



**OFFICE OF CLIMATE,
LICENSING &
RESOURCE USE**

**REPORT OF THE TECHNICAL COMMITTEE ON
OBJECTIONS TO LICENCE CONDITIONS**

TO:	Directors	
FROM:	Technical Committee	- LICENSING UNIT
DATE:	10 September 2007	
RE:	Objection to Proposed Decision for Kilshane Cross Recycling Park, Waste Reg: W0223-01, Fingal County Council	

Application Details

Applicant:	Fingal County Council, P.O. Box 174, County Hall, Swords, Fingal, Co. Dublin
Location of Facility:	Newtown, Kilshane Cross, Dublin 15
Register Number:	W0223-01
Type of facility:	Integrated waste management facility including waste transfer station, biological waste treatment, sludge drying unit and C&D waste recovery.
Class(es) of Activity (P = principal activity):	3 rd Schedule: 11, 13 4 th Schedule: 2(P), 3, 4, 9, 11, 13.
Quantity of waste managed per annum:	211,511 t
Classes of Waste:	Household and commercial, sewage sludge, construction and demolition
Location of facility:	Newtown, Kilshane Cross, Dublin 15.
Licence application received:	29/09/05
PD Issued	10/07/07
First Party Objection received:	Yes
Third Party Objections:	None

Company

The application from Fingal County Council (FCC) is for the development on a greenfield site of an integrated recycling/waste management facility to contain what will effectively be four separate waste management units, each of which would be licensable in its own right. The site is located approximately 1.5km north of the N2/M50 interchange, in the townland of Newtown and is currently a field of agricultural land surrounded by hedgerows. The site is bounded immediately to the east by the N2, and to the west by a small stream, which is a tributary of the River Ward. Although Fingal County Council is the applicant and intends to be the licensee the facility is to be developed using the Public Private Partnership (PPP) process, with the intention that each operation within the facility will be developed and operated by a private contractor.

The proposed development consists of the following:

- (a) A 'Construction and Demolition Waste Recovery Unit' (C&D) processing 75,000 tonnes per annum (tpa);
- (b) A 'Waste Transfer Unit' (WT) dealing with 65,000 tpa of municipal solid waste;
- (c) A 'Biological Waste Treatment Unit' (BWT) treating 45,000 tpa of separately collected domestic and commercial organic waste, and;
- (d) A so-called 'Sludge Hub Centre' (SHC) treating 26,511 tpa of dewatered sludge cake waste from wastewater treatment facilities in Fingal County Council's functional area.

Only one submission was received in relation to the application and this was considered by the Board at PD stage.

Consideration of the Objection

The Technical Committee, comprising of Dr J Derham (Chair) and Ms Marian Doyle, has considered all of the issues raised in the Objections and this report details the Committee's comments and recommendations following the examination of the objections and the licence application documentation.

This report considers the first party objection; no third party objections were received.

First Party Objection

The applicant makes 28 points of objection, a number of which are in the form of requests for clarification.

1. Condition 1.5

The applicant wishes clarification as to whether the requirement for Dept. of Agriculture and Food approval to accept wastes containing animal by-products extends to municipal solids wastes (MSW) when processed for transfer only.

Technical Committee's Evaluation: As acknowledged in the applicant's objection MSW contains catering wastes which is a Category 3 material under the animal by-products regulations. Therefore Dept. of Agriculture and Food (DoAF) approval of the site is required before MSW can be accepted at the site for treatment. In the case of waste accepted for transfer, approval is not currently required. The condition as drafted limits the requirement for DoAF approval to the composting or

digestion of such wastes. The condition does not speak to the transfer of wastes containing animal by-products.

Recommendation: No change.

2. Condition 1.6.1

The applicant objects to the limitation in the PD on waste acceptance and dispatch hours (07.30 to 09.30), and requests that the applied for hours (07.00 to 22.00) are given.

Technical Committee's Evaluation: The Inspectors Report for the application acknowledges that the hours of operation are 07.00 to 22.00, and this operational window is granted to the applicants in Condition 1.6.2. Condition 1.6.1 restricts the receipt and dispatch of waste by thirty minutes either side of this operational window to provide time at the start and end of the operational day to prepare the site for reception of waste and check equipment and plant, and also to provide time (at the end of the day) to clean the reception floors, waste handling plant, etc. Such preparation and clean-up time is considered a necessary component of good facility management.

