

## INSPECTORS REPORT

### WASTE LICENCE REGISTER NUMBER 155-1, Green Waste Recycling Centre, St Annes Park, Dublin City Council .

- This is an unauthorised green waste composting facility.
- **Recommendation:** A Waste Licence, subject to conditions, be granted.

#### **(1) Introduction:**

Dublin City Council have applied for a waste licence to operate an unauthorised green waste composting facility. The facility is unauthorised in that it does not have a Waste Licence or a Certificate of Registration. This facility is located in St Annes Park, Raheny, Dublin. A location plan showing the facility is provided in Appendix 1. The 2.5ha site (approx.) is in city parkland and bounded by densely populated residential areas to the north. There are approx. 200 residences within 300m of the site. The nearest residences are on All Saints Road and are located 55m from the facility boundary and 90m from the nearest part of the composting process.

The applicant states that a maximum of 24,000 Tonnes of green waste is expected to be accepted during 2003. The applicant estimates that in 2002 approximately 20,000 Tonnes of waste was accepted at the facility for composting.

The recommended Proposed Decision limits the applicant to acceptance of 1,500tpa of green waste for open windrow composting [it should be noted that this may result in the handling of less than 1,000T of waste on site at any one time, which is the threshold for licensing vs. certificate of registration]. The applicant may accept up to 6,000tpa of green waste for enclosed/in-vessel composting, with the prior agreement of the Agency upon which open windrow composting must cease. The applicant will also have the option to increase the tonnage accepted for enclosed/in-vessel composting, subject to a maximum of 24,000tpa. In order to accept this quantity of waste the applicant must carry out a full odour survey and odour dispersion modelling of the expected emissions and satisfy the Agency that it will not have an adverse effect or cause a nuisance to local community.

Dublin City Council are aware that there have been many on-going complaints in relation to the operation of the facility. During a meeting of Dublin City Councillors on 2/12/02, a vote was taken on the continued operation of the facility. The applicant has stated that the result of this vote was that the facility has been allowed three months during which to improve operations to the point where complaints have ceased. If this does not occur there will be another vote on the closure of the facility. Dublin City Council have also indicated that they are exploring the possibility that a third party would carry out composting at another location and that the waste would be supplied from the St Annes Park facility. This would involve waste receipt and shredding and subsequent transfer off-site (i.e. it would act as a drop off point for green waste).

In recommending the restriction on the tonnages to be accepted for composting at this facility, I consider that continued open windrow composting of green waste at the facility as it is currently carried out would not comply with the requirements of Section 40(4) of the Waste Management Act, 1996. In coming to this recommendation I have had regard to the following matters;

1. As an open windrow composting facility, international recommendations on suitable buffer zones indicate that the current quantity of waste being processed is significantly in excess of what is appropriate given the distance to sensitive receptors - 90m (See **Section 4.1** for more details).
2. Specific Environment Agency UK guidance on appropriate tonnages for open windrow composting at a facility of this size indicate the appropriate tonnage for acceptance is 1,500tpa (See **Section 4.1** for more details)
3. The evidence of existing environmental pollution due to;
  - odour emissions from the facility; (See **Section 4.1** for more details)
  - noise emissions from the facility; (See **Section 4.3** for more details)
  - dust emissions from the facility; (See **Section 4.4** for more details)
4. Comparison with a very similar facility in the UK (Down End facility-See **Section 4.1.1** for more details) where the process, material accepted, and distances to residences were very similar. However there were significantly more environmental controls in the UK site (including odour abatement sprays, frequent turning with a dedicated turner, review of on-site water management, tree planting and process monitoring). Despite these controls and the estimated €4million spent on the design of the site the operator has had continued complaints and I understand that he may cease operations at the facility due to these problems (personal communication) (See **Section 4.1.1** for more details)
5. 112 submissions and 25 telephone complaints (from 4 TD's, a residents group and individual residents) including a petition with approx. 1000 signatures detailing nuisance caused by the activities carried out (See Section 9 for more details). A number of site visits were carried out to this facility (detailed below), and these confirmed that odour, noise and dust emissions were significant issues in relation to the waste activities being carried out. Appendix 2 includes a number of photographs taken during a site inspection of 12/11/02. There are also many photographs of dust arising and dust settlement on local houses and cars provided in submissions received by the Agency.
6. Based on the evidence of environmental pollution noted above, distances to sensitive receptors and international guidance on acceptable buffer zones and submissions received, I consider that open windrow composting of the current scale and magnitude at this location is not BATNEEC.

