



**OFFICE OF
LICENSING &
GUIDANCE**

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

TO:	Directors	
FROM:	Technical Committee	- LICENSING UNIT
DATE:	20 th March 2007	
RE:	Objection to Proposed Decision (PD) for Advanced Environmental Solutions (Ireland) Limited, Waste Reg: W0194-02 located at Kyletalesha & Kyleclonhobert, Portlaoise, Co. Laois.	

Application Details	
Class(s) of activity:	Third Schedule: Classes 6, 11, 12 & 13 Fourth Schedule: Classes 2(P), 3, 4, 9, 11 & 13
Location of activity:	Kyletalesha & Kyleclonhobert, Portlaoise, Co. Laois.
Licence application received:	31 st July 2006
PD issued:	30 th November 2006
First party objection received:	None
Third Party Objection received	One objection received 5 th January 2007
Submission on Objections received:	20 th February 2007
Article 26/27 issued:	-
Additional Information received:	-
Article 35 extension of time	-

Company

Advanced Environmental Solutions (Ireland) Limited currently operate a Waste Transfer Facility (Reg: W0194-01) at Kyletalesha & Kyleclonhobert, Portlaoise, County Laois. It is located approximately 3.5km northwest of Portlaoise in a rural setting. Kyletalesha Landfill (WL 0026-2) is located to the west of the site and there is a knackery to the southwest. There are six residential dwellings within 1km of the facility, the closest of which lies 500m to the northeast of the facility.

This review application (W0194-02) relates to the proposed extension of the existing facility including the following:

- An increase in annual waste intake from 40,000tpa to 99,000tpa; including acceptance of Waste Electrical and Electronic Equipment (WEEE).
- Infrastructure for the treatment of mixed residual waste and source separated biodegradable waste in Bedminster Digesters.
- An amendment to site area from 0.8 ha to 4.7 ha plus 1.5 ha buffer.
- Inclusion of either in vessel composting or anaerobic digestion technologies on-site and associated infrastructure, including the disposal of residues of such processes.

The facility in the Proposed Decision (PD) as drafted will be permitted to accept household, commercial, and industrial waste (80,000 tpa), construction & demolition waste (5,000 tpa), WEEE (5,000 tpa), sewage sludge (6,000 tpa) and non-hazardous industrial sludges (3,000 tpa). Of the 80,000 tpa, up to 40,000 tpa can be source separated biodegradable waste.

Five submissions were received in relation to the application and these have been taken into consideration for the PD. One Third Party Objection has been received on the Proposed Decision. A first party submission on the objection has also been received.

Consideration of the Objection

The Technical Committee, comprising of Marian Doyle (Chair), Jonathan Derham, and Suzanne Wylde has considered all of the issues raised in the Objection and this report details the Committee's comments and recommendations following the examination of the objection together with discussions with the Inspector, Breen Higgins, who also provided comments on the points raised. This report considers the one third party objection received.

Third Party Objection

One Third Party Objection has been received and is labelled:

A: Albert Culleton, Committee Member, signed on behalf of the Derryguile and Kyletalesha Residents Association and Cllr Pat Bracken MCC Laois County Council.

Mr. Culleton wrote on behalf of the Derryguile and Kyletalesha Residents Association and Cllr Pat Bracken, to object to the granting of the proposed decision on the issues considered below and to request an Oral Hearing. The request for an oral hearing was considered by the Board on 16th January 2007, however it was concluded that the issues raised could be fully addressed by way of a Technical Committee.

The objections are in italics and some have been paraphrased due to their lengthy nature. The headings are as per the Objection received, however some additional sub-headings are added for clarity. Submissions on Objections made by the First Party are dealt with in association with the Third Party Objections to which they relate.

1. Existing Waste Limitation

It is our understanding that approximately 20,000 tonnes of residual waste from the Bedminster process will have to be landfilled and that if this goes to Kyeltalesha Landfill (operated by Laois Co. Co.) it will breach its agreement to accept 48,000tpa. There is no mention in the EIS of the destination of the residual fraction.

Submission on Objection:

The facility will treat biodegradable waste, which as outlined in the EPA National Waste Report 2005 is essential in order to satisfy EU and National targets. The Report also noted slow progress in diverting biodegradable municipal waste from landfill, which causes considerable management problems, including the generation of methane, leachate and the attraction of vermin. Any residual generated from the process will be disposed of to an appropriate facility.

