

# WASTE LICENCE APPLICATION **NON-TECHNICAL SUMMARY RECYCLING FACILITY AT** O'REGAN'S QUARRY PRODUCTS LTD.

**TULLIGMORE** 

DRIPSEY, CO. CORKET INC.

O'Regan's Quarry Products Ltd. The Mills Commercial Park, Crookstown, Co. Cork.

# Prepared By: -

O' Callaghan Moran & Associates, Granary House, Rutland Street, Cork.

19<sup>th</sup> January 2009

### 1 NON-TECHNICAL SUMMARY

O'Regan's Quarry Products Ltd. (O'Regans) is applying to the Environmental Protection Agency (EPA) for a Waste Licence for their facility at Tulligmore, Dripsey, County Cork.

The application for a Waste Licence is in accordance with the requirements of the Waste Management Acts, 1996 to 2003. This non-technical summary contains the information specified in Article 12 (1) (u) of the Waste Management (Licensing) Regulations, 2004 (S.I. No. 395 of 2004).

# Compliance with Requirements of the Waste Management Act 1996 to 2003

Best Available Techniques (BAT) will be used to prevent/eliminate or, where this may be deemed not practicable, limit/abate/reduce emissions of environmental concern resulting from on-site recovery activities.

#### **Nature of the Facility**

The proposed development involves the construction and operation of a recycling facility for C&D waste and a composting area for green waste. The facility will only accept potentially recyclable C&D materials – concrete, bricks, tiles, timber, soils and stones. The green waste will comprise wood wastes, garden and park waste, possible grass and shrub trimmings and timber and wood waste recovered from the C&D materials. The green waste accepted at the site will be from waste contractors with a valid waste collection permit or those exempt from the permit process e.g. landscape gardeners.

#### **Classes of Activity**

The relevant activities as per the Fourth Schedule of the Waste Management Acts 1996 – 2005 will be as follows: -

#### Fourth Schedule - Waste Recovery Activities

Principal Activity:

2: 'Recycling or reclamation of organic substances, which are not used as solvents (including composting and other biological processes)'.

- 4: 'Recycling or reclamation of other inorganic materials'.
- 13: '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'.

#### Quantity and Nature of the Waste to be Recovered or Disposed

The facility will accept only the waste types set out in Table H.1 of the application form. A maximum of 285,000 tonnes per annum will be handled on-site. Total waste inputs for are shown on Table 1.1

Table 1.1Total Waste Inputs

Waste Type	Maximum Capacity
C & D	180,000
Soils & Subsoil	100,000ker tee
Greenwaste (Commercial)	n purpose to \$5,000
Total	285,000

Raw and Ancillary Materials, Substances, Preparations, Fuels & Energy used on the Site

Raw materials and energy to be used on-site include: -

- Diesel for on-site plant equipment,
- Hydraulic oil and engine oil for use in on-site equipment,
- Electricity,
- Water.

### Plant, Methods, Processes, Abatement, Recovery, Treatment and Operating Procedures

The plant that will be used at the facility on a regular basis includes: -

Front Loading Shovel

- Screen(s)
- Crusher
- Dumper Trucks
- Mechanical Grab

It is anticipated that the majority of the C&D materials delivered to the facility will be in O'Regans vehicles. The remainder of the materials will be delivered either by waste contractors with a valid waste collection permit, or those exempt from the permit process (i.e. producers). Casual deliveries from householders will not be accepted. This will minimise the risk of the delivery of unsuitable material. Green waste will only be accepted from waste contractors with a valid waste collection permit or those exempt from the permit process e.g. landscape gardeners. Wastes will not be accepted from individual householders.

## **Waste Processing**

C&D Materials

It is expected that the majority of the C&D materials accepted at the site will have been pre-segregated at the point of generation, in line with best practice in the construction industry. However, it is probable that occasional stray wastes (gas cylinders, empty paint tins, plastic), not suitable for processing will be present.