This recommended Proposed Decision limits waste acceptance, facility operation and the carrying out of screening/grinding to times detailed in Condition 1.6. Only green wastes are to be accepted for recovery at the facility. Compost produced at the site is used by the applicant in parks and sold to the public at the facility.

<b>Quantity of waste (tpa) to be accepted</b>	Maximum 1,500T open windrow. Maximum 6,000T in-vessel/enclosed. Up to 24,000tpa allowable subject to odour survey and modelling subject to the agreement of the Agency.
<b>Environmental Impact Statement Required</b>	No
<b>Number of Written Submissions Received</b>	112

**SITE VISITS:**

DATE	PURPOSE	PERSONNEL	OBSERVATIONS
29/8/01	Response to complaints	Peter Carey	Odour emissions noted
29/5/01	Response to complaints	Malcolm Doak	Dust and odour emissions noted
29/8/02	Response to complaints	Donal Howley	Dust and odour emissions noted
12/11/02	Site familiarisation	Cormac Mac Gearailt	Odour emissions and noise noted
3/12/02	Site Inspection	Cormac Mac Gearailt	Odour emissions noted

**(2) Facility development:**

The facility has been in existence since 1996. There are only very limited environmental controls on the site. Waste is received in one corner of the facility and it is ground before being incorporated into a compost windrow. Composting is carried out using the open windrow method and the compost is turned and moved with a back-hoe digger (JCB) or a front end loader. After composting and curing (final stabilisation of the material), the material is screened and made available to the public. A 2m high berm was constructed around part of the site with the aim of reducing noise and visual impact from the waste activities.

**(3) Waste Types and Quantities**

There is no weighbridge on site and as such all waste tonnages given in the application are estimates (the applicant will be required to install a weighbridge). Waste at the facility arises from public casual use (gardens *etc.*), use by commercial gardeners/landscapers and from the applicant itself (*i.e.* Parks Department). Table 1 shows estimated waste quantity accepted at the facility to date and expected quantities for 2003.

**Table 1. Waste quantities accepted at the facility**

Year	Tonnes per annum
<b>1996-1998</b>	<b>Up to 10,000</b>
1999	11,600
2000	14,000
2001	16,700
2002	20,000
2003	24,000

This recommended Proposed Decision allows the applicant to accept 1,500t of green waste per annum for open windrow composting. The applicant may accept up to 6,000tpa of green waste for enclosed/in-vessel composting with the prior agreement of the Agency. The applicant will also have the option to increase the tonnage accepted for enclosed/in-vessel composting, subject to a maximum of 24,000tpa. In order to accept this quantity of waste the applicant must carry out a full odour survey and odour dispersion modelling of the expected emissions.

There is presently an estimated 6,000T of material on-site. It will take approximately 3-6 months for this material to be suitably composted and cured before it can be sold and removed from the site.

Examples of possible technologies for the in-vessel composting of green waste include VCU technology (Vertical Composting Unit) and the TEG silo system both of which

are in place in Siliot Hill Landfill (Kildare County Council) or Eco-Pod technology which is in use by a local authority in Northern Ireland. These are examples, however many other suitable technologies exist.

The recommended Proposed Decision also allows the applicant to operate a bring centre for the purposes of collecting textiles, metals and glass for subsequent recovery/recycling.

#### **(4) Emissions to Air**

##### **4.1 Odour**

It is common practice (e.g in UK and USA) to carry out green waste composting in such a low-technology manner (i.e. open windrow). However, open windrow composting is normally carried out without nuisances where there is either a limited tonnage processed, or where a significant buffer zone exists (or both). In operations of this type the presence of an adequate buffer zone is one of the principal environmental controls.

