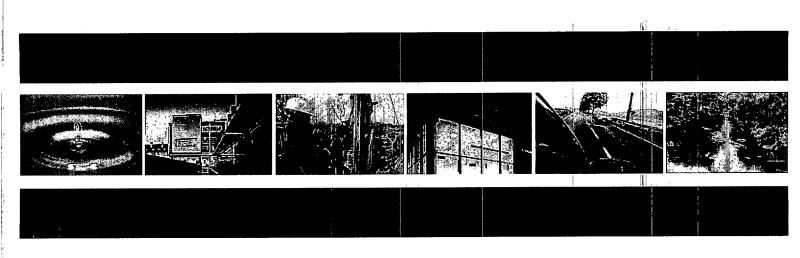


# **OBJECTION TO**

# PROPOSED DECISION ON WASTE LICENCE APPLICATION W0223-01

# TOBIN CONSULTING ENGINEERS

ON BEHALF OF FINGAL COUNTY COUNCIL Consent of copyright owner required







Dublin Block 10-3, Blanchardstown Corporate Park, Dublin 15. Ph +353 (0)1 803 0406 Fax +353 (0)1 803 0409 E-mail dublin@tobin.ie

Administration
Waste Management Licensing,
Environmental Protection Agency
Headquarters
PO Box 3000
Johnstown Castle Estate
County Wexford

26th of July 2007

Re: Waste Licence Application for Kilshane Cross Recycling Park, Newtown, Kilshane Cross, Dublin 15. Waste Licence Register No. W0223-01

Dear Sir/Madam,

On behalf of our Client Fingal County Council, please find attached an objection to the Proposed Decision as issued in respect of the Waste Licence Application for the Kilshane Cross Recycling Park, (Waste Licence Register No. W0223-01).

Having considered the proposed decision, the applicant in accordance with Section 42 of the Waste Management Acts, 1996 to 2003 wishes to make an objection to the Agency in relation to the Proposed Decision.

- (a) The objection is confirmed in writing.
- (b) Name and address of objector is Fingal County Council, PO Box 174, Fingal County Hall, Swords, County Dublin. (the applicant).
- (c) The condition or schedule to which the objection relates is stated.
- (d) The grounds of the objection are stated in full including the reasons, considerations and arguments on which they are based.

We have also included a cheque from Fingal County Council for the required sum of €500 as outlined in the notification.

Yours sincerely,
Damien Grehan

Operations Director - Tobin Consulting Engineers

CC Pat Q Neill

Senior Engineer – Tobin Consulting Engineers

# OBJECTION TO THE PROPOSED DECISION ISSUED IN RESPECT OF THE WASTE LICENCE APPLICATION FOR THE KILSHANE CROSS RECYCLING PARK (WASTE LICENCE REGISTER NO: W0223-01)

26<sup>TH</sup> July 2007

#### 1.0 INTRODUCTION

This objection is made by Fingal County Council, the applicant, and addresses separately each condition of the Proposed Decision to which the objection relates. In a number of instances the purpose of the objection is to provide for clarification of the Condition.

As set out below the condition or schedule to which the objection relates is stated. The grounds of the objection are stated in full including the reasons, considerations and arguments on which they are based.

# 2.0 CONDITIONS TO WHICH OBJECTION RELATES

#### **Condition**

1.5 Prior to acceptance of waste containing animal by-products the licensee shall satisfy the Agency that it has obtained written approval from the Department of Agriculture and Food to process and treat animal by-products in composting/biogas facilities.

#### **Grounds for the Objection**

This condition may impose restrictions on the operation of the Waste Transfer Station facility prior to receiving above-mentioned written approval from the Department of Agriculture and Food. The Waste Transfer Facility will receive municipal solid waste collected from the Fingal County Council domestic refuse collection routes. Municipal solid waste contains animal by-products in the form of catering waste. Clarification on this condition is sought regarding the acceptance of waste containing animal by-products in the Waste Transfer Facility.



# **Condition**

1.6.1 With the exception of emergencies or as may be agreed by the Agency, waste shall be accepted at or dispatched from the facility only between the hours of 7.30 am and 9.30 pm Monday to Saturday inclusive.

