1 DCSW2003/3281/N - WASTE TREATMENT (USING AN AUTOCLAVE) & RECYCLING FACILITY, INCLUDING CONSTRUCTION OF A NEW BUILDING, STONEY STREET INDUSTRIAL ESTATE, MADLEY, HEREFORD, HR2 9NQ

For: Estech Europe Ltd per Enviros Consulting Ltd, Enviros House, Shrewsbury Business Park, Shrewsbury, SY2 6LG

Date Received: 7th November 2003 Ward: Stoney Street Grid Ref: 41742, 36979

Expiry Date: 27th February 2004Local Member: Councillor D. C. Taylor

1. Site Description and Proposal

1.1 The application site is part of the Stoney Street Industrial Estate, Madley, part of a former World War Two RAF base. It is located about 700 metres north-west of Kingstone, 1.7kms south of Madley and 9.5kms to the west of the centre of Hereford. The Madley Communications Centre is about 800m to the north-east. The site itself is irregular in shape, its longest dimensions about 260m east-west and about 100m north-south. It is bounded by the Dene Industrial Estate to the south-east and Stoney Street to the west. There are existing industrial buildings (some disused) (some of which are former military buildings) on three sides and fields to the south. The nearest house is at Dene Villa about 130m to the south-east of the proposed building. There are two schools at Kingstone and another at Madley, about 1.5km and 3.5km away respectively. The surrounding area is semi-rural. The former runways are clearly detectable and there are scattered farms and houses in the wider landscape.

1.2 The Proposal

The proposal is to develop a waste treatment and recycling plant to process 100,000 tonnes per annum of Municipal Solid Waste (MSW) and Commercial/Industrial Waste (MSW). The applicants state that they anticipate that the majority if, not all, of this waste would be from municipal waste collection services in Hereford and the surrounding areas. Treated material would be exported off site.

1.3 Buildings

The process would be undertaken in a proposed new building 112m x 54m x12m to the eaves, 15m to the apex, a chimney will rise 5m above this. The building itself is a standard twin-bay steel portal building with profiled steel cladding and blockwork. The roof would be curved profiled metal cladding, the floor would be concrete. Three-storey offices, staff facilities and a visitor centre (550 sq metre floorscape) and viewing gallery would be located at the west end of the building, with operational processes concentrated in the southern half of the building and vehicle movement areas within the northern half. Vehicle access would be through two doors, each 6m wide and 5.1m tall. Separate pedestrian doors are also proposed.

1.4 The application also includes proposals for two weighbridges and an associated office, car parking and fuel and water tanks. The site as a whole is 2.56 hectares in size, of which the buildings would cover 0.72 hectares, hardstandings for waste vehicles (to the north of the building) 0.34 hectares, and car parking (30 spaces to the south) 0.2 hectares, leaving about half the site undeveloped.

1.5 Process

The proposed operations are to tip waste for treatment onto a concrete floor within the reception hall, transfer it via a loading shovel into feed hoppers where it would be checked and bulky or prohibited items removed. From the hopper waste would be conveyed through barriers and weighing systems to remove oversized materials into one of two 70 tonne intermediate storage hoppers to allow batch processing and monitoring of the waste through either of the two proposed autoclaves.

- 1.6 The applicants state that wastes would be cleared from the working floor each day and that any overnight waste stored in the hoppers would be covered to minimise smells and prevent access by vermin. The two autoclaves would each be 3m in diameter, 18m long and could contain 20 tonnes of waste. The autoclaves would be sealed, the waste treated with steam at 160 degrees centigrade under low pressure (5 bar) and rotated at 12RPM. Steam would be injected for around 15 minutes at a constant basis and maintained for 30 to 40 minutes (dependant upon the waste processed).
- 1.7 Treated wastes would consist of sanitised products (metals and plastics) (less than 20%), homogenous organic fibre (more than 60%) and sanitised waste for landfill (less than 20%), these would be screened using a trommel, sieves and air classifiers to separate out the lighter material (organic fibre) and heavier materials (grit, glass and metals) which would be further separated by magnet, eddy current separater and by machine or hand sorting into distinct streams for packaging and onward distrubution. The proposed end use would be a mixture of landfill (residual waste, less than 20%), direct recyclables (e.g. metals and plastics about 20%) for re-use. The applicants state that the greater part of the treated waste (60% +) would be organic fibre capable of being used for a number of applications, including insulation, fibre board, as a biomass fuel or, after further treatment, as a compost. The waste volume is stated to be reduced by around 65% by the process.

