

# OFFICE OF LICENSING & GUIDANCE

# **INSPECTORS REPORT ON A LICENCE APPLICATION**

To: SUB-BOARD

From: PERNILLE HERMANSEN - LICENSING UNIT

**Date:** 27/01/05

RE: APPLICATION FOR A WASTE LICENCE FROM SOUTH

TIPPERARY COUNTY COUNCIL, LICENCE REGISTER 200-1

# **Application Details**

Type of facility: Integrated Waste Management Facility

Class(es) of Activity ( $\mathbf{P} = \text{principal}$  |  $3^{\text{rd}}$  Schedule: 12 ( $\mathbf{P}$ ) and 13

activity): 4<sup>th</sup> Schedule: 2, 3, 4, 11 and 13

Quantity of waste managed per 21,100 tonnes

annum:

Classes of Waste: Household waste, commercial waste and

household hazardous waste

Location of facility: Waller's Lot, Cashel, Co. Tipperary

Licence application received: 2/01/04
Third Party submissions: None
EIS Required: No

Article 14 Notices sent: 1/07/04

Article 14 routices sent:

Article 14 compliance date:

6/08/04

Article 16 Notices sent: 1/07/04 (Art 16(1)01PH)

15/09/04 (Art16(1)02PH) 26/10/04 (Art16(1)03PH)

Article 16 Compliance date: 12/01/05

Site Inspection: Site notice inspection 17/02/04 carried out by Inspector Elaine Farrell. Site notice compliant

## 1. Facility

South Tipperary County Council (STCC) has applied for a waste licence for a new development at a greenfield site at Waller's Lot, Cashel, County Tipperary. The

proposed facility comprises of a transfer station, composting area and a civic amenity facility including a bring bank.

The site area is about 2.5 hectares and is located approximately 1 km southeast of Cashel town centre. The site is currently being used for pasture with a section of it uncultivated. Agricultural lands surround the northwestern, northern and eastern side of the site. A cemetery is located adjacent to the site at the southwestern boundary. Two houses are located to the south, adjacent to the proposed development and owned by STCC. The applicant states that there are approximately 85 residences within 500 m of the facility.

The site is within an area zoned for commercial development in the Cashel Town and its Environs Draft Development Plan 2002 and is specifically allocated for the development of a recycling centre and waste transfer station. The development plan outlines plans to extend the cemetery to the north. A landscaped park with a proposed pedestrian/cyclist path is planned to the north of the site. Traveller accommodation is to be built to the east of the site about 100 m from the site boundary.

Classes 12 and 13 of the Third Schedule and Classes 2, 3, 4, 11 and 13 of the Fourth Schedule were applied for in the application. Class 12 of the Third Schedule is the principal activity.

The applicant has applied for the following hours:

	Proposed Hours
Hours of operation	8:00 to 20:00 Monday to Saturday inclusive
Hours of waste acceptance	8:30 to 19:30 Monday to Saturday inclusive
	10:00 to 14:00 Sunday Note 1

Note 1: Only for waste acceptance at the civic amenity facility and bring bank

The RD allows for the hours as proposed by the applicant (Condition 1). In addition the RD allows for the hours of operation at the civic amenity facility and bring bank areas from 9:30 to 14:30 on Sunday when waste is being accepted at this area of the facility.

#### **Facility Development**

The installation of infrastructure at the facility is controlled by Condition 3 and Schedule B of the recommended decision.

The RD requires that the quarantine area(s) shall be bunded, secured and surfaced to deal with spillages with the drainage to be collected and safely disposed of (Condition 3). Other main infrastructure proposed by the applicant and required by the RD includes security fencing, impermeable concrete surfaces, a weighbridge, as well as installation of separate wastewater and surface water run-off drainage network including silt traps and oil interceptors.

