S52 Request.

Environmental Protection Agency
An Ghníomhaireacht um Chaomhnú Comhshaoil

Regional Inspectorate, Inniscarra
County Cork, Ireland
Cigireacht Réigiúnach, Inis Cara
Contae Chorcaí, Éire

T: +353 21 487 5540
F: +353 21 487 5545
E: info@epa.ie
W: www.epa.ie

Lo Call: 1890 33 55 99

Mr. P.J. Howell
Director of Water Services
Fingal County Council
P.O. Box 174
Fingal County Hall
Swords
County Dublin

07 November 2005 Reg No: 223-1

Dear Mr. Howell

I am to advise you that the Agency has received an application for a Waste Licence from Fingal County Council, for a facility located at Kilshane Cross Recycling Park, Newtown (Townland), Kilshane Cross, Dublin 15.

The applicant proposes, as part of this application, to provide for the discharge of process effluent to a sewer, which the applicant has stated is vested in, or controlled by, your Council. Process effluent includes trade effluent or other matter (other than domestic sewage or storm water). I enclose copy extracts from the application form, which detail proposed discharges.

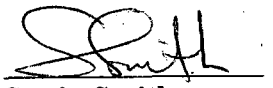
The provisions of Section 52 of the Waste Management Acts, 1996 to 2003, provides that the Agency shall obtain the consent of the sanitary authority to the proposed discharge from an activity which involves the discharge of trade effluent or other matter (other than domestic sewage or storm water), to a sewer vested in or controlled by a sanitary authority.

In order to expedite the Agency's consideration of this waste licence application, I am to request your authority's consent to the proposed discharge/s. It should be noted that, your authority's consent may be subject to such conditions as your authority considers appropriate as provided for in Section 52 of the Waste Management Acts, 1996 to 2003 and Section 99E (3) of the Environmental Protection Agency Acts, 1992 and 2003. Your attention is drawn to paragraphs (3) and (4) of the attached copy of the relevant section of the Act. For your convenience please find attached a reply form including a list of draft conditions compiled by the Agency.

In accordance with paragraph (2) of this section of the Act, you are requested to forward your response within 5 weeks of the date of this letter. Please note that any decision given after the expiry period shall be invalid and in those circumstances the Agency may proceed to determine the application concerned as if consent was obtained. Maeve McHugh is dealing with this matter and can be contacted at the Licensing Unit, Office of Licensing & Guidance, Cork Regional Inspectorate (Tel. No. 021 4875540), if you have any queries.

Your co-operation in this matter is appreciated.

Yours sincerely



Sonja Smith
Programme Officer
Licensing Unit
Office of Licensing & Guidance

Section 99E (3) & (4) of the Environmental Protection Agency Acts, 1992 and 2003

(3) Subject to subsection (4), a consent under subsection (1) may be granted subject to or without conditions and if it is granted subject to conditions the Agency shall include in the licence or revised licence concerned conditions corresponding to them or, as the Agency may think appropriate, conditions more strict than them.

(4) The conditions that may be attached to a consent by a sanitary authority under this section are the following and no other conditions, namely conditions-

(a) relating to-

(i) the nature, composition, temperature, volume, level, rate, and location of the discharge concerned and the period during which the discharge may, or may not, be made,

(ii) the provision, operation, maintenance and supervision of meters, gauges, manholes, inspection chambers and other apparatus and other means for monitoring the nature, extent and effect of emissions,

(iii) the taking and analysis of samples, the keeping of records and furnishing of information to the sanitary authority,

(b) providing for the payment by the licensee to the sanitary authority concerned of such amount or amounts as may be determined by the sanitary authority having regard to the expenditure incurred or to be incurred by it in monitoring, treating and disposing of discharges of trade effluent, sewage effluent and other matter to sewers in its functional area or a specified part of its functional area,

(c) specifying a date not later than which any conditions attached under this section shall be complied with,

(d) relating to, providing for or specifying such other matter as may be prescribed.

SANITARY AUTHORITY RESPONSE

re: SECTION 52 OF THE WASTE MANAGEMENT ACTS, 1996 to 2003

Name & Address of Sanitary Authority: **Fingal County Council, P.O. Box 174, Fingal County Hall, Swords, County Dublin.**

Waste Reg. No. **223-1**

Waste Facility: **Kilshane Cross Recycling Park, Newtown (Townland), Kilshane Cross, Dublin 15,**

Waste Licence Applicant: ***Fingal County Council***

Consent: Indicate Yes to one of the following statements:

Consent granted subject to the consent conditions outlined below	
Consent granted without conditions	
Consent refused [Note 1]	

Note 1 ***Where it is proposed to refuse permission the reasons for the refusal should be clearly outlined in the response.***