#### Grounds for the Objection

The Waste Licence Application requested hours of operation as follows:

'The Kilshane Recycling Park will operate between the hours of 07:00 and 22:00 Monday to Saturday and will normally be closed on Sundays and on Bank Holidays. The facility will also be open for waste acceptance during these hours. Maintenance out of hours may also be required for emergency breakdowns etc.' The introduction to the waste licence also states that 'the facility will operate between 7 a.m. and 10 p.m. Monday to Saturday'. A review of this condition is sought on the basis of the request in the Waste Licence Application.

#### **Condition**

1.6.2 The facility, other than the Biological Waste treatment Unit, shall be operated only during the hours of 7 a.m. and 10 p.m. Monday to Saturday inclusive.

#### Grounds for the Objection

Due to the nature of design, the Sludge Hub Centre will also need to operate outside of normal operating hours.

An amendment of the above condition is sought as follows;

'The facility, other than the Biological Waste treatment Unit and Sludge Hub Centre, shall be operated only during the hours of 7 a.m. and 10 p.m. Monday to Saturday inclusive.'

#### **Condition**

2.1.1 The licensee shall employ a suitably qualified and experienced facility manager who shall be designated as the person in charge. The facility manager or a nominated, suitably qualified and experienced, deputy shall be present on the facility at all times during its operation or as otherwise required by the Agency.

#### **Grounds for the Objection**

The Biological Treatment Facility and Sludge Hub Centre will operate on a 24-hour basis. Suitable instrumentation will identify any critical process component failures. Standby components will automatically commence on identification of a critical process component failure, a PLC program will always ensure the above response. A SCADA based alarm system will notify the facility manager of any emergency situations by means of a mobile phone connection.

The above condition could imply that the 'facility manager' must be present on a 24 hour basis as per the following term in the condition; 'shall be present on the facility at all times during its operation'.

Clarification of the above condition is sought in regard to the detail presented.



# **Condition**

3.1 The licensee shall establish all infrastructure referred to in this licence in advance, of the commencement of the licensed activities or as required by the conditions of this licence.

# **Grounds for the Objection**

This condition may impose restrictions on the operation of the entire facility. There are a number of different waste activities proposed for this facility, Construction & Demolition Waste Recycling Facility, Biological Treatment Facility, Waste Transfer Facility and Sludge Hub Centre. Some of the above mentioned facilities may be designed, built and operated by independent parties. As a result the various facilities may be commissioned at different time scales. The above condition may restrict the operation of independent facilities that may be operational ahead of other facilities. Clarification of this condition is sought on the basis of the above.

# **Condition**

3.2.3 A plan of the facility clearly identifying the location of each storage and treatment area shall be displayed as close as is possible to the entrance to the facility. The plan shall be displayed on a durable material such that it is legible at all times. The plan shall be replaced as material changes to the facility are made.

# Grounds for the Objection

It is our opinion that the location of the 'plan of the facility', imposed by the above condition, would be better positioned away from the entrance to the facility but in advance of the first junction/departure point on the site entrance. Relocation of this plan would eliminate an unnecessary distraction and possible traffic congestion issues at the site entrance/main road junction.

# **Condition**

3.3 The licensee shall install on all emission points such sampling points or equipment, including any data logging or other electronic communication equipment, as may be required by the Agency. All such equipment shall be consistent with the safe operation of all sampling and monitoring systems.

#### Grounds for the Objection

The above condition is not definitive enough regarding 'emission point' electronic equipment and instrumentation necessary to satisfy requirements of the Agency. Retrofitting of additional equipment may prove disruptive and expensive. The construction of the facility will be based on a tender process. A complete equipment specification will need to be established at an early stage to enable an efficient tendering process. A request is sought for a list of all emissions that require data logging or other electronic communication equipment.



#### **Condition**

In the case of composite sampling of aqueous emissions from the operation of the facility a separate composite sample or homogeneous sub-sample (of sufficient volume as advised) should be refrigerated immediately after collection and retained as required for EPA use.