Buffer zones stipulated in other jurisdictions were examined in order to provide guidance as to the level of activity appropriate for a facility such as this. With regard to recommended distances to residences and other sensitive locations for greenwaste composting facilities, these are summarised below. It is apparent that with a maximum distance of 90m to the nearest resident, the facility in its current configuration (i.e. tonnage's accepted and processes used) is not appropriate.

**Table 2** Buffer zone recommendations for green waste facilities in other jurisdictions

Jurisdiction	Recommendation
<b>USEPA (Review)</b>	• Indicates an ideal minimum of <b>600m</b> to residences.
<b>New Jersey Regulations (USA)</b>	• Up to <b>300m</b> for low technology operations (such as open windrows)
<b>Wisconsin Regulations</b>	• At least <b>300m</b> from a public park
<b>New Brunswick Regulations (Ca)</b>	• <b>400m</b> from residences
<b>EU Draft Biowaste Directive</b>	• Requires any site producing >500T of green waste to implement unspecified odour control measures

The specific tonnage restrictions included in this recommended Proposed Decision are based on the Environment Agency (UK) Draft Guidance on Composting (*See Appendix 2 for further details*). This provides recommendations on appropriate tonnages and processes to used (i.e. open vs. enclosed) and relates these factors to the location of the nearest sensitive receptor.

**Table 3** Rationale for specific tonnage restrictions

Environment Agency (UK) Draft Guidance on Composting ( <i>See Appendix 2 for further details</i> )
<p>This guidance indicates that a green waste open windrow composting facility with residences 90m from site operations should maintain &lt;250T of green waste on-site at any one time. It is possible to equate this to the tonnage which may be accepted on an annual basis. This equates to a maximum waste acceptance of <b>1,500 tpa</b>.</p> <p>Where in-vessel or enclosed technology is to be used the guidance recommends that a maximum of <b>6,000tpa</b> is acceptable.</p>

Reduced tonnages handled, increased operational controls and monitoring of the process required under the terms of this recommended Proposed Decision will result

in a reduction in odours arising due to the prevention of anaerobic conditions. Grass clippings may not be accepted at the facility due to the odours caused by this material, as suggested by the applicant (due to high Nitrogen levels). However, the most significant control on odours arising will be the very significant restriction on the tonnage of waste allowed at this facility.

#### **4.1.1 Down End Composting Facility – A comparable case study**

The Down End Composting Facility in the UK was contacted due to many similarities with this site. The Down End Facility was designed to process approx. 30,000T/annum of green waste (max. accepted approx. 20,000T/annum). The nearest residences are approx. 80m from the site boundary. The tonnages and waste types handled, distance to neighbouring residences and composting process used are all very similar. I had personal communication with the operator, the local authority (regulating body) and the Environment Agency who acted as technical advisors to the local authority.

This site commenced operation in April 2000 and within 12 months the operator and regulator agreed that the site should be closed pending further works to ameliorate the problems associated with the facility (principally odour). To date approx. €4million has been spent on the site, including; 1ha concrete slab, new advanced windrow turning machinery purchased, odour abatement/suppression spray system installed, landscaping, process monitoring and various investigations and studies. Complaints in relation to the activity continue and I understand that the operator may soon cease operation at this site and transfer to another facility due to these ongoing problems. The operator has other facilities which operate at a similar or higher tonnage which have not caused significant nuisance. The significant difference in these cases is the distance to neighbours *i.e.* the provision of an adequate buffer zone.

#### **4.2 Bioaerosols**

The applicant did not include any details on bioaerosol generation at the facility. Emissions of bioaerosols occur primarily during turning and screening of compost. A recent guideline on composting issued by the UK Environment Agency states:

“..studies carried out by the Environment Agency on open windrow composting systems have indicated that micro-organism concentrations in air reduce by 80-90% at a distance of 20-40m from the operations occurring.”

Controls in this recommended Proposed Decision which will significantly reduce the quantities of bioaerosols include:

- Significantly reducing the quantity of waste which can be accepted at the facility
- Use of a dedicated windrow turner instead of a front end loader/JCB
- Use of dust covers during screening
- Dampening and use of water sprays on compost material during screening

In addition, monitoring will be required annually at 3 locations upwind and downwind of the facility for *Aspergillus* and Mesophilic bacteria.