Recommendation: No change.

3. Condition 1.6.2

The applicant wishes to include an exemption (to the daily operational time restrictions) for the Sludge Hub Centre in this condition as is provided for the biological waste treatment unit.

Technical Committee's Evaluation: The sludge hub operations are similar to the biological waste treatment operations in that there is a continuous automated dimension to the operation. The applicant's objection is accepted. Although the applicant did not object to Condition 1.6.3, the same type of operational limitation exists. This condition can be amended in a similar way to Condition 1.6.2.

Recommendation: Amend Conditions 1.6.2 and 1.6.3 by the inclusion of the text '*and Sludge Hub Centre*' after the word 'Unit' in Conditions 1.6.2 and 1.6.3.

4. Condition 2.1.1

The applicant wishes clarification as to whether the requirement for the presence of a facility manager or designate during all times of facility operation includes for the automated operations at the biological treatment facility (BTF) and the sludge hub centre (SHC) given that these are 24 hour automated processes.

Technical Committee's Evaluation: As acknowledged in the applicant's objection, the automated processes in the BTF and SHC are connected by a SCADA system to

notify management of any out-of-hours failure of the automated processing systems. Given the nature of the automated processes and the presence of the alarm systems, the applicants proposed management approach is satisfactory to offset the need for 24 hour presence of operatives.

Recommendation: Amend Condition 2.1.1 to include the text '*(as defined in Condition 1.6)*' after the word 'operation'. Add new condition 6.22.10 as follows:

6.22.10 In association with Condition 2.2.2.9 the licensee shall ensure that there are 24 hour process control and monitoring facilities in place for the automated Biological Treatment Facility and the Sludge Hub Centre processes. These monitoring facilities should be designed such that facility management are automatically notified of any breakdown or malfunction in automated waste processes.

5. Condition 3.1

The applicant objects to the requirement in the condition to have all infrastructure in place prior to commencement of the activity given that the proposed operations are varied and can be established on an independent and modular basis.

Technical Committee's Evaluation: The applicants point is accepted.

Recommendation: Replace Condition 3.1 with the following:

3.1 The licensee shall establish all infrastructure necessary for the operation and monitoring of each component or unit of the licensed facility prior to the commencement of the activity at the component or unit or as required by the conditions of this licence.

6. Condition 3.2.3

The applicant wishes to place the plan specified in the condition away from the immediate entrance so-as to avoid congestion.

Technical Committee's Evaluation: The condition as worded gives the operator some flexibility as to the exact location for the site plan notice board. Safety is one of the considerations for the optimum siting of such a notice board. This is a matter that can be agreed with the OEE following completion of the entrance works.

Recommendation: No change.

7. Condition 3.3

The applicant objects to the vagueness of this condition (provision of sampling equipment, data loggers, etc., on emission points).

Technical Committee's Evaluation: This is a standard condition, and is necessary to permit to Agency to require as may be necessary detailed data collection from any emission point (e.g. following a series of spot sampling non-compliances), and also to permit the Agency to specify certain monitoring depending on the final process technology choices made by the applicants (on completion of PPP process). It avoids the requirement to review a licence (at a cost to the applicant) to deal with such matters. Given the vagueness in the application documentation regarding the exact processes and technologies to be deployed at this site (refer inspectors report) it is somewhat surprising that the applicant would challenge the Agency over the generalised wording of the condition. Any imposition triggered by this condition would naturally be subject to test under the principle of BAT.

Recommendation: No change.

8. Condition 3.4

The applicant wishes clarification as to how long composite samples need to be kept as this has storage and sample integrity implications.

