

Waste Licence Review Application

Non-Technical Summary

Section A



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 to cater for the needs

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 $2m^3$ intercepting trap and then onto a $180m^3$ 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 36O'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-Iift 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 $2m^3$ intercepting tank before passing through a $180m^3$ 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		Waste Management Act			
3rd Schedule (Disposal) Activities		4th Schedule (Recovery) Activities			
Class of		Quantity (tpa)	Class of		Quantity (tpa)
Activity			Activity		
Applied For			Applied For		
Class 1			Class 1		
Class 2			Class 2	~	1,000
Class 3			Class 3	~	3,000
Class 4			Class 4	~	10,000
Class 5			Class 5		
Class 6			Class 6		
Class 7			Class 7		
Class 8			Class 8		
Class 9			Class 9		
Class 10			Class 10		
Class 11	✓	16,000	Class 11		
Class 12	✓	20,000	Class 12		
Class 13	✓	36,000	Class 13	~	10,000

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