GENERAL CONSENT CONDITIONS	Condition to be included *(Yes/No)*
1. No specified emission from the installation shall exceed the emission limit value set out in *Schedule B: Emissions Limits to Sewer*. There shall be no other emission to sewer of environmental significance.	
2. The licensee shall carry out such sampling, analyses, measurements, examinations, maintenance and calibrations as out in *Schedule C*.	
3. Monitoring and analytical equipment shall be operated and maintained as necessary so that monitoring accurately reflects the discharge or emission.	
4. The licensee shall permit authorised persons of the Agency and the Sanitary Authority to inspect, examine and test, at all reasonable times, any works and apparatus installed, in connection with the process effluent, and to take samples of the process effluent.	
5. All automatic monitors and samplers shall be functioning at all times (except during maintenance and calibration) when the activity is being carried on unless alternative sampling or monitoring has been agreed in writing by the Agency for a limited period. In the event of the malfunction of any continuous monitor, the licensee shall contact the Agency as soon as practicable, and alternative sampling and monitoring facilities shall be put in place. Prior written agreement for the use of alternative equipment, other than in emergency situations, shall be obtained from the Agency.	
6. The licensee shall record all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence.	
7. The licensee shall provide safe and permanent access to all on-site sampling and monitoring points and to off-site points as required by the Agency.	
8. The licensee shall at no time discharge or permit to be discharged into the sewer any liquid matter or thing which is or may be liable to set or congeal at average sewer temperature or is capable of giving off any inflammable or explosive gas or any acid, alkali or other substance in sufficient concentration to cause corrosion to sewer pipes, penstock and sewer fittings or the general integrity of the sewer.	
9. In the event of any incident which relates to discharges to sewer, having taken place, the licensee shall notify the Agency, Local Authority and Sanitary Authority as soon as practicable after the incident.	

ADDITIONAL GENERAL CONSENT CONDITIONS in respect of discharges or emissions to sewers, in accordance with Section 52 of the Waste Management Acts, 1996 to 2003 *(specify, if required)*

Limit Values for Process Effluent to Sewer

Schedule B: Emission Limits

Waste licence application Register No. **223-1**

Emission Point Reference No: _____

Emission to *(sewer description):* _____

Volume to be emitted: Maximum in any one day: _____ m^3

Maximum rate per hour: _____ m^3

Parameter *(delete parameters which are not applicable)*	**Emission Limit Value**	
	Daily Mean Concentration (mg/l)	**Daily Mean Loading (kg/day)**
BOD		
COD		
Suspended Solids		
PH		
Temperature		
ADDITIONAL PARAMETERS *(if required)*		

Frequency of Monitoring Process Effluent to Sewer

Schedule C

Waste Licence application Register No. 223-1

Emission Point Reference No:_____

Parameter *(delete parameters which are not applicable)*	**Monitoring Frequency (e.g. monthly, quarterly, annually)**	**Sampling Type** *(grab, composite)*
Flow to sewer		
Temperature		
pH		
BOD		
COD		
Suspended Solids		
ADDITIONAL PARAMETERS *(if required)*		

SANITARY AUTHORITY CHARGES	
Charge per cubic metre of process effluent (per s52 of the Waste Management Acts, 1996 to 2003)	
Payment Frequency	
Annual Monitoring Costs	

Signed on behalf of Fingal County Council

_____ Date_____

ATTACHMENT B.4 SANITARY AUTHORITY

Fingal County Council will apply to the Drainage Division section of Fingal County Council for a discharge licence under Section 16 of the Water Pollution Acts 1977-1990, in order to discharge trade effluent to the local authority sewer. This application is contingent of the granting of a Waste Licence for the facility by the EPA.

building for the provision of a public education area for environmental education needs. Poster presentations and literature on waste management and on the workings of the waste management facility will be available in this meeting room. Provision will also be made for the inspection of the EPA Waste Licence and Annual Environmental Reports (AERs) in this room.

In addition a weighbridge office/kiosk will also be provided at the main weighbridge facility at the location shown on Drawing No. 1234/01/203. Details of the weighbridge office are shown on Drawing No. 1234/01/211.

3.2.11 Fuel Storage

In each facility bunded fuel storage will be provided for the diesel fuel utilised for the on site plant and equipment. The exact nature of bunded fuel storage tank will depend on the various processes to be utilised and will emerge from the DBO procurement process

3.2.12 Laboratory Facilities

A small laboratory will be established on-site in the main administration building, which will allow for the carrying out of routine monitoring requirements for the whole of the Recycling Park. Groundwater and surface water analyses will be carried out on a periodic basis. The parameters to be analysed include BOD, COD, Conductivity, Dissolved Oxygen, Ammonia, Phosphorus, etc. and the laboratory will be equipped accordingly. There will also be another laboratory facility as part of the BTF. Basic parameters (e.g. dry solids, volatile solids, pH, etc.) for process control measures will also be measured in this laboratory. A stove and a small oven for drying samples will be provided in the laboratory. Portable instrumentation such as pH and temperature meters will be retained on-site in the laboratory.

It should be noted that it is not intended to carry out the full suite of analyses for groundwater or surface water at the Recycling Park. An external, accredited laboratory will carry out the analysis of the samples, as required under the EPA licence conditions.