Technical Committee's Evaluation:

Kyeltalesha Landfill is licensed to accept a maximum of 47,100 tonnes of waste per annum. A submission from the same Residents Association refers to an agreement between Laois County Council and their association where volumes of waste accepted at the landfill will be restricted to 48,000 tonnes per annum, however the Agency is not involved in such an agreement.

The PD for the proposed facility requires all wastes to be disposed of/recovered at permitted or licensed facilities and details to be recorded of these facilities. The PD does not require wastes to be directed to a particular facility other than it be authorised to accept such waste.

Recommendation: No change

2 Odour Mitigation

2(a)

We are in agreement, that in theory, if part of the waste was to be diverted from landfill to such a facility it is possible that there might be a positive impact on the environment, however as there is no agreement between LCC and AES then there will not be an improvement.

We have gathered some alarming information regarding Bedminster technology. In a recent objection to a planning application for a similar facility in Co. Waterford it is reported "Despite AES insisting that the Bedminster technology has been tried and tested it remains that this technology has serious failings. The facility in Cairns, Australia had to close within 3 months of opening mainly due to odours, rusting of components, and lack of quality final compost. Numerous facilities in America have experienced similar problems including Cobb County, Georgia and other facilities using Bedminster technology. "

Submission on Objection:

As outlined in Point 1 the diversion of biodegradable waste is essential in order to satisfy EU and National targets. It is unclear as to the need of agreement between Laois Co. Co. and AES, although it is assumed the statement relates to Laois Co. Co. landfill, which is a matter for Laois Co. Co.

The reference to information used in an objection to a planning application for a similar facility in Co. Waterford relates to correspondence with Cairns City Council. Part of the response was omitted, specifically, a general manager, a representative of Cairns City Council stated that the Bedminster Plant in Cairns 'is a solution to the putrescible fraction', and that 'there is nothing wrong with the Bedminster Technology'. It should be noted that planning was granted for the facility in Co. Waterford. In addition, the Bedminster Plant in Nantucket is held up as a model plant for other compost facilities in the USA. Technologies like the proposed Bedminster process are essential if Ireland is going to meet its EU targets, in particular, the diversion of biodegradable material from landfill.

Technical Committee's Evaluation:

Landfilling of biodegradable waste results in release of odorous landfill gas, and generation of leachate. It is expected that operation of the proposed facility would result in diverting biodegradable waste from landfills including Kyletalesha landfill thereby reducing the potential for odour. This is in accordance with the National Strategy on Biodegradable Waste, the Midlands Regional Waste Management Plan, National and EU Policy. In the PD the proposed activity is not required to direct waste to specific facilities, for example Kyletalesha landfill. However this will not prevent such waste being diverted from landfills in the region including Kyletalesha landfill. It is envisaged that the proposal would result in a decrease in the quantity of biodegradable material to Kyletalesha landfill.

In relation to information used in the objection to the facility in Co. Waterford: The Agency is satisfied that the concerns raised are addressed in the PD licence conditions. The technology proposed is considered BAT. The issues of odour, fire and quality of final compost are dealt with in later sections of this report.

Recommendation: No change

2 Odour Mitigation

2(b)

The applicant states that up to 80,000tpa of household waste will be processed in the Bedminster plant, the bulk of which will be mixed (Municipal Solid Waste (MSW)). The organic fraction whether treated aerobically or anaerobically will not be applicable to agricultural land, or for any land application.

The liquor from any anaerobic treatment of MSW cannot be classified as safe for agricultural land application as it may facilitate the buildup of heavy metals or other bio-hazards. The applicant has not provided any information on the suitable outlets for this material apart from declaring that the organic fraction will be used as a soil improver and nutrient source. We believe this claim to be false owing to the reasons outlined above.

Submission on Objection:

The organic fraction will have to meet specified criteria, as set out in the Standards for Compost Quality of the PD, before it is allowed on land.

Technical Committee's Evaluation:

The Bedminster Digestion process produces a 'rough compost' which will be transferred to either an aeration hall for maturation (option 1) or to anaerobic digestion (option 2). Where the input is residual (mixed) municipal waste the outputs from either of these processes will be a stabilised biowaste. This has a number of applications including for mine rehabilitation, as landfill cover or in embankments and screening bunds. The applicant does not propose to landspread material on agricultural land as a result of the activity, and all waste residues produced shall be appropriately disposed of at licensed waste facilities.