1.8 Emissions

The applicants emphasise that no emissions should be released to atmosphere by the process except steam escaping when the autoclave door is opened for the removal of treated wastes and steam evaporating from the treated waste as it goes through the various processes to separate out recyclables, etc. These emissions would be captured by extractor fans, condensed and re-used, Negative air pressure is proposed within the building as a whole to treat air within the building to remove particulates (via a wringing separator) and odours (using an ultra-violet/ozonation system). The intention is stated that no wastes would be stored overnight except in case of breakdown or emergency.

1.9 Hours of Operation

The proposal is to operate the site for 16 hours a day (6 am to 10 pm), 5 days a week (not weekends or Bank Holidays except for maintenance or in exceptional circumstances), the applicants state that permission for out of hours working is required to allow for essential maintenance and have asked for approval to work up to 10 additional days per annum (either Saturdays or Sundays) subject to prior approval in advance, to allow flexibility for peaks in demand.

1.10 Vehicle Movements

Vehicle movements into and out of the site are proposed from 7.00 a.m. to 6.00 p.m. and the applicants state that the doors of the facility would be closed outside these hours. The submitted environmental statement predicts that there would be 160 vehicle movements per day, this has subsequently been revised to an estimate that given imports of 400 tonnes per day over 5 days per week and 50 weeks per year (equivalent to 100,000 tonnes) about 50% would be delivered in ten tonne loads and 50% in 17.5 tonne loads. This gives an estimated 58 waste movements in per day and on the same basis 54 movements removing treated waste, i.e. a generation of 112 HGV movements per normal day, with a maximum of 160 movements per day (80 in and 80 out). An estimated 26 people would be employed and would generate additional car movements divided between two shifts per day. Vehicles would be under the applicants' direct or contractural control and could therefore be limited to prescribed routes. The primary access proposed is off the A465 trunk road along the B4352, past Clehonger and south along Roman Road at the Comet crossroads to the site.

1.11 Drainage

Rainwater would be drained into an external collection tank to supplement mains water to feed the boiler. Water from external hardstandings would be drained to the industrial estate's existing drainage system discharging into the Coldstone Brook via two oil interceptor/grit traps. Dirty water (e.g. washdown waters from the process building) and sewage would be discharged to foul sewer.

1.12 External Activities

The proposal includes signs at the entrance, lighting, to provide a minimum of 25 lux for external areas, security gates and supplementary fencing (details to be agreed) and a small landscaping block 800 sq metres to the south east of the main building. The applicants state that space constraints limit the potential for further landscape planting but that hedges and trees at the far end of the site would be retained.

1.13 Environmental Controls

Proposed methods of controlling odour, dust, litter, vermin, noise and air quality are set out. It is estimated that external construction would take 8 months and internal, 4 months, working 7am until 7pm weekdays and 9am - 5pm Saturdays, and would require 3 temporary porta-cabins on site.

- 1.14 The application is accompanied by plans and a statement of support, letters of clarification and a statutory Environmental Statement. The Environmental Statement includes, inter-alia, an assessment of the proposed development and design principles, planning policy, need, alternatives and BPEO 'Best Practicable Environmental Option', and assessments of effects on traffic, agricultural quality, ecology, noise and vibration, archaeology and other issues. Ten possible sites for the proposal are discussed with the conclusion that the Madley site was the best. The Ecological Survey of the site found one Great Crested Newt on one occasion, adjoining the application site boundary. This is a European Protected Species. 34 smooth newt larvae were also found in a concrete water sump on site but no other protected species.
- 1.15 The applicants have held two demonstrations on site, one open to the public, using a reduced scale plant.

2. Policies

2.1 **EU**

Framework Directive on Waste (75/442 EC as amended by 91/156/EC)

Directive on the Landfill of Waste (99/31/EC) (CD 41)

Directive on Waste Incineration (2000/76/EC) (CD 42)

A Community Strategy for Waste Management (European Resolutions Adopted in 1997)

2.2 Planning Policy Guidance

PPG.1 (Revised) - General Policy & Principles
PPG.10 - Planning & Waste Management
PPG.23 - Planning & Pollution Control

2.3 Waste Strategy 2000

2.4 Hereford and Worcester County Structure Plan

Policy WD.2 - Waste Handling & Disposal

Policy WD.3 - DC Considerations

Policy E.14 - New Industrial Development
Policy E.15 - Dangerous or Difficult Waste