#### **4.3 Noise**

Noise has been a significant issue in relation to this facility. Dublin City Council (Environment and Culture Dept.) carried out monitoring at the facility in Oct 2000

and determined that “noise complaints in relation to this facility are justified”. Further monitoring since then indicates that there has been some improvement, however noise emissions remain an issue and controls as required under the terms of this recommended Proposed Decision will serve to reduce emissions further.

The applicant will be required to operate the screening/grinding machinery in a specified area away from residences and surrounded by a 4m screen or berm. Condition 1.6 limits operating times, which will also serve to limit the time when noise emissions arise.

#### 4.4 Dust

Monitoring carried out as part of the application has indicated extremely high levels of dust deposition due to composting activities. The results below show that dust deposition levels have been observed which are an order of magnitude higher than the emission limit value commonly applied (350 mg/m<sup>2</sup>/day). This is confirmed in submissions indicating extensive deposition of dust on cars and houses near the facility.

	Nov 2000		April 2002
<b>NE Edge of site (40m from houses)</b>	8,035 mg/m <sup>2</sup> /day	<b>W Edge of the facility</b>	1,242 mg/m <sup>2</sup> /day
<b>NE Edge of site</b>	65,472 mg/m <sup>2</sup> /day	<b>NE Edge of facility</b>	433 mg/m <sup>2</sup> /day

**Table 4** Dust deposition results

Dust controls required in this recommended Proposed Decision include water suppression systems which are required (hosing and bowser) to prevent dust arising from storing and processing of waste/compost. In addition, a dust suppression system consisting of wetting down and use of a machinery cover shall be required when screening or grinding waste/compost.

Monitoring requirements and an emission limit for dust deposition (350mg/m<sup>2</sup>/d) and a trigger limit for PM<sub>10</sub> (50µg/m<sup>3</sup>) are set in the recommended Proposed Decision in order to control any fugitive dust emissions from activities on site. Monitoring as required above for bioaerosols will also give an indication as to the significance of dust emissions from the facility. Within six months the applicant will be required to cover finished compost with a flexible cover for the purposes of dust minimisation as proposed by the applicant. In addition the roads adjacent to the composting facility entrance (including All Saint’s Road) must be cleaned using a ‘wet clean’ street cleaner (daily in summer when the facility is in operation - and three times a week otherwise) (Condition 3.5).

<b>(5) Emissions to Groundwater</b>
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At present the site consists of a mix of concrete, tarmac and unsurfaced areas. This recommended Proposed Decision requires that the composting pad, maturation area and storage/delivery areas shall be concreted. However it also allows the applicant to propose other surfacing materials (e.g tarmacadam) as long as appropriate groundwater monitoring is included. At present there is little surface water management at the site and it appears that the majority of rainwater becomes incorporated into the compost. There is no run-off outlet from the composting area of the site. There is a 2m high berm in place around this area of the facility and this served to prevent any run-off from leaving the facility. Where run-off arises Condition

3.10.1 requires that it is either re-used within the process or tankered off-site to a location agreed with the Agency.

#### **(6) Emissions to Surface Waters**

The only watercourse near the facility is the Naniken River, which is separated from the facility by an earthen berm (approx. 30m from composting activities). There are no visible emissions to this River from this facility. Monitoring is required at upstream and downstream locations on an annual basis for a limited set of parameters.

#### **(7) Other Significant Environmental Impacts of the Development**

The applicant will also be required to maintain site hedgerows and supplement them with further planting as required under Condition 5.6.

#### **(8) Waste Management and Air Quality Management Plans**

- Consideration was given to the **Dublin Waste Management Plan**. (adopted December 1998).

This plan states :

“The St Annes Park composting facility treats 3,500-4,000 tonnes per annum”  
*[Currently the facility is treating approx. 20,000 tonnes per annum]*

“The product is not advertised as Dublin Corporation know that they could not meet the public demand for this material, particularly as it is situated in the area of St Anne’s Park which is an amenity garden of international repute”

Despite the above statement (and as noted in **Section 3** above), the tonnages being treated at this facility have very significantly increased since this plan was written and agreed.