Of the 80,000tpa of household, commercial or industrial waste, the facility has the capacity to accept 40,000tpa of source separated organic waste. In Condition 8.8 compost produced shall, comply with the quality standards established in *Schedule E: Standards for Compost Quality* in order not to be considered a waste. These criteria are deemed a quality standard for the use of compost as a soil improver and not for fertiliser.

In the event that anaerobic digestion (AD) is utilised the AD plant will produce a liquor and a fibrous material. As above the applicant does not propose to landspread material on agricultural land as a result of the activity. Any process liquids (including the AD liquor) from the composting/anaerobic digestion operations that are not re-used shall be discharged to the leachate containment system and tankered off-site for treatment at a municipal wastewater treatment plant agreed in advance by the Agency.

Recommendation: No change

3. Low Population

We do not believe that the BAT, licensing & monitoring will safeguard our environment. Our experience with the licensing /monitoring process in relation to the LCC landfill, where in 2005 there were over 200 breaches in the prescribed limits resulting in no action from the EPA, leaving the Kyletalesha Clonsoughy /Derryguile area one of the most polluted in Laois and the River Triogue as one of the most polluted rivers in the country.

Submission on Objection:

AES is committed to ensuring compliance with the final issued licence.

Technical Committee's Evaluation:

In order to grant a licence for the proposed facility (W0194-02) the Agency must be satisfied that the activities will not cause environmental pollution. The Agency is satisfied that the conditions in the PD satisfy the requirements of BAT for the sector¹.

The Agency is aware of the complaints referring to odours emanating from the Kyletalesha landfill facility and is concerned at the level of non-compliance in particular in relation to odours and landfill gas management. The landfill licence is being enforced through regular monitoring, site inspections and audits. There is no 'technical connection' between the AES site and the Laois County Council Landfill.

In relation to any potential for water pollution no wastewater, leachate or contaminated surface water run-off shall be discharged to any surface drain or any other watercourse. All process liquids generated will be collected and stored on site prior to disposal at an agreed municipal wastewater treatment plant, as per Condition 8.11 of the PD. Run-off from roofs and non-process areas will be discharged to water via a silt trap and Class 1 oil interceptor. Emissions will be monitored in accordance with Schedule C2.

The Agency is fully committed to enforcing all licences granted to waste facilities and to take appropriate action where necessary.

It is unclear why the heading of the objection refers to Low Population, but it may relate to a previous submission.

Recommendation: No change

4. Traffic Impact Assessment & Traffic Restrictions

The residents have no guarantee that the majority of the vehicle movements will be from the N80 direction. The EIS does not consider the increase in traffic to be significant, however we believe that there will be a significant increase in volumes and hence a significant impact on traffic.

Submission on Objection:

Independent traffic consultants Trafficwise carried out a Traffic Assessment and concluded that 'increase in traffic and the likely impact of such traffic on the capacity and operation of the receiving road network would not be significant'. Traffic has also been dealt with by Laois Co. Co. under their planning remit.

¹ BAT Guidance Notes for the Waste Sector: Waste Treatment, (Draft) 2003

Technical Committee's Evaluation:

Off site traffic concerns are outside the scope of licensing and are a matter for the Local Authority (Laois County Council).

Recommendation: No change

5. Alternative Locations

The EIS for the proposal fails to consider alternative sites. Also considering the Fire Hazard that Bedminster plants possess and the proposed location in a peat bog surrounded by forests is a serious oversight.

Submission on Objection:

Alternative locations were considered as outlined in Section 1.9 of the EIS and the alternative chosen was to extend the existing waste facility.

Technical Committee's Evaluation:

The scope of waste licensing with regard to site location is set out in the Best Available Techniques Guidance Note for the Waste Sector: Waste Treatment, (Draft) 2003. In selecting a suitable location for such a facility the basic requirement is that it will not cause environmental pollution, taking account of the characteristics of the location, the waste types it will handle, the nature of the facility and the control measures to be employed.

The site is located in a rural area with the nearest resident approximately 500m from the site boundary. The proposed licence conditions require waste infrastructure and controls that will limit the potential odours that can be associated with such a facility. The Technical Committee is satisfied that the facility will not cause environmental pollution where it is operated in accordance with the licence conditions.

The siting of such a facility in the vicinity of peat bog is primarily a matter for the Local Authority and the Fire Services. See also the response for objection subheading 7. Fire Control.