Policy CTC.4 - Nature Conservation

Policy CTC.9 - Development Requirements

Policy CTC.10 - Protected Species

2.5 South Herefordshire District Local Plan

Policy GD.1 - General Development Criteria

Policy C.2 - Settlement Boundaries
Policy C.9 - Landscape Features

Policy C.13 - Protection of Nature Conservation

Policy C.14 - Ponds

Policy C.15 - Creation of New Sites for Nature Conservation

Policy C.16 - Protection of Species
Policy C.32 - Archaeological Information

Policy C.34 - Preservation of Archaeological Features

Policy C.40 - Provision of Services

Policy C.43 - Foul Sewerage
Policy C.45 - Drainage
Policy C.46 - Groundwater
Policy C.47 - Pollution

Policy C.48 - Health & Safety
Policy ED.1 - Employment Land
Policy ED.2 - Employment Land

Policy CF.6 - Access for All Policy T.1A - Transport

Policy T.2 - Environmental Impact
Policy T.3 - Highway Safety
Policy T.4 - Highway Standards
Map 34A - Madley Airfield

Madley Airfield

Policy 1 Policy 2 Policy 3

2.6 Unitary Development Plan (Deposit Draft)

Policy S.1 - Sustainable Development Policy S.2 - Development Requirements

Policy S.4 - Employment Policy S.6 - Transport

Policy S.7 - Natural & Historic Heritage

Policy S.10 - Waste

Policy S.11 - Community Facilities

Policy DR.1 - Design

Policy DR.2 - Land Use & Activity

Policy DR.3 - Movement
Policy DR.4 - Environment
Policy DR.6 - Water Resources

Policy DR.9 - Air Quality

Policy DR.10 - Contaminated Land

Policy DR.13 - Noise
Policy DR.14 - Lighting

Policy E.5 - Safeguarding Employment Land

Policy E.8 - Design Standards

Policy T.6 - Walking Policy T.7 - Cycling

Policy T.8 - Road Hierarchy
Policy T.9 - Road Freight
Policy T.11 - Parking

Policy T.16 - Access for All

Policy LA.2 - Landscape Character
Policy LA.3 - Setting of Settlements

Policy LA.6 - Landscaping

Policy NC.1 - Nature Conservation

Policy NC.5 - European Protected Species

Policy NC.6 - Bio-diversity
Policy NC.7 - Compensation
Policy NC.8 - Habitat Creation
Policy NC.9 - Monitoring

Policy Arch 1 - Archaeological Assessment

Policy Arch 6 - Recording

Policy W.1 - Waste Management Facilities

Policy W.3 - Waste Transportation
Policy W.4 - Temporary Permissions

Policy W.5 - Waste Management Licensing

Policy W.9 - Reclamation

Policy W.11	-	Waste Implications
Policy CF.1	-	Utility Services
Policy CF.2	-	Foul Drainage
Policy CF.4	-	Renewable Energy

3. Planning History

3.1 SW2002/0044/F Erection of proposed industrial - Granted 03.04.02

unit and offices, Use Classes B1

and B8

Adjoining land - 23 permissions for industrial or related development have been granted since 1993, including 13 extensions to existing businesses or new industrial buildings and two changes of use to B2 uses, and one for an emergency stop-over site for gypsies. Ten earlier permissions in the 1980s and 1990s include, inter-alia, use of the site as a transport depot and HGV training centre.

4. Consultation Summary

Statutory Consultations

4.1 Environment Agency – have no objection in principle but express concern about two potential groundwater issues arising from a) the previous use of the site (notably as a military airfield), and the possibility of associated contamination, and b) the potential contamination that might arise from the proposal (e.g. from how wastes are accepted, stored, processed and how waste water is dealt with).

Conditions requiring further site investigations to identify potential contamination and to develop appropriate risk strategies and methods of dealing with any contamination and details of how wastes are accepted, stored and processed are recommended.

The Agency state that the site is not located within the Agency's Indicative Flood Plain and note that sustainable urban drainage techniques should be included and recommend that conditions be imposed on any permission to control surface water drainage for both pollution and flood control reasons.

They also state a Waste Management Licence would be required for the development in accordance with the Environmental Protection Act 1990.

4.2 English Nature – Support the principle in the Government Waste Strategy that waste disposal should only be considered when re-use, recycling, energy recovery and composting options have been exhausted and accept that additional facilities will be needed to increase capacity for the re-use and recycling of waste, comment that the Council should use an appraisal framework to determine where such facilities should be located and that any such locations should optimise use of existing infrastructure and minimise loss of valuable habitat, natural features or harm to the environment.