# **Grounds for the Objection**

This condition may have significant implications with respect to the number of samples/sub-samples to be stored in refrigeration and the period of time for which they are stored. It is submitted that the period of time for which samples can be stored before they chemically deteriorate is limited. The condition could also imply that all samples/sub-samples are held on-site for an infinite period of time. Clarification should be provided within the condition with respect to the number of samples to be stored and the length of time for which they are stored.

#### **Condition**

3.17.2 The licensee shall install a CCTV system which records all truck movement into and out of the facility; the CCTV system shall be operated at all times and copies of recording kept on site and made available to the Agency on request.

# Grounds for the Objection

The above condition does not define a period for which the CCTV records need to be retained on site. An amendment of the above condition is sought to include a time period of 7 days for which CCTV records need to be retained and made available to the Agency.

#### **Condition**

3.22.3 The quantity of waste to be accepted at the facility on a daily basis shall not exceed the duty capacity of the equipment at the facility. Any exceedence of this intake shall be treated as an incident.

# Grounds for the Objection

This condition may prove to be restrictive to the practical operation of the facility. Scheduling of waste deliveries on a daily basis may prove difficult and onerous from the point of view of the applicant and delivery contractors. It is proposed that the above condition would be amended so that 'daily basis' is replaced by 'weekly basis'.

#### **Condition**

3.22.4 If sludges are being accepted the licensee must ensure that an enclosed tank be provided for storage of sludge/slurry to ensure safe coupling system for loading/unloading from road tankers.

# Grounds for the Objection

It is envisaged that all sludges in line with condition 8.4.5 will be transported to the facility in enclosed skips. Skips will only be opened within the Sludge Hub Centre reception building. Sludges with solid contents of 18% (condition 8.4.5) are not suitable for transportation by road tanker.

Exclusion of the above condition is sought on the basis of the above detail.



#### **Condition**

3.25 (vii) Prior to commencement of composting activities a continuous monitoring system shall be installed and maintained at the facility. All facility operations linked to the telemetry system shall also have a manual control which will be reverted to in the event of break in power supply or during maintenance. As a minimum the system shall record and relay temperature and oxygen content of the compost at all stages during its production.

### Grounds for the Objection

Condition 3.25 (vii) calls for continuous monitoring of oxygen content levels at all stages in the process. The majority of modern composting technologies do not consider such continuous monitoring of oxygen a requirement. Continuous temperature monitoring is accepted as being sufficient. Schedule C.8 refers to the monitoring frequency of oxygen levels as 'daily' as opposed to 'continuous'. It is proposed that the above condition is amended so that 'continuous monitoring' of oxygen is not included.

#### **Condition**

3.29 Fuel

Use

Natural gas, biogas or biodiesel meeting CEN standard EN14214 shall be used in the boilers or Combined Heat & Power plant and sludge drying process on site. In the event of an interruption to the supply of natural gas, biogas or biodiesel, an alternative fuel such as gas oil (supply content not exceeding 0.2% by mass until December 31<sup>st</sup> 2007 and not exceeding 0.1% by mass thereafter) may be used with the written agreement of the Agency.

#### **Grounds for the Objection**

The above condition may restrict the sludge drying process due to fuel implications. The technology in mind for the sludge drying process is such that propane is typically used as a back-up fuel source. Delivery of a gas pipeline to the site may be unfeasible, hence the use of fuel oil as a fuel source for normal use may need to be included. A review of the above condition is sought in line with the above points.



#### Condition

# 5.5 Odour

Unless otherwise agreed by the Agency, the limit value for odour, monitored as required by Schedule C.10.1 of this licence, shall be 1.5 OU.m<sup>-3</sup>. In order to gain the agreement of the Agency for any less stringent limit value for odour the licensee shall demonstrate that the offensiveness of the odour is such that a lesser limit is appropriate.