Technical Committee's Evaluation: It is necessary to keep samples for a sufficient period to be accessed by the Agency or the Sanitary Authority as a routine measure, or following an incident or some issue arising from EPA/SA sampling of site emissions. It is recognised however that even with refrigeration some degradation of samples will take place, which can impact on parameters such as BOD. This will be an interpretative matter for discussion between the authorities and the licensee on a case by case basis. In this licence the applicant is required to take a 24hr composite of the sewer discharge every fortnight (i.e. two samples a month). The position should be such that there is always in on-site refrigeration a volume of the most recent fortnightly composite sample. As each fortnightly sample is taken for refrigeration, the previous fortnightly sample is replaced. In this case that means that the maximum store period is a fortnight. This is not an unreasonable position.

Recommendation: Amend Condition 3.4 by inserting the text ' .. for a fortnight ..' in place of the text 'as required'.

9. Condition 3.17.2

The applicant wishes clarification as to how CCTV records need to be kept. They propose a period of 7 days.

Technical Committee's Evaluation: It is a reasonable request to have the period of retention specified. However the period of 7 days offered is considered too little given the often protracted reaction/enforcement response to incidents or chain of custody investigations. The Technical Committee believe that such records (typically digitally stored) should be maintained for at least two months.

Recommendation: Amend Condition 3.17.2 to include the text '(for a minimum of two months)' after the text 'site'.

10. Condition 3.22.3

The applicant objects to the restrictions placed by virtue of this condition, and wants the duty capacities established on a weekly basis.

Technical Committee's Evaluation: The condition is necessary to ensure that there is adequate capacity available to undertake the requisite daily processing of waste arriving at the site; in particular odorous or nuisance forming wastes. Condition 3.22.2 requires the licensee to agree the duty and standby capacities with the EPA. In the case of non nuisance or odour forming wastes which arrive in inconsistent loads over a few days for stockpiling and which may be processed on say a weekly or fortnightly basis (e.g., stone crushing, timber shredding), the strict application of a daily capacity may not be appropriate. This is a matter the licensee can agree with the OEE under the terms of Condition 3.22.2.

Recommendation: No change.

11. Condition 3.22.4

The applicant objects to the requirement for a 'coupling system' for delivery of sludges in a tanker, commenting that some of the sludges will be delivered by covered skip which will be unloaded within the sludge hub centre. They ask for the condition to be removed.

Technical Committee's Evaluation: The condition can be amended to provide for skip delivery whilst maintaining the requirement for sealed unloading of sludges. The sludge hub building is under negative air pressure with treatment of exhaust gases.

Recommendation: Replace condition 3.22.4 with the following:

3.22.4 All sludge unloading and storage operations should be carried out within the Sludge Hub Centre building.

12. Condition 3.25(vii)

The applicant objects to the requirement for 'continuous' sampling of oxygen content in the composting process citing that this is not normal for the sector. The applicant point out that Schedule C.8 of the PD suggests daily sampling, which is the industry norm.

Technical Committee's Evaluation: The applicant's objection is accepted. Schedule C.8 accurately reflects the Agency position.

Recommendation: Amend Condition 3.25(vii) to include the text '*daily*' before the text 'oxygen' in the condition.

13. Condition 3.29

The applicant objects to the restriction in the condition to use certain fuels. They may wish to use propane or a fuel oil.

Technical Committee's Evaluation: Propane also comes under the EN14214 standard and is a suitable alternative. The term 'fuel-oil' applies to a wide range of oil fuels including heavy oils, some of which would not be acceptable. The second half of the condition allows the operator to use a certain acceptable type of fuel oil (gas-oil), so there is no need to amend the condition in this respect.

Recommendation: Amend Condition 3.29 by including the text '*propane,*' after the text 'Natural gas'.

14. Condition 5.5

The applicant objects to the monitoring methodology proposed for compliance with the ambient odour limit specified in the condition. They argue that it is not technically possible to monitor at receptor location to the degree of accuracy mandated by the ambient limit value (1.50Um³). They add that modelling could be used to provide a theoretical odour value at ambient monitoring locations.

Technical Committee's Evaluation: The applicant's point is accepted. Condition 5.5 can be amended to eliminate the specific reference to monitoring, and Schedule C.10.1 can be amended to specify a predictive modelling technique to be used to evaluate the ambient odour levels at the specified monitoring locations.