With respect to the current application they note that:

 the development is not included or adjacent to statutorily protected features of wildlife or geological interest and that the development would not harm the interests of the nearest SSSIs

- that English Nature has no information to suggest that the site is of high value for nature conservation
- that one Great Crested Newt was found on site, endorse the recommendation in the Environmental Statement and recommend that conditions should be imposed requiring a spring survey and the requirement of appropriate mitigation to require a detailed plan for the creation and management of wildlife habitats on site.
- 4.3 Herefordshire Nature Trust Any response will be reported orally.
- 4.4 ODPM Have been sent three copies of the Environmental Statement, have discussed the proposal orally with officers and not stated that they intend to comment or call the application in.
- 4.5 HSE Note that the proposal would not include special, hazardous or radio-active wastes and would not therefore on health or safety grounds advise against the granting of planning permission.
- 4.6 BT Wholesale, do not have any problems in providing network services to a development on this site.
 - BT Madley Communications Centre have no objection to the waste facility itself request being kept up to date on any variations to that proposed and of the Council's view regarding the suitability of the highways infrastructure and urge that a lower speed limit be considered for this stretch of road.
- 4.7 Network Rail have stated orally that they do not wish to comment.
- 4.8 Dwr Cymru Welsh Water state that in relation to Policy 2 (Madley Airfield) of the Local Plan which states "any further development on the estate will not normally be permitted until satisfactory drainage and foul sewerage arrangements are made" "unfortunately no funding was allocated to undertake the necessary improvement works in this area within the current Capital Investment Programme (years 2000-2005). However moderate improvement works have been undertaken over the past year with savings made in other improvement schemes, these works were not to provide additional capacity but to prevent further hydraulic overloading of the public sewerage system. Since these works were commenced there has been no reoccurrence of the hydraulic overloading of the public sewerage system.

We would request that the sewerage aspect of the above policy remains unchanged, as no further capacity has been alleviated within the public sewerage system as aforementioned. We must however consider each development on its own merits and with regards to the domestic foul flows from the proposed development, these would have no adverse impact on the public sewerage system and they have therefore raised no objections to the planning application.

In relation to a trade effluent discharge from the proposed development, which is independent of the planning process, we have been in discussions with the developer regarding the proposed development site. In order to discharge trade effluent to the public sewerage system, if a consent is permitted, the developer will either have to fund upgrading works to the public sewerage system by an additional capacity or connect directly to the Waste Water Treatment Works.

We will inform you if any improvement works are to be undertaken on the public sewerage system in the area within the next capital investment programme (years 2005-2010) which will allow us to request an alteration of this policy. Determination of improvement works for the next capital investment programme will be known at the latter part of this year."

- 4.9 Highways Agency comment: "Despite the scale of this proposal and the nature of the net traffic generation there are no operational, capacity or safety issues raised by this proposal. As the A465 is a non-core Trunk Road we are required to be mindful of the views of the successor highway authority. We are not aware of any specific concerns regarding these proposals we would confirm that we would not be making any comments that require any further action on these proposals. A formal TR110 notice has been enclosed confirming this response."
- 4.10 CPRE Wish to conditionally support the proposal. They have concerns about the impact of increased HGV movements locally but feel that with careful conditioning the adverse traffic impact would be more than outweighed by the other far reaching environmental benefits which would occur. Their comments also take account of:
 - a) the reduced impact of HGV movements from this county to the current out of county landfill site once the proposed plant is operational,
 - b) the potential for an overall reduction of wasteland to landfill,
 - c) the potential savings in operating the current kerbside waste collection services and increased opportunities for recycling,
 - d) the relatively minor effects the building housing the plant would have on this industrial estate setting on the wider landscape,
 - e) their view, based on knowledge of plants employing similar technology elsewhere, that the process is relatively benign with minimal emissions and limited risk of harm to the environment.

They request that suitable conditions are attached to any consent to protect as far as is possible the residential amenity of persons residing in the locality.

In a second letter they further requested that a condition be imposed to limit the treatment of waste at the plant to material from sources within the county of Herefordshire only in order to minimise the adverse impact on the local highway infrastructure and the consequential effects on residential amenity.

4.11 DEFRA (Waste Processing Policy Unit) comment:

"There are a number of these autoclave systems being marketed in the UK for the treatment of mixed municipal waste.

I can confirm that the material recovery rates claimed for the proposed Estech facility are in line with other suppliers and are based on trials on demonstration units. The figures will no doubt vary according to the feedstock gathered – e.g. the level of bank and kerbside collection activity will change the characteristics of the waste.

Similary the outlets for the fibre product are all potentially viable and being actively developed by others. Use as a fuel is probably the most secure outlet and may benefit from a premium price if the quality and type of use qualifies it as a renewable energy source which benefits from the Renewable Obligation (also helps to have a coal fired power station in the vicinity).