#### Grounds for the Objection

This condition may prove to be unworkable for the following reasons. Ambient sampling and monitoring systems under laboratory conditions cannot operate within this low odour unit range due to a very high limit of detection. Computer based air dispersion modelling techniques would need to be used to calculate odour unit levels at monitoring points. Such techniques will only provide a theoretical value for odour levels at monitoring points, based on wind speed, wind direction, weather conditions etc. Such an onerous procedure may not have any positive influence on odour control of the facility on a daily basis. An amendment to the above condition is sought so that an alternative means of quantifying odour levels is reached:

#### **Condition**

6.1.6 Following the initial pilot scale waste acceptance for the purpose of carrying out a test programme(s) there shall be no commencement of waste acceptance at the Waste Transfer Station, Biological Faste Treatment Unit or Sludge Hub Centre without the agreement of the Agency. In order to gain the agreement of the Agency:

#### **Grounds for the Objection**

The above condition seems to identify a single test programme prior to the approval of waste acceptance at the waste Transfer Station, Biological Waste Treatment Unit or Sludge Hub Centre. Some of the above mentioned facilities may be designed, built and operated by independent parties. As a result the various facilities may be commissioned at different time scales. The above condition may restrict the operation of independent facilities that may be operational ahead of other facilities. It is proposed that the above condition is amended to reflect separate test programmes for the different facilities proposed. Satisfaction of the conditions of the separate test programmes should allow waste acceptance at the separate waste facilities.



#### **Condition**

6.12.2 There shall be no emission of bioaerosol to air within 200 metres of an occupied dwelling.

# Grounds for the Objection

This condition could sterilise bordering lands for development purposes. Furthermore, occupied dwelling is not defined. The UK HSE carried out a detailed literature review of bioaerosol exposure from composting facilities and found that at 200 metres the levels of bioaerosols from a source reduced to background. Hence this was recommended as a safe level in terms of risk assessment. However, this safe level did not take into account controlled mitigation measures on the site such as part of the proposed development. As such, it would be more meaningful to include a monitoring requirement in the licence requiring the operator to demonstrate the absence of aspregillus fumigatus and other microbes at the nearest sensitive receptors rather than simply prohibiting certain site operations. A review of the above condition is sought with regard to the above argument.

#### Condition

6.22.9 The licensee shall on a daily basis monitor and record the temperature and the moisture content of the material at a number of locations to be agreed in advance by the Agency

### **Grounds for the Objection**

It is our opinion that the monitoring and location points for temperature and moisture content control should comply with Department of Agriculture and Food regulations with regard to Animal By-product compliance. It is proposed that the above condition is amended as follows;

'The licensee shall on a daily basis monitor and record the temperature and the moisture content of the material at a number of locations to be agreed in advance by the Department of Agriculture and Food.'

#### **Condition**

Waste arriving at the facility shall be inspected at the point of entry to the facility and subject to this inspection, weighed, documented and directed to the Waste Transfer Building. Each load of waste arriving at the Waste Transfer Building or Biological Waste Treatment Building shall be inspected upon tipping within these buildings. Only after such inspections shall the waste be processed for disposal or recovery.

#### Grounds for the Objection

The above condition may introduce environmental risks. All waste loads arriving on the facility will be covered, hence inspection at the point of entry to the facility would involve removal of covers. This operation may cause airborne litter or odour generation. It is proposed that the above condition be amended as follows;

'Waste arriving at the facility shall be weighed, documented and directed to the appropriate waste facility. Each load of waste arriving at the Waste Transfer Building, Biological Waste Treatment Building and Construction & Demolition Waste Recovery Area shall be inspected upon tipping within inspection and quarantine areas. Only after such inspections shall the waste be processed for disposal or recovery.'



# 3.0 SCHEDULES TO WHICH OBJECTION RELATES

# **Schedule**

#### A.1

Limitations

The licensee is restricted to the carrying out either composting or anaerobic digestion operations at any one time in the Biological Waste Treatment building at this facility, but not both.

# Grounds for the Objection

The chosen Biological Waste Treatment may be anaerobic digestion, which will produce a digestate by-product. Composting of this digestate may be necessary to produce a product that has nutritional value with an agricultural end use. Clarification on the above condition is sought with respect to the above argument.

#### **Schedule**

WASTE TYPE	only any other use.	MAXIMUM (TONNES PER ANNUM)
Non- Hazardous Wastes <sup>Note I</sup>	Municipal Solid Waster Child	65,000
	Construction & Demolition	75,000
	Biodegradable Municipal Waste (EWC 20.01.08)	45,000
	Dewatered sludge waste from wastewater treatment plants (minimum 18% dry solids)	26,511

Note 1: Any proposals to accept other compatible non-hazardous waste types must be agreed in advance by the Agency.