Recommendation: In Condition 5.5 delete the text:

' , monitored as required by Schedule C.10.1 of this licence,'

Replace Schedule C.10.1 with the following:

Emission Point Reference No.: Measured at the monitoring points (shown on Figure 3.4.1 of the EIS) D1 – D4 (or as may be amended under Condition 6.8). One additional monitoring point (D5) shall be located at the south-western boundary of the facility.

Parameter	Monitoring Frequency	Analysis Method/Technique
Dust (mg/m ² /day)	Quarterly ^{Note 1}	Standard Method ^{Note 2}
PM ₁₀ (µg/m ³)	Biannually	See ^{Note 3}
Odour	Annually (unless otherwise agreed in writing by the Agency)	See ^{Note 4}
Bacteria	Biannually	Grab sample ^{Note 5}
Aspergillus fumigatus	Biannually	Grab sample ^{Note 5}

Note 1: Twice during the period May to September, or as otherwise specified in writing by the Agency.

Note 2: Standard method VDI2119 (Measurement of Dustfall, Determination of Dustfall using Bergerhoff Instrument (Standard Method) German Engineering Institute).

Note 3: As described in prEN12341 “Air Quality – field test procedure to demonstrate reference equivalence of sampling methods for PM₁₀ fraction of particulate matter” or an alternative agreed in writing by the Agency.

Note 4: **Unless otherwise agreed, ambient odour assessment shall be by dispersion modelling technique based on measurement of gas emissions from the site (Schedules B.1 & B.2) and predicting ambient odour values for locations D1 to D5.**

Note 5: Enumeration of colonies to be carried out as described in ‘Standardised Protocol for the Sampling and Enumeration of Airborne Micro-organisms at composting Facilities’ the Composting Association 1999. One sample to be taken in May and another in September.

15. Condition 6.1.6

The applicant objects to the condition that restricts any waste activities on site in any of the waste treatment components until the completion of the test programme citing that the components may be developed at different times. They request that the condition be amended to refer to separate test programmes.

Technical Committee's Evaluation: The applicant's objection is accepted. The condition can be reworded such that the Agency's interests are protected and the applicant's concerns addressed.

Recommendation: Replace the first paragraph of Condition 6.1.6 with the following:

6.1.6 Each component or unit (Waste Transfer Station, Biological Waste Treatment Unit or Sludge Hub Centre) of the facility shall not commence operational scale waste acceptance activities prior to the successful completion of the pilot scale waste acceptance test programme and without the written agreement of the Agency. In order to gain the agreement of the Agency:

16. Condition 6.12.2

The applicant objects to the current wording of the condition which prohibits emissions of bioaerosols to within 200m of an occupied dwelling, stating that the term 'occupied dwelling' is not defined, and further, that the 200m guide which is sourced to a UK guidance document is based on unmitigated sources at composting sites. The applicant wants a monitoring requirement to be used instead to show if there is a bioaerosol impact, and this would remove the 'development sterilising' impact of the current condition.

Technical Committee's Evaluation: There is no national ambient (imission) standard for bioaersols, and the general practice in the UK has been to set-back composting plants from residential areas by at least 250m, as research there indicates that beyond this distance the levels of bioaerosol have decayed to ambient levels. A study was carried out by Cré the Composting Association of Ireland in association with the EPA, and published in 2004, on the subject of bioaerosols and composting. The study recommended that there be a guideline set-back distance or buffer zone of 200m from composting facilities to a sensitive receptor for the natural abatement (dilution) of all potential nuisances emanating from a composting facility, including bioaerosols. In the case in hand the applicant is proposing a fully contained composting operation with abatement. Accordingly it is considered reasonable to replace the 200m limit in the licence with a biannual ambient monitoring requirement linked to a source-investigation trigger level set for bioaerosol levels at 25% above ambient. The term 'occupied dwelling' has its common language meaning.

Recommendation: Replace condition 6.12 with the following:

6.12 Bioaerosol Emissions

6.12.1 The licensee shall undertake baseline bioaerosol monitoring (four monitoring events over at least one year, with a least two of the sampling events taking place in May and September) prior to the commencement of licensed activities, to determine ambient conditions (seasonal norms). The location of the monitoring points to be agreea with the Agency having regard to sensitive receptors, prevalling winds and proposed site layout. Subject to ongoing monitoring results these seasonal norms may be varied with the agreement of the Agency.