Similarly use in the manufacture of fibreboard and other construction products is a possibility but there may be market perceptions to overcome and the quality of the fibre probably becomes more critical to success.

Some others have claimed that a compost product is viable but I think to be assured of a secure market, the quality would have to be as good as compost produced from segregated green waste. But there are other options such as anaerobic digestion which can provide further opportunities for removing contaminants.

The letter you attached from Estech Europe fairly reflects the claims made by industry based on limited/demo scale plant operational experience. I do not know how many commercial units of this technology are operating in Europe or USA.

I presume that the performance of the plant and the preferred use of the outputs has been checked against your requirements in respect of best value performance targets for Herefordshire and the future requirements to divert bio MSW from landfill.

For our part in Waste Strategy we are pleased to hear of local authorities actively considering new technologies such as autoclaving."

Internal Council Advice

4.12 Internal consultations have also been undertaken.

and responses are summarised in the report.

4.13 The application was advertised in two local newspapers on two successive weeks and on site. 37 neighbour notification letters were also sent out.

5. Representations

5.1 Madley Parish Council state:

"The Parish council strongly objects to this application on 16 grounds, summarised that:

- The Environmental Statement, states that the development "would not have any significant adverse impact on the local road network". The Parish Council believes that it would have a "major significance".
- The increase in the movements of HGV's is unacceptable.
- The stated vehicle movements will not be evenly spaced and would result in convoys of HGVs along the route.
- Although the suggested route is A465 / B4352 / Stoney Street, drivers to the site will undoubtedly use all available routes.
- All available routes to the site are unsuitable and this is explained in detail.
- The increase in the number of HGVs would not only increase the number of accidents but their involvement would make any accident more serious.
- The BT site on Stoney Street is a UK Economic Key Point (category 2). This requires that emergency vehicles have unrestricted access to the site on ALL roads, in the event of an emergency. The increase in traffic and the narrow section near The Comet would have a direct bearing on this access.

- It is anticipated that waste would come from Herefordshire and parts of Worcestershire. It is a concern that in the future, waste would come from even further afield and the traffic increases would be greater.
- The hours of operation of the facility could well increase in the future.
- It is possible that numbers of waste-filled lorries will be waiting for the gates to open at 7.00 a.m.
- The facility would be very close to two schools and to watercourses. There are no guarantees given that dangerous or toxic wastes would not come to the site, and "minor contamination" is a possibility.
- The amount of water needed for the process could well have implications for residents, especially during the increasing periods of low rainfall.
- Villages in the surrounding area have had numerous problems regarding sewerage capacity. The "daily washdown" would only exacerbate this.
- There is no existing facility anywhere to enable a true assessment of the environmental impact of the procedure.
- The criteria used regarding alternative sites are at best, misleading and possibly biased.
- Alternative sites at Rotherwas and Moreton-on-Lugg are far more suitable than the Madley site.
- On December 1st 2003, more than 130 people turned up at the Madley Parish Council Meeting, to voice their objections to this application.
- 5.2 At the time of writing 411 letters and e-mails of objection, including a petition of 20 names, have been received, including those from Kingstone, Eaton Bishop, Clehonger, Belmont Rural, and Kilpeck Group Parish Councils, Friends of the Earth, Age Concern, Hereford Civic Society, Friends of the Earth and the Green Party. A Group called Waste Watchers has made 8 representations. Some of these are numerous and lengthy, the points made cannot easily be summarised but in essence the objections particularly draw attention to issues relating to possible health and safety risks. problems arising from new and unproven technology, the scale of the proposal, that it does not comply with national and local policies, that alternative technologies and other better sites exist, that the claims made by the applicant are wrong, misleading or unproven, that the Council would be wrong in policy, legal and environmental terms to approved it, that the application is premature in terms of the Unitary Development Plan and the Council's waste policies and that the Council should refuse it until these are further progressed, that the Council is implicated in or inappropriately involved with the proposal, the potential for pollution and its effects, effects on water resources and quality, the undesirable intensification of the industrial estate, effects on local amenities and businesses, problems arising from nuisances, smell, noise, steam, smoke, fumes, effluent and from 24 hour working, overlooking, effects on the landscape, ecology and protected species, the importance of the BPEO concept and the proximity principle, the possibility of juidicial review and human rights issues. The most significant single area of concern raised by objectors, however, is that arising from the increased volume of traffic, particularly the increase in the number of large vehicles, increases in congestion both close to the site and far afield, especially Hereford itself, and the increased risk of accidents to local people.