The issue of alternatives as part of an EIS is a matter for the relevant authorities to address through the planning process. However, in relation to alternative locations a number of factors were considered. The EIS complies with Article 94 and Schedule 6 of the Planning and Development Regulations 2001 (S.I. No. 600 of 2001) and EPA Licensing Regulations (S.I. No. 85 of 1994, as amended).

Recommendation: No change

6. Negative Impact on supply of clean water

The destination of the 30,000 litres of post-process contaminated water has not been addressed by the EIS. This is likely to be enriched with ammonia and heavy metals and categorically is not suitable for land spreading, contrary to the EIS.

Submission on Objection:

The amount of process water will be restricted as much as practically possible. Any excess process wastewater generated at the site will be transported off-site to an approved wastewater treatment plant in accordance with requirements set out in Condition 8.11 of the PD.

Technical Committee's Evaluation:

Condition 6.13.6 of the PD states that all wastewater from composting/anaerobic digestion operations shall be collected and re-used in the process where possible. Any leachate from the composting/anaerobic digestion operations that is not re-used shall be discharged to the leachate containment system and tankered off-site for treatment at a municipal wastewater treatment plant to be agreed in advance by the Agency. The PD does not include proposals for landspreading process water or other wastes from the facility.

Recommendation: No change

7. Fire Control

Bedminster processing facilities have demonstrated a high capability for fire hazard. We suggest that an official report from a fact-finding visit to one of these facilities, be obtained. We are gravely concerned that this facility possesses a risk to the surrounding peat land, which borders our homes not to mention the volumes of methane gasses being generated by the nearby landfill.

Submission on Objection:

Fire control measures are outlined in Section 2.5.7 of the EIS and Condition 3.21.1 of the PD requires a risk assessment to be carried out. There is a significant capital expenditure to develop the facility and as such it is in AES's interest to eliminate any risk of fire.

Technical Committee's Evaluation:

The Fire Service is the primary authority to deal with all fire incidents.

The PD contains a number of conditions relating to fire control including that all processing of material takes place indoors. Condition 9.6 requires that any fire at the facility shall be treated as an emergency and immediate action shall be taken to extinguish it and notify the appropriate authorities. Also Condition 3.21 of the PD

requires the licensee to carry out a risk assessment to determine whether the facility requires a fire-water retention facility on-site.

Recommendation: No change

8. Decommissioning Costs

We would consider it a reasonable condition of the granting of and EPA license that a financial bond be lodged equivalent to the forecast decommissioning costs in the event of AES or the facility being financially non-viable or in the event of AES or its assets being purchased by another Company.

Submission on Objection:

It is anticipated that the plant will be operated indefinitely. However in the event of unforeseen closure, waste would be removed to authorised facilities and equipment removed and recycled where possible. The building where waste activities are proposed would, (if permissible) remain and would likely be used again. Condition 12.2 of the PD includes for financial provision in relation to remedial action following anticipated events including closure.

Technical Committee's Evaluation:

Under Condition 10 of the PD the licensee is required to decommission, render safe or remove for disposal/recovery, any soil, subsoils, buildings, plant or equipment, or any waste, materials or substances or other matter that may result in environmental pollution. The licensee shall carry out such tests, investigation or submit certification, as requested; to confirm that there is no risk to the environment. This is considered a sufficient requirement in relation to proper closure of the activity and in order to protect the environment. No hazardous waste is associated with the site, which would make decommissioning problematic or expensive.

Recommendation: No change

9. Cumulative Health Implications

Please respond to our concerns on the cumulative impact on our health detailed in our original objection before continuing with the process.

Submission on Objection:

Neither AES nor AES's consultants are aware of any study or concrete evidence linking proximity of biological waste management infrastructure to deterioration in human health.

Technical Committee's Evaluation:

It is considered that the emission limits, conditions, monitoring and the design of the site provide a high level of protection of the environment and human health. Also during the licensing process due regard has been afforded to the Best Available Techniques for this type of activity. The PD deals with emissions to the environment, in addition to the environmental management of the facility and the Agency is satisfied that the activity carried on in accordance with the conditions will provide the necessary protection to the environment and to human health.

10 Ongoing Odour Problems in the Area

10 (a).

The situation at present with odours emanating from the Landfill is very bad and complaints have been lodged continuously throughout the last few months with both the EPA and Laois County Council. Some residents have in fact had to leave their homes because of the problems with odours. We object that under these circumstances this community should be burdened further with another odour generating facility.