6.12.2 Based on ambient sampling the licensee shall establish appropriate action (source-investigation) trigger levels which instigate an appropriate response when ambient measurements (as per Schedule C.10.1) indicate levels 25% above an agreed seasonal norm (as per Condition 6.12.1).

Amend bacteria and bioaerosol monitoring requirement in Schedule C.10.1 to that as given in Objection 14 above.

17. Condition 6.22.9

The applicant objects to the requirement in this condition to monitor temperature and moisture in the composting material at locations to be agreed with the Agency. The applicants want to agree these locations with the DoAF instead.

Technical Committee's Evaluation: This factor is a matter of dual competency. The Agency's interest turns on the issue of odour management and production of a quality compost (full recovery). The DoAFs interest is primarily orientated towards optimum composting conditions for pathogen destruction. The requirement for the licensee to agree matters with the DoAF is outside the remit of the Agency as acknowledged by Condition 1.8 of the PD.

Recommendation: No change.

18. Condition 8.3.4

The applicant objects to the requirement to inspect the waste loads at arrival at the facility as they are covered and this may lead to nuisance. The applicant proposes as an alternative that inspection takes place within the processing buildings.

Technical Committee's Evaluation: This request is acceptable. The condition can be reworded to reflect this request.

Recommendation: Replace Condition 8.4.3 with the following:

8.4.3 Waste arriving at the facility shall be weighed, documented and directed to the appropriate processing building. Each load of waste arriving at either the Waste Transfer Building, Biological Waste Treatment Building or 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.

19. Schedule A.1

The applicant objects to the limitation that either Composting or Anaerobic Digestion may be carried out in the Biological Waste Treatment building, but not both. They comment that the AD process if selected as the principal process will produce a digestate by-product which they would hope to compost for agricultural application.

Technical Committee's Evaluation: The Inspectors Report to the Board of the Agency for the Proposed Decision acknowledges that if AD is the chosen technology then the residues will need to be composted. This is in line with the objector's comments. The licence can reflect this request. The main concern of the Agency is to be notified of the chosen principal biological treatment technology and to regulate the final design, operation and control of same. It will not be the case that there are two separate biological processes operating in parallel on raw waste intake streams. If AD is chosen then there will be a 'plug-in' composting unit to support it. This can be achieved via the Specified Engineering Works provisions in the licence.

Recommendation: Remove the first line of Schedule A.1. Insert new line to Schedule D 'Installation of Anaerobic Digestion facility'.

20. Schedule A.2

The applicant objects to the restriction in Schedule A2 to accepting only Biodegradable Municipal Waste (EWC 20 01 08) into the Biological Waste Treatment building commenting that there will be other bio-waste that will form the feed-stock to the process.

Technical Committee's Evaluation: Source separated waste streams such as garden waste, parks maintenance waste, and the biodegradable fraction of municipal waste are some of the likely streams feeding into the process. Schedule A.2 identifies one of these streams, but does include a footnote permitting other compatible waste streams to be accepted subject to Agency approval. The applicant is aware of this clause but would wish the Schedule to be amended to acknowledge the likely intake of other source segregated municipal bio-wastes. This can be accommodated without losing the Agency's ability to regulate waste intake to the process.

Recommendation: In Schedule A.2 replace the text 'Biodegradable Municipal Waste (EWC 20.01.08)' with the text:

Biodegradable Waste Streams (other than sludges) ^{Note 2}

Add a new footnote 2 to Schedule A.2 as follows:

Note 2: Individual sources, quantities and waste codes for biowaste streams proposed to be accepted to the Biological Waste Treatment process, must be approved in writing by the Agency in advance of acceptance.

21. Schedule B.1

The applicant objects to the volumetric flow and TOC limits in the schedule for emissions to air. In relation to the former they comment that at this stage in the procurement process the design flows are unknown. They comment that the TOC limit may be difficult to achieve and propose a limit of 100mg/m³, or at least the opportunity to review the limits in the licence based on operational experience.