The delivery vehicles will be weighed on the weighbridge and the materials inspected by the weighbridge operator. Any deliveries which, upon inspection, is found to contain large quantities of unsuitable materials e.g. domestic waste, paper and plastics, will not be accepted. In such events the weighbridge operator will record the name of the waste delivery contractor, the driver, the registration number of the vehicle and the nature and origin of the waste. The operator will instruct the vehicle driver to return the waste to the producer. Records of any such incidents will be maintained on-site and reported to the Council.

Clean soils and stones will be directed to the active reinstatement areas, where the materials will be off-loaded and graded using a dozer. The dozer operator will inspect the soils and any stray contaminants e.g. timber, plastic will be manually removed and brought to the quarantine area. All other materials will be off-loaded at the C&D recycling area, where a further inspection will be carried out. Any further materials identified as not suitable will be immediately removed and, where practical, returned to the delivery vehicle. If this is not practical the material will, depending on its nature (e.g. gas canisters, metal), either be stored in a quarantine area or placed in the containers used to store stray contaminant.

In the event of the producer or contractor refusing to remove the unsuitable materials O'Regans will ensure that they are removed off-site and disposed of at an appropriate

facility as soon as practical. O'Regans will also ensure that the stray contaminants removed from the incoming materials are sent to appropriate off-site recovery/disposal facilities. O'Regans will maintain records of the waste type, quantity and destination of the materials.

Timber, which may present, will be separated out manually and transferred to the green waste composting area. The material will then pass through a mechanical screen to remove the fine fraction e.g. subsoil and topsoil. This fine fraction will be used on-site for reinstatement purposes. The larger faction from containing concrete, brick etc will pass through a crusher to produce an inert recycled aggregate.

It is expected that the majority of the recycled aggregate will meet the relevant construction quality standards and will be sold as products. The residual inert materials that do not meet these standards will be used on site in the reinstatement works.

#### Green Waste

All delivery vehicles will be weighed on the weighbridge, where the waste will be inspected by the operator. Any deliveries which, upon inspection, is deemed not to be suitable will not be accepted. In such events the weighbridge operator will record the name of the waste delivery contractor, the driver, the registration number of the vehicle and the nature and origin of the waste. The operator will instruct the vehicle driver to return the waste to the producer. Records of any such incidents will be maintained onsite and reported to Cork County Council.

# Information Related to Section 40(4) (a) to (d) of the Waste Management Act

Details of the emissions from the proposed extension are presented in Sections 6, 7, 9 and 10 of the EIS which accompanies this application. The emissions will not result in the contravention of any relevant standard or emission limit prescribed under enactment.

The proposed site activities are based on best management practice and take into consideration the BAT Guidance Note for the Waste Sector: Waste Transfer Activities published by the EPA. The facility operations, when carried out in accordance with licence conditions, will not cause environmental pollution.

The facility manager and deputy will complete the FAS Waste Management Training Programme, or equivalent agreed with the Agency, prior to the start of waste acceptance.

Energy will be used efficiently in the carrying out of proposed activities although the proposed composting process is not energy intensive. Necessary measures will be taken to ensure limited consequences for the environment from accidents or the permanent cessation of activities at the site.

#### Source, Location, Nature, Composition, Quantity, Level and Rate of Emissions

Surface Water / Groundwater

The lands are located in the catchment of the Dripsey River, which is a sub-catchment of the River Lee. An unnamed stream, which is a tributary of the Dripsey, forms part of the eastern site boundary. The applicant has a Trade Effluent Licence (W.P. (W) 13/08) to discharge water used in the on-site gravel washing plant to the stream. The water is initially treated in on-site settlement ponds. The licence sets a daily maximum discharge of 2,000 m<sup>3</sup> over the period from October to April.

There are no direct emissions to groundwater from the facility. Three groundwater monitoring wells were installed on the site in 2007 MW-2, MW-3 and MW-4 at the south western, northern and north-eastern perimeter of the site.

Dust

It is not anticipated that dust will be a significant problem at the facility. Potential sources of dust include vehicle manoeuvring on paved and unpaved areas, C&D processing activities and loading/unloading materials.