This plan refers to the need for preferably one of two central composting plants for the treatment of green waste. However no further details are given.

- Consideration was given to the **Dublin Air Quality Management Plan** which covers this area.

Within this document there are a number of relevant policies and strategies, which in particular aim to control and limit air emissions and to prevent dust and odour emissions arising.

It is clear that this facility is having a significant effect on local air quality with regard to dust and odour emissions. The controls in this recommended Proposed Decision will result in a significant improvement in air quality in the vicinity of this composting facility. I consider that compliance with the conditions of this recommended Proposed Decision will ensure that significant environmental pollution will not be caused by waste activities carried out at the facility.

#### **(9) Submissions/complaints**

I have had regard to all valid submissions in making my recommendation to the Board. Below are the main concerns raised in the submissions dealt with on a subject by subject basis.

A total of one hundred and twelve written submissions and 25 telephone complaints have been received in relation to this application, from June 2001 to date. Submissions were received from individual residents, signature petitions with approx.

1000 signatures in total, submissions made by local elected representatives, including Ald. Sean Haughey TD, Cllr Tommy Broughan TD, Ald Richard Bruton TD, Ald. Ivor Callely TD. Fifteen submissions were made by Mr. Liam Cooke on behalf of St Anne's Residents Association which include a detailed daily log for many months of nuisance observed by Mr Cooke. Some concerned residents (e.g. Mr. Brian Cummins) made up to ten separate submissions. The issues/concerns/requests raised by the submissions include the following with dust, odour and noise being of principle concern;

### **1. Dust**

*Submissions refer to the following:*

- *The depot is situated very near to a row of houses and causes a film of dust, often several inches thick to form on pathways windowsills and even inside the home.*
- *Dust emissions from the facility are particularly bad during dry weather. Houses on the All Saints Road are coated with dirt and debris from the depot. Bits of mulched or ground up vegetation are clearly distinguishable among finer brown-reddish dust that is characteristic of the depot.*
- *Residents questioned the validity of results from a dust monitoring programme carried out by Dublin City Council. The monitoring programme was carried out during the month of October 2000. Residents believe that the results were not representative of worse case situations on the site at this time due to high rainfall.*

### **RESPONSE**

Many photographs are included in these submissions which support the residents claims of extremely high levels of dust deposition due to the operation of this facility. The controls required under Condition 7.4 will serve to significantly reduce dust arising this facility. In addition the very significant restriction on the tonnage of waste allowed at this facility will also serve to prevent dust nuisance arising.

Dust deposition tests carried out in November 2000 and reported by the applicant indicate that there were very significant emissions of dust from the activities carried out at this facility despite rainfall referred to by the submittor.

### **2. Odours**

*Submissions refer to the following:*

- *This is a problem as a result of the decaying compost and constant turning of the compost in the windrows.*
- *“Windows and doors must be kept closed to prevent the whole house smelling like a silage pit”*
- *The residents complain that even on the calmest days and nights they have had to endure nauseating overpowering odours.*

### **RESPONSE**

Improved operational controls and monitoring of the process and very significant restriction on the tonnage required under the terms of this recommended Proposed Decision will result in a reductions in odours arising due to the prevention of anaerobic conditions arising. In addition, Condition 1.4.3 requires the licensee to carry



out a full odour survey (including olfactometric measurements) and air dispersion modelling within 12 months of the date of grant of this licence.