#### 2. Operational Description

The applicant proposes to accept 21,100 tonnes per annum. The RD allows the facility to accept up to 21,100 tonnes per annum consisting of household and commercial waste (21,000 tonnes) and household hazardous waste (100 tonnes) detailed in Schedule A. The annual tonnages of the various waste types can be changed with the agreement of the Agency as long as the total annual tonnage remains the same.

The facility will consist of three operations: a transfer station, a composting facility and a civic waste facility.

The waste transfer station building will comprise of a municipal solid waste area, a dry recyclable area and a green/organic waste acceptance area. A retaining wall will be constructed within the building to accommodate a split level between the tipping/inspection area for waste and the hardstanding surface for ejector trailers to facilitate top loading of waste into the ejector trailers. Municipal solid waste collected from households or delivered to the civic amenity centre will be handled at the municipal solid waste area. At the dry recyclables area the source of the waste is expected to be households served by a 2-bin collection system and dry recyclables from the civic amenity facility. Paper/cardboard may be baled at the dry recyclable area or transferred off-site to an appropriate licensed facility for recycling/recovery.

Green waste collected at the civic waste facility and the organic fraction of household waste segregated at source will be accepted at the green waste intake area. The green/organic waste will be shredded and e.g. wood chip will be added if required. The material will be fed into in-vessel composting units and then transferred to an outdoors composting area. The composting area will comprise of the in-vessel containers, bio-filters and a maturation area. The applicant estimates that about 6000 tpa of waste accepted at the facility will be composted. Condition 1 requires that before commencing composting the licensee must satisfy the Agency that it has obtained consent from the Department of Agriculture and Food to treat animal byproducts in composting facilities.

The civic waste facility at the site will be divided into a toll-free and tolled area. The toll-free bring bank will be located at the southern end of the facility and will comprise of receptacles for acceptance of glass bottles, aluminium cans, plastic bottles and textiles. The tolled civic amenity centre will be located north of the administration building. From an upper level, users can deposit the following materials into containers: timber, garden/green waste and organic waste, municipal waste and metals. The tolled civic amenity centre will also include a bund for waste oil, household hazardous waste and waste batteries, a white goods area and a container for paper/cardboard.

## 3. Use of Resources

The applicant estimates that 1,200 l of heating oil, 2,500 l of diesel oil will be used at the site. The applicant states that water will be via a metered mains supply and estimates that about 1m<sup>3</sup> will be used each time the floors are cleaned at the facility.

#### 4. Emissions

#### 4.1 Air

Main emissions to air will be from the composting of green/organic waste in the form of odour, dust and bioareosols emissions. The closest potential sensitive receptor will be the proposed traveller accommodation c. 190-200 m from the green waste intake area and about 130-150 m from the composting area. The applicant states that potential odour, dust and bioaerosol emissions will occur at the Green Waste Intake Area where the material for composting is shredded and mixed and deposited into the in-vessel composting units. To control the emissions to air from this area the applicant proposes to carry out all the waste processing in an enclosed area under negative pressure with a biofilter attached to the air extraction system to mitigate potential odours, dust and airborne bioaerosols. The applicant states that the exhaust air from the in-vessel composting units could lead to potential odour nuisances but this will be mitigated by

the installation of a biofilter system attached to the in-vessel composting units. Odour emission may also arise from the maturation area at the outdoors composting area. To mitigate odour emissions from the maturation area, the applicant proposed to install a slab with floor aeration which will ensure that the maturation pile will be aerobic. Condition 3 provides for the above mentioned composting infrastructure.

The applicant has proposed two air emission points; (BF2) at the green waste intake area and (BF1) at the biofilters located at the composting area. The RD requires that air monitoring is carried out at the two emission points mentioned above (Schedule D) and Condition 3 requires that the emission limit values for emissions to air are not exceeded.