A copy of a 'mandate' stating "This is to certify that I wish the group called 'Waste Watchers' to represent me in my opposition to the above Planning Application" signed by 1,868 people (officers' count) and by 1,879 people (according to the covering letter) has been submitted.

5.3 Seven letters of support have also been received, including one from Mercia Waste Management.

Summarised these letters draw attention to issues relating to the ease with which waste can be treated in built-up areas without nuisance, the advantages of the Council being pro-active in dealing with waste, beneficial local employment and reduced rates, that earlier businesses on site have generated more traffic (from haulage and car boot sales), smells (pig farming, chicken sheds and plastic manufacturing) than the application, that the proposal would form part of the overall management of the County's waste, that the creation of a locally based treatment plant is inherently desirable, that the proximity of the site would not adversely affect respondents' own businesses on the estate and that the benefits outweigh the drawbacks.

The full text of these letters can be inspected at Planning Services: Minerals & Waste, Blueschool House, Blueschool Street, Hereford and prior to the Sub-Committee meeting.

6. Officers Appraisal

- 6.1 For clarification, Members should be aware that the applicants have stated their intention to treat Herefordshire's waste (supplementing with waste from outside the county until the local waste generation matches the capacity of the plant). Waste collected by the Council is however at present dealt with in accordance with the Council's Integrated Waste Management Contract with Worcestershire County Council and Mercia Waste Limited. All the parties to the contract would need to agree to give the applicant access to the waste collected by the two Councils before it could be treated on site. No such agreements are in place. Members should also be aware that if permission were to be granted the applicant would need a Waste Management Licence (or comparable permit) from the Environment Agency. The Licence would control the kinds of waste and how they are to be treated in order to minimise the risk of pollution. The Agency has discretionary powers to refuse licences, require them to be modified and has powers of prosecution.
- 6.2 In order to operate in accordance with the application proposal therefore, the applicant would need not only planning permission but a Waste Management Licence/Permit from the Environment Agency and a contract to treat the Council's waste. Only if all three are obtained would the proposal be workable as applied for. Only the application for planning permission is before Members at this meeting.
- 6.3 Officers consider that it is a matter of fundamental importance that the proposal could only be granted permission if it accorded with the National Waste Strategy and the principles of Best Practicable Environmental Option (BPEO). These are dealt with below but all other considerations apart, on the basis of the current application and consultations, officers consider that the Council could only reasonably grant planning permission for the proposal if it is principally for the treatment of Municipal Solid Household and Commercial Waste (MSW) (but not Industrial Waste) generated within Herefordshire, with only subordinate supplements of the same material generated from Worcestershire and that if permission were to be granted it would be conditioned on this basis. The whole of this report is based on that assumption and the matter should be deferred if this is not acceptable.
- 6.4 To clarify the wide range of issues the application is considered under the following headings:

- National Policy Considerations, The BPEO Concept and issues regarding new technology,
- Safety and Perceptions of Safety, European Protected Species and the Madley Communications Centre
- The Use Class of the proposal itself and the Land Use designation of the site in the existing Local Plan and Consultation Draft UDP; Waste Policy Issues.
- Site specific issues, effects on landscape, design, archaeology, effects on ground and surface waters, drainage and foul sewerage, nature conservation, effects on local settlements and the amenities of local people, noise, air quality, odour, dust, and light pollution, local road network and road safety and other matters raised by objectors
- BPEO

National Policy Context

- 6.5 National waste policy is in essence based on the European Framework Directive on Waste, which has been brought into English law and the principles of sustainability. The published "Waste Strategy 2000" describes the government's vision for managing waste and sets out guidelines on how the changes necessary will be made. Progressive targets to reduce the amount of municipal waste sent to landfill are imposed. The Strategy expects planning decisions for waste treatment and disposal to be based on a local assessment of the Best Practical Environmental Option (BPEO) for individual waste streams.
- 6.6 The courts have held that these matters are material considerations of the greatest weight, which must always be kept in mind when making planning decisions regarding waste, and that such decisions must be in line with the BPEO.
- 6.7 The West Midlands Regional Technical Advisory Body for Waste has submitted a Draft Regional Waste Management Strategy to the Regional Planning Body. The Strategy identifies the need for further facilities in the Counties to meet national targets. It does not prescribe specific methods or locations for waste treatment facilities. The Consultation Draft UDP incorporates the basic requirements of both the Waste Strategy 2000 and the Draft Regional Waste Management Strategy.

BPEO (Background)

6.8 The BPEO concept was first outlined by the Royal Commission on Environmental Pollution (RCEP) in 1976 as an extension of the "Best Practical Means" concept, a principle used in air pollution control since the Alkali Act 1874.

