stand area. the site roads are taken to be of the same detail as the hard stand area, i.e., a 300mm layer of compacted hardcore with a 300mm concrete covering.

## Plant

The plant to be utilized at the facility is as follows:

- Horizontal Baler for cardboard and plastic
- Powerscreen 725 LL Trommel with 25mm screen
- Powerscreen Picking Station with overband magnet and paper i plastic blower
- Komatsu PC 2 I OLC 360” Excavator with bucket



- Fiat Hitachi FH 150 W2 360' Excavator with McQuaid Engineering Grab
- Hyster Forklift Truck
- Tim Enviropro SD-1010 Timber Shredder
- 2 FG Wilson Diesel 3-Phase Power Generators - 60 kva and 250 kva
- Schmidt I5 I Compact Road Sweeper
- Two Forty Foot Articulated Truck Ejector Trailers
- Forty Foot Articulated Truck Curtain Side Trailer
- 4 Four cubic yard forklift tipping containers
- 2 Six cubic yard skips for storing rubble and soil
- DAF 1900 Chain Lift Skip Truck
- Two cubic yard skip for storing plate glass
- 14 cubic yard open-top skip for mixed plastic film
- 14 cubic yard skip used to store mixed newsprint and paper

There are also a number of on-the-road vehicles for waste collection and transfer.

These include:

- 2 chain-lift skip trucks;
- 1 hook-lift skip trucks;
- 1 articulated truck;
- 2 refuse collection vehicles-commercial wheeled bin waste:
- 1 Skip Eater - skips and cardboard:

A Waste Quarantine Area is located inside the Waste Transfer Building for items such as batteries, fluorescent tubes and unidentifiable liquid wastes mainly paints. In the event that hazardous waste or other non-complaint waste which cannot be seen on visual inspection of the skips at the customers premises and is inadvertently delivered to the Waste Transfer/Recycling facility, the waste will be removed to the designated Waste Quarantine Area.

Wash Water and Domestic Effluent generated from the Office and Toilets will pass through a proprietary treatment unit, before passing onto percolation. Site Layout Map for details of location of the proprietary treatment unit.

The yard surface water will be collected in gullies and box gully drains and will pass into a 2m<sup>3</sup> intercepting tank before passing through a 180m<sup>3</sup> holding tank and onto a local land drain which connects into the Curraheen River. The interceptor tank and holding tank are to be located at the southern end of the waste transfer building

Roof water from the facility building will be diverted into a 10,000 gallon holding tank at the south eastern end of the facility. The water will be used for washing plant and equipment on the site as well as for use for fire fighting purposes. An overflow pipe will be attached to the storage tank to drain off excess water. This will be diverted onto a local land drain which connects to the Curraheen River at the South Eastern end of the facility.

## Civic amenity facilities

It is proposed to apply for use of a civic amenity to cater for the needs of the local population to dispose of recyclables and household waste at the facility. Bays are currently in place to hold glass, wood, plasterboard, metals. Individual bays are provided for each waste stream. A member of staff will be available to assist members of the public to the appropriate bay.

There will be external storage bays located at the facility for storing recovered waste for recycling. Concrete storage bays for soil, rubble, green waste and chipped wood are located at the north eastern end of the facility. At the south western end of the waste transfer building there will be bays located for glass and scrap metal and also a quarantine area for fridges, freezers, tyres and other electrical goods.

These bays will be used by members of the public to dispose of recyclables. A member of staff will be available at all times to direct members of the public to designated bays.

## Types of Waste Accepted:

The following are the main types of waste accepted at the facility in Knockpoge:

1. Mixed Construction & Demolition Waste
2. Mixed Municipal Waste (Household and Commercial Wheeled Bins).
3. Commercial & Industrial Waste (Skips), and.
4. Domestic Waste (Household Skips)

## **Emissions**

### Emissions to Surface Waters

Surface water from the hardstanding areas at the facility drain to an oil interceptor at the rear of the workshop building. Run-off from this interceptor flows to the land-drain which subsequently flows to the Curraheen River. Monitoring locations SW2 and SW3 are located upstream and downstream of the discharge respectively. Monitoring locations SW1 represents the discharge from the oil interceptor. Run-off from the roof areas are collected in holding tanks.

### Emissions to Sewer

Ted O'Donoghue and Sons Ltd Waste Disposal do not discharge any effluent or sewage from the site to sewer. All domestic sewage generated on-site will be treated by a waste water treatment system with a subsequent percolation area. Consequently, there will be no discharge to sewer from the facility.