The applicant states all municipal waste will be handled indoors and an air extraction system or equivalent will be installed. Condition 7 of the RD requires that all buildings handling putrescible waste shall be maintained at negative air pressure (unless otherwise agreed by the Agency) with ventilated gases being subject to treatment as specified by the Agency. Furthermore waste for disposal shall be removed from the civic waste facility to the waste transfer building within twenty-four hours of its arrival at the civic amenity site (Condition 5). All waste for disposal stored overnight shall be stored inside the transfer station building in suitable covered and enclosed containers (Condition 7). Condition 7 of the RD requires removal of all waste for disposal within forty-eight hours of its arrival (for Bank Holiday weekends seventy two hours) to avoid odour nuisances. Furthermore the RD requires that green waste accepted at the civic amenity centre shall be stored in covered and enclosed containers and transferred off-site on a weekly basis if not used on site for composting (Condition 7). Condition 9 requires that daily odour inspections be carried out at the green/organic waste acceptance area at the civic amenity area and at the waste transfer station as well as the proposed designated composting area to ensure odour emissions resulting from storage/handling of green/organic waste be kept to a minimum.

## 4.2 Emissions to Sewer

The applicant has submitted a consent to discharge to sewer (S52 consent notice) issued by the Sanitary Authority of STCC. The Sanitary Authority requests that the volume of wastewater and surface water run-off discharged is controlled with a set limit of 10 l/s and 40 l/s respectively.

The applicant states that wastewater from toilets and canteen, floor wash and the power washer as well as surface water run-off from areas with waste handling/storage including leachate from the maturation area located at the composting area will be discharged to the foul sewer. In addition the RD requires that the surface water run-off from the weighbridge shall be discharged to the foul sewer (Condition 3). The wastewater and the surface water run-off from waste storage/handling areas will be installed as separate drainage systems and will be combined only at the outfall pump chamber to the sewer. The RD requires that all waters discharged to sewer (excluding toilet and canteen wastewater) shall pass through a Class II full retention interceptor (Condition 3). The applicant states that a buffer tank will be installed to ensure that the discharge rate from the facility is maintained at 10 l/s as required by the Sanitary Section of the STCC due to the existing capacity of the receiving sewer.

Condition 6 sets the requirements for emission to sewer. The applicant proposes to monitor the discharge to sewer at the outfall pumping chamber which would include monitoring of the sanitary wastewater. The recommended decision requires that waters discharged to the foul sewer (excluding sanitary wastewater) be monitored at a

monitoring location to be agreed with the Agency (Schedule D). Monitoring requirements are set under Condition 9 and Schedule D.

## 4.3 Surface Water Runoff

The applicant proposes to discharge surface water run-off from site surfaces with no waste handling/storage and from roof buildings to two soakaways areas. The applicant states that trial pit excavations show that the substrata at the site comprise of gravels and cobbles with suitable soakaway characteristics. One soakaway area will be located behind the transfer station at the northern boundary of the site. The other soakaway area will be located adjacent to the access road to the facility at the southeastern boundary. A buffer tank will be installed at the drainage network to the southern soakaway area to regulate flow during periods of intense rainfall. No buffer tank is proposed for the northern soakaway area as the catchment area is significantly less than the area served by the southern soakaway area. Prior to discharge to both soakaway areas the surface water run-off shall pass through a silt trap and a Class I full retention interceptor (Condition 3).

Condition 9 and Schedule D establishes the requirements for surface water run-off monitoring. The locations for monitoring of surface water run-off shall be agreed by the Agency. Schedule C sets the emission limit value for discharge to the soakaway areas.

#### 4.4 Emissions to ground/groundwater:

According to the Geological Survey of Ireland (GSI), the site is underlain by units of the Ballyadams Limestone Formation. A trial pit dug at the site indicated that medium-bedded fine gravels alternate with thickly bedded sandy clays to a depth of at least 4m. The GSI describes units of the Ballyadams Formation in the Tipperary area as a major aquifer formation. According to the applicant there are no private or public wells in the area surrounding the site. The applicant states that topographic relief in the Waller's Lot area indicates that groundwater will flow in a west to south-westerly direction. Borehole logs from the nearby area obtained during the site investigation for the N8 Cashel by-pass indicate that groundwater was not present in the overburden or bedrock in boreholes drilled to 15m below ground level.