# **Grounds for the Objection**

The above schedule states that EWC 20.01.08 is the only BMW permitted into the facility although "proposals to accept other compatible non-hazardous waste types must be agreed in advance with the agency". Up to 25% of the facility throughput may be materials that are not BMW, depending on contractual agreement reached. An amendment to the above schedule is sought in light of the above argument.



# Schedule

B.1 Emissions to Air

#### **Grounds for the Objection**

Volumetric flow rates of Flare Stack, Gas Compression Engine Stack and Sludge Drier Plant Stack are fixed figures. Detailed airflow specifications for the technologies used in the various waste treatment areas have yet to be provided. Hence exact airflow rates at stacks are unknown. The above schedule may restrict the technology design if the volumetric flow rates quoted are maximum figures. Clarification of this schedule is sought with regard to the above detail.

The emission limit value for TOC is quite low. Satisfaction of this limit may be unachievable based on experience of the industry. An amendment of this schedule, regarding the following parameter, is sought.

Parameter	Flare Stack	Gas Compression Engine Stack	Sludge Drier Plant
TOC	$100 \text{ mg/m}^3$	$100 \text{ mg/m}^3$	$100 \text{ mg/m}^3$

An agreed review of emission limit values after an initial 6-month period of operation is sought, so that workable limit values are in place for long-term facility operation.

# Schedule

B.4 Emissions to Sewer

# **Grounds for the Objection**

The emission limit value for BOD, COD and Sulphates are extremely low. Satisfaction of these limits may be unachievable based on experience of the industry. An amendment of this schedule regarding the following parameters is sought.

Parameter	<b>Emission Limit Value</b>		
	mg/l	Kg/day	
BOD	1000	510	
COD	3000	1530	
lphates (as SO <sub>4</sub> )	1000	510	

An agreed review of emission limit values after an initial 6-month period of operation is sought, so that workable limit values are in place for long-term facility operation.

# **Schedule**

C.5 Monitoring of Storm Water Emission

### Grounds for the Objection

Monitoring frequency of Storm water is stated as 'weekly' for a number of the parameters. Experience of the industry, point to less frequent monitoring regimes. An initial phase of frequent testing followed by an agreed less frequent monitoring programme may be more acceptable. An amendment of the above schedule is sought with regard to less frequent monitoring of Storm Water parameters.



#### **Schedule**

C.6

Monitoring of Emissions to Sewer

# **Grounds for the Objection**

Monitoring frequency of Emissions to Sewer is stated as 'fortnightly' for a number of the parameters. Experience of the industry, point to less frequent monitoring regimes. An initial phase of frequent testing followed by an agreed less frequent monitoring programme may be more acceptable. An amendment of the above schedule is sought with regard to less frequent monitoring of Emission to Sewer parameters.

#### **Schedule**

C.10.1 Air Monitoring – Dust, Odour and Bioaerosol Monitoring

Note 3: Odour measurements shall be by olfactometric measurement and analysis for mercaptans, hydrogen sulphide, ammonia, and amines

# **Grounds for the Objection**

The above requires monitoring of amines but no emission limit values for amines are specified in Schedule B2.

# Schedule

C.10.3

Surface Water Monitoring

# **Grounds for the Objection**

Monitoring frequency of surface water is stated as 'weekly' for the majority of parameters. Experience of the industry, point to less frequent monitoring regimes. An initial phase of frequent testing followed by a 'quarterly' monitoring frequency programme may be more acceptable. An amendment of the above schedule is sought with regard to less frequent monitoring of Surface Water parameters.

#### Schedule

Schedule E Standards for Compost/Digestate Quality

#### **Grounds for the Objection**

An amendment of the above schedule is sought so that the following text is inserted after the heading 'Maturity (Compost)'

#### **Maturity (Compost)**

'Compost shall be deemed to be mature if it meets two of the following groups of requirements'

#### Schedule

Schedule E.3 The Cress Test

#### **Grounds for the Objection**

The high salinity levels in compost derived from catering waste, as in this facility, effectively preclude the use of this test. Thus, this condition is effectively redundant.