3.2.13 Sewerage and Waste Water Treatment

The site drainage network is illustrated on Drawing No. 1234/01/205. The main types of wastewater generated by the proposed facility will be:

1. Domestic wastewater from the site accommodation blocks and from the individual facilities, generated by approximately 40 staff (toilets, showers, sinks, etc.).
2. Internal Run-off and waste down water from the Waste Transfer Facility.
3. Partially treated liquor from the Sludge Hub Centre.
4. Leachate/overflow from the in-vessel composting option for the Biological Treatment Facility; the majority of the leachate would be recycled in the composting system.
5. Leachate from the Anaerobic Digestion option for the Biological Treatment Facility
6. Overflow from the wheelwash.
7. Fire water from potential fire fighting activities.

The composition of this runoff and wash water would typically have a significant level of ammoniacal nitrogen and suspended solids, as well as Biochemical and Chemical Oxygen Demand (BOD/COD). The majority of the waste water would be partially treated liquor from the Sludge Hub Centre. The maximum daily load limits and the maximum concentration limits of the treated liquor are given in Tables 3.2.2 and 3.2.3.

The AD option for the BTF would produce leachate that would either have to be treated on-site and then discharged to sewer, or discharged directly to sewer. As an illustration of the type of leachate that is produced from a AD process Tables 3.2.4 and 3.4.5 give the composition of the input leachate into an on-site wastewater treatment facility and the composition of the treated leachate, respectively. These figures are from the Dranco AD Plant in Brecht in Belgium, which treats with up to 55,000 tpa of source separated biological waste.

The daily foul water loading for the whole facility is given in Table 3.2.6

Table 3.2.2 Maximum Daily Load Limits for the Liquor from the Sludge Hub Centre

Parameter	Maximum Average Daily Quantity	Maximum Hourly Peak Quantity
BOD	72 kg/day	6 kg/h
COD	128 kg/day	11 kg/h
Total Suspended Solids (TSS)	608 kg/day	38 kg/h
Total Kjeldahl Nitrogen (Kj-N)	92 kg/day	8 kg/h
Ammonia (NH_3-N)	36 kg/day	3 kg/h
Phosphorus (P)	8 kg/day	1 kg/h
pH	6-8	6-8
Maximum Effluent Flowrate	480 m^3/day	30 m^3/h
Maximum Effluent Temperature	30°C	40°C

Table 3.2.3 Maximum Concentration Limits for Liquor from the Sludge Hub Centre

Parameter	Maximum Concentration Limit
Oil	No significant visible oil
Metals and their compounds	
Mercury	0.03 mg/l
Cadmium	0.05 mg/l
Thallium	0.05 mg/l
Arsenic	0.15 mg/l
Lead	0.2 mg/l
Chromium	0.5 mg/l
Copper	0.5 mg/l
Nickel	0.5 mg/l
Zinc	1.5 mg/l
Dioxins and Furans	0.3 mg/l

Table 3.2.4 **Composition of Input to Wastewater Treatment Plant of Dranco AD Plant, Brecht, Belgium**

Parameter	Unit	Average
Capacity	m^3/d	173
COD_{TOTAL}	mg/l	12,710
	kg/d	2,200
Ratio BOD_5/COD_T		0.44
Kj-N	mg/l	1,450
	kg/d	255
Ratio COD_T/Kj-N		8.6
TSS	mg/l	2,765

Table 3.2.5 **Composition of Output from Wastewater Treatment Plant of Dranco AD Plant, Brecht, Belgium**

Parameter	Unit	Average
Capacity	m^3/d	173
COD_{total}	mg/l	125
BOD_{total}	mg/l	25
Kj-N	mg/l	12
NH_4-N	mg/l	2
NO_x-N	mg/l	5
P_{total}	mg/l	0
SO_4^{2-}	mg/l	200
Conductivity	µS/cm	6,000

Table 3.2.6 Foul Water Loading

Foul Water Sources	Hydraulic Loading Volume (m^3/day)	Organic Loading BOD_5 (mg/l)	Total BOD_5 Loading (kg/day)
1. Domestic Wastewater	7.2[1]	300	2.16
2. Internal Runoff from WTF	1.5	70	0.105
3. Partially Treated Liquor from SHC	480	150	72
4. Leachate/Overflow from BTF: Compost	1.5	70	0.105
5. Leachate from BTF: AD	18	58	10.5
6. Overflow from Wheel Wash	1.5	70	0.105
Total[3]	**508.2**	**167[2]**	**84.87**

1. This value assumes a hydraulic loading of 180litre/person/day with 40 operatives on site. This value represents the hydraulic loading for a domestic residence and therefore a worst-case scenario (working day is 12hr). This value should adequately cover usage of the on-site sanitation system by site operatives.
2. Mean BOD loading in mg/l calculated from Total BOD_5 Loading divided by Total Hydraulic Loading Volume.
3. This value takes the worse case for the BTF, which would be the AD option