It is not good enough to say it is BAT or that the potential is only limited to a 0.5km range. How can you categorically state this will be the case when the ISC Prime atmospheric dispersion model is based on data gathered at Dublin Airport and Birr Castle and not at the proposed site? In the event that we continue to see odour problems how will we know which facility is the culprit in generating the nuisance odours?

At present the landfill is operated to a license granted by the EPA, yet even with the history of complaints to the EPA we have not witnessed any improvements in the situation. Why is this? If sanctions have not being imposed by the EPA why should we have any faith that sanctions will be imposed by the EPA when we are experiencing problems from this new facility?

Submission on Objection:

Odour control measures are outlined in Section 4 of the EIS. Odour Monitoring Ireland carried out an odour assessment and concluded that 'with considered abatement protocols implemented, no odour impact should be registered by residents living in the vicinity of the facility'. Condition 6.11.2 of the PD requires measures for control of odour emissions. A buffer zone has been incorporated in the design as highlighted in Figure 2.1 Proposed Site Layout Plan of the EIS.

Technical Committee's Evaluation:

In relation to the Kyletalesha landfill facility the Agency are concerned at the level of non-compliance in particular in relation to odours and landfill gas management as discussed in Section 3. The ongoing issues are being dealt with by the Office of Environmental Enforcement.

In this case odour dispersion modelling was carried out to determine the impacts associated with odour from the AES facility. The model was based on three years worth of hourly sequential meteorology data, and is representative of the study area. Dublin Airport was chosen, as other meteorological stations did not have sufficient cloud cover data to perform accurate modelling. The assessment concluded that during operation of the proposed facility, regardless of the specific processes, the air and odour quality impact due to the proposed facility will be negligible and therefore will not have a significant effect on the air quality in the surrounding area.

The potential for odours arise mainly from movement of wastes to and from the site, handling and processing of waste. Condition 5.2 requires that no emissions, including odours, from the activities on the site shall result in an impairment of, or an interference with amenities or the environment beyond the facility boundary or any other legitimate uses of the environment beyond the facility boundary.

Conditions 6.11.2 and 6.11.3 require the installation of an appropriately designed air extraction system to maintain waste reception and maturation areas under negative pressure. All delivery entrances will be provided with automatic roller shutter doors. All odorous air streams extracted are to be treated by an appropriately abatement system. These requirements are in accordance with BAT.

In the case landfill the odorous wastes cannot be simply removed; and this makes corrective action a protracted affair. However in the event of an odour problem at the applicant's facility they can be ordered to cease accepting waste. The problem will diminish as the waste in process is moved off site, as it is not a permanent deposit facility.

Recommendation: No change

10 (b).

We object to the fact that this facility will be generating noise 24/7 if in operation. As this is the first type of such a facility in this area where there is no precedent of 24 hours of continuous operation some measures should be put in place to reduce the potential impact from noise on the surrounding area. At the least we would require that the entire facility be bounded by a buffer zone landscaped such that when planted with native deciduous trees the plant is completely screened on all sides. This will require forming a high wide sloping bank on all sides similar to the sound abatement techniques used on modern roads and airports.

Technical Committee's Evaluation:

Condition 4.5 and Schedule B.2 of the PD require that noise from the facility shall not exceed 55 dB(A) L_{Aeq} for daytime and 45 dB(A) L_{Aeq} at night, as measured at the boundary of the facility. This is standard for the sector and it is not anticipated that noise at these levels will give rise to complaints. Condition 6.18 also requires the licensee to carry out a noise survey of the site operations annually.

Condition 1.6 specifies that waste shall be accepted and processed at the facility only between 0700hrs and 2000hrs Monday to Friday inclusive and between 0700hrs and

1800hrs Saturdays. Due to the nature of the process involved the infrastructure for the treatment of biodegradable waste (composting or anaerobic digestion) will operate on a continuous basis, however this would not be expected to breach the specified noise limits. The main sources of noise will be related to the operation of equipment on-site, e.g., timber shredder and loading shovel together with traffic movements, which will be at restricted times as above.

The site of approximately 4.7 hectares (ha) will be landscaped and it includes an additional 1.5 ha of screen/buffer. Further requirements in relation to buffering are considered unnecessary.

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,

Marian Doyle

for and on behalf of the Technical Committee