The RCEP's 12^{th} report 1988 elaborated the BPEO concept and produced the most widely used summary of BPEO as

"the outcome of a systematic, consultative and decision-making procedure which emphasises the protection and conservation of the environment across land, air and water. The BPEO procedure establishes for a given set of objectives, the option that provides the most benefits or least damage to the environment as a whole, at acceptable cost in the long term as well as the short term".

6.9 Simplified, the concept requires that decisions relating to waste management should minimise damage to the environment as a whole at acceptable cost in both the long

and the short term, taking into account what is affordable and practicable. Local environmental, social and economic considerations are important and in practice the BPEO for a particular waste stream may be different in different areas or in the same area at different times. Related principles which must be taken in to account are:

- The waste hierarchy that the most effective environmental solutions are usually to <u>reduce</u> waste generation, then to <u>re-use</u> it, recycle, compost, or <u>recover</u> energy from it and that only if none of these are appropriate should it be <u>disposed</u> of (i.e. to landfill).
- The **Proximity Principle** i.e. that waste should ideally be disposed of as close as possible to its point of origin, and
- Regional Self-Sufficiency that a locale should wherever possible deal with the waste it generates itself.

These are all incorporated into PPG 10.

The concept of BPEO must be interpreted widely. The report is structured to assess first of all

- If the application should be granted permission within the terms of the 1990 Act.
- And if so, if it is the BPEO.

Objectors have expressed concern about the need to demonstrate the proposal is BPEO.

PPG.1

PPG.1 advises that — "Material considerations must be genuine planning considerations, i.e. they must be related to the purpose of planning legislation which is to regulate the use of land in the public interest and that when determining applications they must take into account any relevant views however local opposition or support for a proposal is not in itself a ground for refusing or granting planning permission, unless that opposition or support is founded upon valid planning reasons which can be substantiated."

6.10 Safety and Perceptions of Safety

The safety of a proposal and public perceptions of that safety are material considerations. In this case the Health and Safety Executive have expressly stated that they "would not ... on health and safety grounds advise against the granting of planning permission." The District Commander Herefordshire for the Fire Brigade, does not wish to comment on the application and has orally informed officers that he has also considered the possible highway safety implications of the application and that he does not object to it or wish to recommend conditions. In the circumstances, officers' advice is that the application could not realistically be refused on the grounds that it was unsafe.

The public perception that it is unsafe is nonetheless material, regardless of the justification or otherwise for that perception. Officers advice is however that in this case permission could not reasonably be refused on the basis of objectors' perceptions that it was unsafe.

6.11 Madley Communications Centre

Members will be aware that the Madley Communications Centre is close to the site. The Centre is nationally important within the UK Communications Network. Neither BT regionally or locally have objected to the proposal or requested conditions be imposed if permission were to be granted. There are no grounds for refusal with regard to the Communications Centre.

6.12 Internationally Protected Species

The applicants have identified that the concrete water tank (circa 8m x 8m) within the site is an important amphibian habitat and found a single Great Crested Newt on the boundary of the application site, on one of five site surveys. Great Crested Newts are a European Protected Species and neither they or their habitats may be disturbed or damaged without a licence. In this case, the applicants propose to undertake further survey work and if appropriate to obtain a suitable licence from DEFRA to undertake whatever is necessary. The potential to construct any necessary mitigation exists on site. English Nature endorse the applicants' recommendations and recommend that if permission were to be granted a further survey should be undertaken and that if Great Crested Newts are found the development should not commence until an appropriate licencing scheme has been approved. They also recommend that a detailed plan for the creation and management of wildlife habitats is necessary. These are supported by the Council's Ecologist, all of these could be required by condition.

6.13 Use Class of the Proposed Development

There is no specific use class for autoclaving. There is a case therefore for arguing that the proposal is sui generis. If, however, the use were to be more closely defined, as the treatment of Municipal Solid Household and Commercial (but not Industrial) Waste, something which could be required by condition, it is possible to define it more precisely. Many waste uses can be treated in this way as sui generis when mixed waste types are involved and B2 when only a specific type is. A municipal waste deposit, treating, keeping, storage or disposal place is defined as sui generis – but B2 where it is waste treating only. Other comparable uses, e.g. a waste treatment place or waste sorting place are also B2. It is also of interest that a steam cleaning place is B1 and B2 where it is potentially detrimental to residential amenity. A steam production place is B2. Officers consider it reasonable therefore regarding the general definition of B2 uses and the nature of the application to advise that if permission were to be granted and conditions imposed to limit the waste imported to Municipal Solid Household and Commercial Waste then the application should be considered a B2 use. If no such condition were to be imposed it would be considered a sui generis use.