### **3. Noise**

*Submissions refer to the following:*

- *Concern was expressed as to the impact of the on site noise levels generated by the JCB's and the mulching machinery in the surrounding residential areas.*
- *The noise is not a minor irritant to the residents of St. Annes, it has become a constant drone which goes on for hours on end, day in day out, week in week out.*
- *The validity of noise monitoring carried out by Dublin City Council was questioned. The method used to rate the noise refers to noise affecting mixed residential and industrial zones, although the facility is located in a section of St. Anne's Park zoned for recreational and amenity use. The two storey nature of the surrounding houses or the operation of heavy machinery other than the tub grinder were not considered.*

### **RESPONSE**

Noise generated will be controlled through restriction on the use of certain plant (e.g. grinding and screening) (see Condition 5.2). Plant used on-site shall be low noise plant and/or shall have acoustic panels and exhaust silencers fitted for the purposes of noise abatement and a regime restricting screening/grinding to certain wind conditions shall be implemented. In addition noise berms/screens will be required where grinding and screening is carried out and grinding and screening will be limited to the SW corner of the site (away from residences). If the applicant decides to continue with windrow composting he will be required to use a dedicated windrow turning machine which is more suitable to the task required within six months of date of grant of licence. This will serve to reduce the noise arising due to use of JCB's and front end loaders. In addition Condition 7.4.5 requires the applicant to assess the requirement for full enclosure of the grinding/screening processes for the purposes of noise and dust control within nine months of date of grant of licence.

The very significant restriction on the tonnage of waste allowed at this facility will also serve to reduce noise arising due to waste activities at the facility.

### **4. Planning Status**

*Submissions refer to the following:*

*The St Anne's Residents Association question whether Dublin City Council are exempt from the planning procedures. The Green Waste Depot is now a substantial operation. It is in fact a commercial activity and therefore at odds with the present Z9 zoning status of the Park. Dublin City Council's guidelines state that land designated Z9 is supposed to be used "to preserve, provide and improve recreational amenity and open space". Concern was expressed as to the impact "the noises of machinery, the overpowering smell and the clouds of dust that choke the air".*

### **RESPONSE**

Planning issues are not a matter for the Agency's consideration. Odour, dust and noise issues are dealt with elsewhere in this report.

### **5. Traffic**

*Submissions refer to the following:*

*The volume of traffic as a result of this activity has increased significantly in the locality. Cars, trailers, bulldozers, trucks etc. queue outside the entrance sometimes from 7am, causing severe disruption and noise pollution to the residents.*

*As a result of the green waste depot there has been a significant increase in the volume of traffic on the All Saints Road. This is a problem particularly apparent on Saturdays and Bank Holiday Mondays.*

#### **RESPONSE**

Off-site traffic issues are not a matter for the Agency's consideration. Although it is noteworthy that the reduction of waste permitted to be accepted at the facility will have a corresponding impact on reducing the traffic to and from the facility.

#### **6. Health Implications**

*Submissions refer to the following:*

*Concern was expressed as to the health implications for visitors to the park from the dust as a result of the green waste recycling facility, "the choking dust cannot be healthy for children who come to play in the park".*

#### **RESPONSE**

The conditions of the recommended Proposed Decision require the applicant to control all emissions from the facility including air, surface water, dust/bioaerosols and odours so that these emissions will not cause environmental pollution. Ongoing monitoring of emissions, including dust and bioaerosols is required by *Condition 8* and *Schedule D: Monitoring*.

Compliance with the conditions of this recommended Proposed Decision will ensure that significant environmental pollution will not be caused by waste activities carried out at the facility.

#### **7. Fire**

*Submissions refer to the following:*

*Garden waste and mulch at the facility caught fire on the 24<sup>th</sup> August 2001. The cause of the fire was unknown. Submitters reported the fire as having lasted for fifteen hours and odour from the burnt material lasted three days. The mains tap water was contaminated with large amounts of particulate matter, making it unusable and undrinkable.*

#### **RESPONSE**

The applicant is required to submit an Emergency Response Procedure (ERP) to the Agency for its agreement. This shall address any emergency situations that may originate at the facility and shall include a risk assessment to determine the requirements at the facility for fire fighting and fire water retention facilities. The applicant must consult with the Fire Authority during this assessment. Condition 9.3.3 requires that no waste shall be burnt within the boundaries of the facility, and that a fire at the facility shall be treated as an emergency. In this event immediate action must be taken to extinguish it and notify the appropriate authorities.

In addition, where compost storage piles are greater than 3m high weekly temperature monitoring will be required to ensure spontaneous combustion does not occur.

It is not clear as to how any fire could have affected the mains water supply in the adjacent homes.