The recommended decision requires that all areas of the facility shall be impermeable concrete surfaces (Condition 3). The proposed fuel storage area shall be bunded as per Condition 3 of the RD. Condition 6 of the RD specifies that there shall be no direct emission to groundwater. The applicant proposes to carry out groundwater monitoring at two boreholes at the site (Condition 3). Condition 9 and Schedule D of the RD set out the groundwater monitoring requirements.

#### 4.5 Noise:

The applicant has submitted results from an ambient noise survey carried out at three site boundary locations in July 2003. The monitoring results show elevated noise levels at monitoring location N3 located at the site entrance with the daytime level being  $L_{\text{Aeq}}$  69.3 and night time level being  $L_{\text{Aeq}}$  60.5 dB(A). According to the applicant the high level of noise can be attributed to traffic and construction activities associated with the construction of the Cashel By-pass about 160 m away from the monitoring location. The applicant states that it is expected that the noise emanating solely from the activities carried out on site will not exceed the EPA recommendation

of 55 dB(A)  $L_{\text{Aeq}}$  at the boundaries of the site. Furthermore the applicant states that the impact on noise levels of operation of the proposed facility is expected to be minor.

In the Article 16 reply received on 17/12/04 the applicant states that potential noise emission will occur form the operation of the proposed shredder and the mixing of the material. The RD limits the hours for operation of the shredder (Condition 5).

Condition 9 and Schedule D set the requirements for noise monitoring. The noise emission limit values to be measured at any noise sensitive location are set in Schedule C.

#### 4.6 Nuisance:

Potential nuisances at the facility are controlled by Condition 7 of the RD.

#### Dust

The applicant has submitted dust monitoring results showing dust deposition values measured at three boundary locations (D1: 72 mg/m²/d, D2: 123 mg/m²/d and D3 110 mg/m²/d). The RD requires that dust monitoring is carried out three times a year at four boundary monitoring locations (Condition 9 and Schedule D).

Dust deposition values are set out in Schedule C.

The RD requires that the composting activities carried out at the green/organic waste intake area are maintained at negative air pressure (Condition 3) to control dust emissions. In addition Condition 7 of the RD ensures dust control measures are carried out at all areas of the facility.

# 5. Cultural Heritage, Habitats & Protected Species

The applicant details that the site is not covered by any designations for conservation. There are 7 sites covered by conservation designation (6 NHA and 1 SAC) within 10 km of the proposed development. The nearest conservation site is the Lower River Suir approximately 4.5 km from the facility which is designated as a SAC. The proposed development will not impact on this SAC according to the applicant.

#### 6. Waste Management Plan

The Joint Waste Management Plan for the South East was adopted by STCC in June 2002. The plan outlines the need for local biological treatment systems to be provided throughout the region as well as materials recovery facilities for dry recyclables, civic amenity sites and bring banks which will all be provided at the proposed facility.

The plan details how a multiple bin collection is necessary to deal with modern waste management system requirements. The development of the proposed facility will be able to accommodate these collection systems with separate operations for the various separately collected waste streams.

### 7. Compliance with Directives/Regulations

The facility does not fall under the scope of the Landfill Directive or the IPPC Directive. In relation to the Groundwater Directive, the facility will not have any direct emission to groundwater (Condition 6).

#### 8. Charges

The RD requires that the applicant shall pay an annual contribution of €12,275.00 (Condition 13).

# 9. Recommendation

I recommend that a licence be granted subject to the conditions set out in the attached RD and for the reasons as drafted.

In making the recommendation for a waste licence I have taken into account all information submitted as part of the application.

I am satisfied, on the basis of the information available, that the waste activity, or activities, licensed hereunder will comply with the requirements of Section 40(4) of the Waste Management Acts, 1996-2003.

Signed

Pernille Hermansen Inspector Office of Licensing & Guidance

#### **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 1996-2003.