Technical Committee's Evaluation: The difficulty in this case is that the applicant has given little information on the specific design of the technologies to be used. These specifics have yet to come out of the PPP procurement process. This is not helpful to the EPA licensing process, particularly where assessment of emissions impact and establishment of ELVs is a licensing prerequisite. The volumetric flow rates presented in the licence reflect the maximum predicted flows given in the EIS for the licence application. The applicants EIS concluded that;

... the mass emission rates chosen are at or within those limits established by the Environmental Protection Agency [draft BAT]. This would represent highest emission event and therefore represent maximum predicted air quality impact based on these facts. Therefore, this will allow for the predictive analysis of maximum potential impact on the neighboring sensitive locations while the facility is in operation.

It is not reasonable for an applicant to object to flow limits in a licence that reflect those values used in the applicant's licence application and EIS to model the impact

of the operation, and which are used by the applicant to demonstrate that no impact will occur. Such actions undermine the transparency and integrity of the EIA process. In relation to the TOC levels, where the applicant seeks to revise upwards (between 5 and 10 times greater than that specified in the licence for the three emission points) the same point applies. The TOC ELVs used in the licence were those presented by the applicant in the EIS as reflecting the Regulatory advice (draft BAT) and which were accepted and used by the applicant in their dispersion modelling to show that their process will not lead to an air quality impact.

As regards the applicant's request to review of ELVs after six months, the statutory processes provide for a licensee to apply for a review at any time, and minor amendments in support of the licence may be possible by Technical Amendment, which a licensee can also seek at any time.

Recommendation: No change.

22. Schedule B.4

The applicant objects to the ELVs given for BOD, COD and Sulphates for discharges to sewer and proposes revised limits.

Technical Committee's Evaluation: The ELVs for sewer discharge were set by the Sanitary Authority (Fingal Co Co). Normally in the case of such objections, the Agency requests the Sanitary Authority to consider the objection to the sewer conditions and to revert to the Agency with an assessment. In this case the Technical Committee did not consult with the Sanitary Authority as the ELVs established in the licence via the Sanitary Authority reflect the predicted loadings presented by the Applicant in their EIS and upon which the applicant relied when concluding that the emissions were insignificant.

The EIS predicted that approximately 85% of the BOD loadings were associated with the Sludge Hub Centre, and a further (approx.) 12% being associated with the Biological Treatment Facility. The EIS set out maximum predicted daily loads for BOD, which are reflected in the PD. Similarly for COD and Sulphate. The applicant by means of this objection wants to vary by over 600% the predicted emission quality presented in their EIS.

The Technical Committee believe – as was the case in Objection 21 above – that it would be inappropriate at this stage to vary the ELVs given as to do so would invalidate the EIS. The licensee may, in the light of some experience with the new technology when operational, approach the Sanitary Authority and the EPA (review mechanism is necessary) to seek a formal variation of ELVs.

Recommendation: No change.

23. Schedule C.5

The applicant objects to the required weekly monitoring frequency for storm water, and request a less frequent basis.

Technical Committee's Evaluation: The cited Schedule requires weekly monitoring of storm water emissions for pH, COD, Suspended Solids, Ammonia and Conductivity. As noted in the Inspectors Report for the PD the proposed facility will include a variety of waste recovery processes and buildings, which may be under the control of different management teams. Integrated management of all waste movement and storage will thus be challenging for the overall site management. The polluting potential of the wastes (particularly the biological and sludge material) is significant and thus it is appropriate to see surface waters as a risk receptor. The combination of these two factors justifies the need for regular monitoring of surface water discharges from the site: it will attest to the efficacy of site management. The specified monitoring is not considered onerous and can be undertaken by field equipment subject to agreement with the Agency. The applicant did propose to commence such monitoring at the frequency specified and then subsequently relax the demand. In fact the PD as drafted already includes this provision (Condition 6.8) which can be applied for by the licensee at any time, subject naturally to Agency approval having regard to the monitoring data produced up to that point in time.

Recommendation: No change.

24. Schedule C.6

The applicant objects to the high frequency of monitoring specified for sewer discharges.