## **8. Hours of Operation**

*Submissions refer to the following:*

*Residents were concerned at the hours of operation with shredding reported to begin at 8.15am and screening continuing until 7.30pm on Thursday & Friday the 14<sup>th</sup> & 15<sup>th</sup> of June 2001 for example.*

## **RESPONSE**

Hours of operation are limited by Condition 1.6. These hours of operation would prevent situations such as referred to in the above submission arising in the future.

## **9. Proximity to Residential Area's**

*Submissions refer to the following:*

*This facility is very close to many residential areas, including the following:*

- . Dollymount Ave.*
- . Mount Prospect Ave.*
- . Watermill Rd.*
- . Howth Rd.*
- . Coast Rd.*
- . All Saints Rd. 60 metres*
- . St Annes's Ave. 60 metres*
- . Wades Avenue*
- . Ballyhoy Ave.*
- . St Annes's Estate Park 70 yards*

## **RESPONSE**

The location and proximity of nearby residences have been taken into consideration in reaching a decision on this application. In addition, Condition 2.4.1 requires that a community liaison committee shall be established which will enable communication between representatives of the local residents and the licensee.

I consider that compliance with the conditions of this recommended Proposed Decision will ensure that significant environmental pollution will not be caused by waste activities carried out at the facility.

## **10. Use of the facility**

*One Submission was received from a landscape gardener who uses the services of the facility on a regular basis. He stated that;*

- 1. he is in favour of the facility,*
- 2. however, he is unhappy about the restricted opening hours of the facility, and*

3. *he finds it “intolerable” that the Agency has not licensed the facility yet. He states that he hopes this is “as a result of some technical hitch and not because of foot-dragging on your [i.e. the Agency’s] part”.*

**RESPONSE**

1. This observation is noted
2. As an unauthorised facility the opening hours are not under the control of the Agency. This recommended Proposed Decision outlines hours of opening and operation for the facility (Condition 1.6). Opening hour restrictions are required in order to prevent nuisance arising from the operation of the facility.
3. This facility is currently unauthorised. This application was received on 13/6/01. Prior to this date the Agency carried out a visit to the facility and advised the operator that the facility would require a licence to operate. This application was deemed to have been in compliance with Article 16 of the regulations (i.e. a complete application) on 23/12/02.

**Signed** \_\_\_\_\_

**Dated:**

**Name:** Cormac Mac Gearailt

## **APPENDIX 1**

### **LOCATION PLAN**

1. Drawing No. 3 Waste Licence Application 'Monitoring Points Location Plan'
2. Recent Site Visit Report (*si01mcg* – 12/11/02)

## APPENDIX 2

### UK Environment Agency Technical guidance on composting operations (Draft October 2001)

Included below is a matrix of indicative buffer distances which are related to composting technology type used and the tonnage of material processed. This table is extracted from UK Environment Agency Technical guidance on composting operations. As can be seen, the buffer zones required are greater for increased tonnages of waste composted. The buffer zone required is also greater where 'low technology' methods of composting are used *e.g.* open windrow (Column C). All other factors being equal, 'higher technology' options such as enclosed or in-vessel types of operations (Column A) require a smaller buffer zone.

**Table 1 Indicative buffer distances (m) for smaller composting facilities**

Material on site (Tonnes)	Technology Type Used		
	A	B	C
<5	2	2	2
5 to <10	2	2	4
10 to <25	2	4	10
25 to <50	3	10	25
50 to <125	15	35	55
125 to <250	30	65	90
250 to <500	60	110	150
500 to <1000	100	170	215
1000 to <1250	110	200	250

Technology required under this Proposed Decision to go to 6,000tpa or greater

Technology current in use

Buffer zone available at this facility

**A Green waste** and kitchen vegetable waste enclosed composting either **in vessel** or within a sealed building

**B Green waste** and kitchen vegetable waste composted in the open air, including within a Dutch Barn type operation, and turning the compost by hand

**C Green wastes** and kitchen vegetable waste composted in the **open air**, including within a Dutch Barn type operation, **and turning the compost by machine**; sites wishing to compost animal manure (excluding cat and dog faeces) regardless of type of operation.