Odours

The waste that will be accepted and processed at the site will not be malodorous. Food

bearing wastes or sludges will not be accepted and any unsuitable or malodours waste delivered to the facility will be removed off-site as soon as practical.

Noise

The potential noise sources include gravel excavation and processing, C&D processing, green waste screening and shredding and vehicle movements.

#### Assessment of the Effects of Emissions on the Environment

Groundwater / Surface water

When the site is operational, there will be no direct or indirect long-term emissions to The provision of extensive paved areas and secondary ground or groundwater. containment of the oil storage area minimises the potential for short term direct or indirect discharges to ground or groundwater, including dangerous substances, in the event of spill or leak. The discharge of water to the stream on the eastern boundary is only associated with the quarrying activities. Waste activities will not result in any discharges to the stream or other off-site water courses.

#### Dust

O'Regans have installed a dust suppression system along the access road and some of the paved areas that are used for vehicle manoeuvring. A water bowser and tractor are used to damp down unpaved areas of the site in dry weather. These also act as a backup in the event of a problem with the fixed dust suppression system. The layout and general topography of the site limits the potential for dust emissions beyond the site boundary.

#### **Odours**

There should be no odour problems when the facility is fully operational due to the types of material accepted. Any material with the potential to cause an odour such as food waste and sludge will not be accepted. Should any of this material be delivered to the facility it will be removed as soon as practical.

#### Noise

Noise predictive modelling indicates that noise from the site will not adversely impact on the nearest noise sensitive locations. Noise emissions will generally not be audible off site. It is proposed to construct a perimeter berm around the waste management facility prior to the commencement of waste acceptance at the facility.

# **Monitoring and Sampling Points**

Condwater

There are three groundwater wells at the site which it is proposed to monitor annually for Electrical Conductivity, pH Total Organic Carbon, Total Petroleum Hydrocarbons & Mineral Oils.

#### Dust

Dust will be monitored at four locations on the property boundary three times annually. The measurements will be carried out using Bergerhoff gauges specified in the German Engineering Institute VDI 2119 document entitled "Measurement of Dustfall Using the Bergerhoff Instrument (Standard Method).

#### Noise

Noise will be monitored annually at the five locations. Four locations are along the western and northern boundaries and one is off-site near the residence to the northeast of the site. The monitoring will be representative of daytime 30-minute L(A)eq and will be carried out in accordance with the ISO1996: Acoustics - Description and Measurement of Environmental Noise.

Odour

It is not proposed to carry out odour monitoring as there will be no malodorous material accepted at the facility.

Surface Water

The trade effluent licence W.P. (W) 13/08 requires monitoring of the discharge to the stream and the stream itself.

#### **Prevention and Recovery of Waste**

Waste oils generated during plant and vehicle maintenance will be collected and sent off-site for recovery.

#### Off-site Treatment or Disposal of Solid or Liquid Wastes

The discharge from the facility is limited to foul water from welfare facilities to an existing septic tank which has been in situ for approximately 20 years.

Leachate will be collected in an underground storage tank and removed as required to a waste water treatment plant. It is not proposed to carry out routine monitoring of this as part of the waste licence. Monitoring will be carried out as requested by the operator of the waste water treatment plant for billing purposes.

### **Emergency Procedures to Prevent Unexpected Emissions**

O'Regans will prepare an Emergency Response Procedure for the facility that addresses all contingencies that might arise including fire, uncontrolled release of leachate and/or oil, facility closure failure and major injury. The procedure will ensure a rapid response to any incident by trained staff and minimise the impact on the environment of any associated emissions.

#### Closure, Restoration and Aftercare of the Site

It is not anticipated that the waste processing activities will cease in the medium to long term. In the unlikely event that the facility shuts down it will be decommissioned in accordance with an agreed Decommissioning Plan. Post closure measures for the monitoring and maintenance of the building and the restored areas will be agreed with the Agency.

January 2009 (JOC/MG)