Technical Committee's Evaluation: The sewer discharge monitoring is established by the Sanitary Authority, who in this case is the same body as the applicant. It seems unfortunate that the applicant is objecting to its own specifications. That said, the substance of this objection is similar in many ways to that presented in Objection 23 above. Moreover, the recommendation of the Technical Committee is the same as that in Objection 23; Condition 6.8 as drafted provides the applicant with the potential for the relief they desire.

Recommendation: No change.

25. Schedule C.10.1

The applicant objects to the requirement for monitoring of amines when no ELV for same is given in the licence.

Technical Committee's Evaluation: It is quite the normal practice for the Agency to seek monitoring of general environmental performance of an operation via a range of environmental parameters for which an ELV is not set. Such a sentinel parameter can be a useful guide to the environmental performance of processes and to the general efficacy of process control. In the absence of specified mandatory ELVs, it is generally only where *significant* emissions (magnitude, duration, extent, toxicity, etc..) of a particular pollutant are anticipated, will a licence seek to set ELVs.

In this case, the nature of the operations is such that performance against the contended parameter (amines – odour related) is warranted.

Recommendation: No change.

26. Schedule C.10.3

The applicant objects to the high frequency of ambient surface water (receiving water) monitoring, which is weekly for most parameters. The applicant requests a quarterly monitoring interval.

Technical Committee's Evaluation: From a monitoring perspective the main emissions regulating device is monitoring of the actual emission to a receiving media. Ambient monitoring is only used to validate assessment predictions and to raise alarm in case of unforeseen impacts. Ambient monitoring of surface waters can also play a role in regulating discharges (e.g. prohibition of discharge when flow in receiving water is low). In the case in hand the surface water emission is monitored very regularly (refer Objection 23 above), and given that the surface water emission comprises storm water only (no process effluents), the Technical Committee accept the applicant's objection and recommends a variation in the ambient monitoring frequency.

Recommendation: In the middle column of Schedule C.10.3, replace the term 'Weekly' with the term 'Quarterly'.

27. Schedule E

The applicant seeks an amendment of Schedule E (Compost Standards) for the purposes of clarity with respect to testing compost maturity.

Technical Committee's Evaluation: This objection relates to a formatting problem in the Schedule.

Recommendation: Replace the paragraphs 1 to 4 of Schedule E with the following text:

The state of the curing pile must be conducive to aerobic biological activity.

Compost shall be deemed to be mature if it meets two of the following groups of requirements, or other maturity tests as may be agreed with the Agency:

1. Respiration activity after four days AT_4 is $\leq 10\text{mg}/\text{O}_2/\text{g}$ dry matter or Dynamic Respiration Index is $\leq 1,000\text{mg}/\text{O}_2/\text{kg VS}/\text{h}$.
2. Germination of cress (*Lepidium sativum*) seeds and of radish (*Raphanus sativus*) seeds in compost must be greater than 90 percent of the germination rate of the control sample, and the growth rate of plants grown in a mixture of compost and soil must not differ more than 50 percent in comparison with the control sample.

3. Compost must be cured for at least 21 days; and

Compost will not reheat upon standing to greater than 20°C above ambient temperature.

Or

Compost must be cured for a six month period and offensive odours from the compost shall be minimal for the compost to be deemed mature.

28. Schedule E

The applicant objects to the specification of Cress germination (paragraph 3 of Schedule E) as evidence of maturation given that in their case the presence of catering waste with typically high salt content will prevent such germination.

Technical Committee's Evaluation: The applicant's objection is accepted. This test difficulty for composting of material containing catering waste is known. This is why the opening line of the three proofs (as reworded in Objection 27 above) provides for agreement of alternative maturity tests. The reformatting given in Objection 27 should assist interpretation and thereby address the applicant's objection.

Recommendation: No change.

Overall Recommendation

It is recommended that the Board of the Agency grant a licence to the applicant

- (i) for the reasons outlined in the proposed determination and
- (ii) subject to the conditions and reasons for same in the Proposed Determination,
and
- (iii) subject to the amendments proposed in this report.

Signed

Dr J Derham

for and on behalf of the Technical Committee