### Emissions to Groundwater

Percolation from the site wastewater treatment system discharges to the groundwater.

## Noise Emissions

Noise emissions are produced from the current activities ongoing at the facility. The primary sources of noise at the Waste Transfer Station are outlined as follows:

- Heavy goods vehicles (HGVs) delivering waste to and collecting waste from the site.
- HGVs tipping waste materials in the waste inspection area within the main waste building at the site.
- 1 excavator for waste/recyclables handling within the main waste building at the site.

## Control & Monitoring

### To Atmosphere

The management of the site including waste handling and other facility procedures employed serve as successful abatement techniques.

All waste related activities are currently and will continue to be restricted to the main waste building. The hardstanding areas of the site are periodically sprayed with water during periods of dry weather. All waste is covered while being transported. These measures reduce the generation and release of dust to the atmosphere.

Operations at the waste transfer facility involve the transfer and compaction of solid waste only. No liquids, agricultural or sewage sludges will be accepted at the site. Waste accepted at the facility will have generally undergone relatively little decomposition. The storage of waste in sealed containers following compaction and fast turnaround times on site means that the potential for odour problems arising at the facility will be minimised.

### To Surface water/Sewer/Groundwater

All surface water collected on-site will pass through the oil interceptor prior to discharge. A surface water network collects surface water run-off from the hardstanding area and rain water from the roof, which are directed to a oil interceptor before discharge through a 170mm pipe to open drain leading to the Curraheen River. The oil interceptors on-site are emptied and cleaned regularly.

### Surface Water

Monitoring of surface water will take place at the point of discharge after the outlet pipe from the oil interceptor. This sample is currently taken and analysed monthly in accordance with the current EPA licence for the facility. The outlet from the oil interceptor discharges to the Curraheen River. The Curraheen River is sampled upstream and downstream of the discharge point.

### Noise

There are 5 no. noise monitoring locations; 2 on-site and 3 and local sensitive locations. The noise is measured annually in accordance with the current licence requirements. The only impact from the proposed increase in tonnages is expected to come from traffic noise. An increase of less than 3dB is

expected to occur during maximum capacity. This result will have negligible impact on existing noise levels.

### Waste Acceptance Procedures

Staff members operating in the traffic control cabin will log all waste loads arriving at the site. The following information will be recorded for the site records:

1. Description of the waste including waste types, composition, form and relevant EWC codes etc.
2. The origin of the waste including all customer details.
3. The weight of the waste load.

### **Waste Types and Quantities – Existing & Proposed**

#### **QUANTITIES OF WASTE IN RELATION TO EACH CLASS OF ACTIVITY APPLIED FOR**

Waste Management Act 1996 to 2011 and the European Communities (Waste Directive) 2011					
3rd Schedule (Disposal) Activities			4th Schedule (Recovery) Activities		
Class of Activity Applied For		Quantity (tpa)	Class of Activity Applied For		Quantity (tpa)
Class D1			Class R1		
Class D2			Class R2	✓	1,000
Class D3			Class R3	✓	3,000
Class D4			Class R4	✓	10,000
Class D5			Class R5		
Class D6			Class R6		
Class D7			Class R7		
Class D8			Class R8		
Class D9			Class R9		
Class D10			Class R10		
Class D11			Class R11		
Class D12			Class R12		
Class D13	✓	16,000	Class R13	✓	10,000
Class D14	✓	20,000			
Class D15	✓	36,000			

### ANNUAL QUANTITIES AND NATURE OF WASTE

Year	Non-hazardous waste (tonnes per annum)	Hazardous waste (tonnes per annum)	Total annual quantity of waste (tonnes per annum)
2008	40,000	0	40,000
2009	45,000	0	45,000
2010	50,000	0	50,000
2015	60,000	0	60,000

### Existing & Proposed Tonnages

WASTE TYPE	TONNES PER ANNUM (existing)	TONNES PER ANNUM (proposed)	TOTAL (over life of site) tonnes
Household	12,880	30,000	30,000
Commercial	1,840	6,600	6,600
Sewage Sludge	Zero	Zero	Zero
Construction and Demolition	7,514	19,602	19,602
Industrial Non- Hazardous Sludges	Zero	Zero	Zero
Industrial Non- Hazardous Solids	766	3,798	3,798
Hazardous	Zero	Zero	Zero