6.14 The Land Use Designation of the Application Site

The precise points of use definition are however less important than the fact that the proposal is clearly not that prescribed for this site in the Local Plan.

The application site is currently designated for B1 and B8 uses in Policy ED.2 of the South Herefordshire District Local Plan. Against this background the grant of planning permission would be contrary to Adopted Development Plan policy. However, Members should be aware of two highly material considerations:

- that planning permission has already been given for changes of use to B2 use on adjoining sites (Hangar 5 and Unit 6, reference SH970820 and for the AW Engineering Site (reference SW2000/0775) and that another operation currently on site, Gelpack is clearly already a B2 use;
- that the site is identified in Policy E.5 of the Consultation Draft UDP as safeguarded land for employment purposes. The supporting text states "employment land and premises will be reserved for uses within Part B of the Use Classes Order, or on appropriate sites other acceptable sui generis employment uses which would otherwise be difficult to locate, such as motor car display and sales, tool hire depots, builders merchants and recycling facilities." There are therefore two clear precedents of granting permission for B2 uses on the site and there is a developing policy for such uses and sui generis recycling type developments on the site. It would not be unreasonable therefore to grant permission for this kind of use and it could not be argued that the proposal must be refused on land use designation grounds.

Members should also be aware that the proposal would not, by reason of its scale, nature or location, significantly prejudice the implementation of the Development Plan.

Waste Policy Considerations

6.15 Regional Policy

The West Midlands Draft Regional Waste Strategy is being used to inform the developing regional planning system. The strategy emphasises the principles of the BPEO, particularly local self-sufficienty and the provision of adequate facilities. The strategy is necessarily general but the proposal would be in conformity with it.

Structure Plan Policy

6.16 Structure Plan policies, notably WD2, specifically draw attention to the geographical and transportation relationship between the sources of waste and proposed handling and disposal facilities and this itself relates naturally to the more recent concept of the Proximity Principle. The County's Municipal Solid Waste is generated by householders throughout the county and to a lesser extent by the Council itself collecting commercial waste, mostly from the market towns. The greatest single source of this waste stream is Hereford City. At present solid waste collections are concentrated at the Council's Waste Transfer Station (WTS) at Leominster and at the WTS and Materials Reclamation Facility (MRF) at Rotherwas (about two-thirds). The greater part of this waste is currently taken to Lower Moor, near Pershore and landfilled. The application site is relatively close to Hereford and reasonably accessible, both to the city and Leominster.

The applicants have submitted details of the existing and proposed HGV traffic flows if permission were to be granted, these demonstrate that on a like for like comparison with 2002/3 that treating the County's waste at the Madley site would create a reduction in waste transportation (in terms of tonne miles) from circa 2.6 million tonnes miles to 1.4 million tonnes miles. This analysis does not include other wastes which might arise over time or be imported from outside the County but it does undoubtedly demonstrate a substantial reduction in traffic movements on the existing position.

Officers consider that the proposal would therefore accord with this Structure Plan Policy.

The Policy also requires the need for the facility to be established. The County's current waste treatment methods and its reliance on landfilling an excessively high proportion of that waste does not accord with national policy. Officers are satisfied that the need for this kind of facility is amply demonstrated in the Council's BPEO Report and would be entirely in accordance with National Policy and emerging Regional and UDP Policy.

The cumulative impact of facilities is also a significant policy consideration and the issue is best addressed in connection with other development plan criteria.

6.17 Structure Plan Policy CTC.9 (Development Requirements) and Local Plan Policy GD.1 (General Development Control Requirements) set out a range of general criteria under which applications should be assessed. Many other policies amplify these. For simplicity's sake the application is addressed under general headings, but Members should consider the proposal in the light of all National and Development Plan Policies, particularly those noted in section 2 above.

6.18 Effects on the Landscape

The landscape of the area around the industrial estate is described as Principled Settled Farmlands in the Council's Landscape Character Assessment. The topography is generally flat, roadside hedges are low and do not particularly screen views around the site. The land to the south is very open, rising to the higher land of the Golden Valley to the south-west, an area of Great Landscape Value. There are significant settlements and large intensive agricultural units in the adjoining landscape.

The existing buildings on site include modern industrial units and two former aircraft hangars. There are groups of smaller industrial and former intensive agricultural buildings on the Dene Industrial Estate and Webton Business Park. The proposed building would be very large scale and at least the upper part would be visible from the Kingstone – Brampton and particularly the Brampton – Madley roads, and from distant viewpoints such as Brampton Hill. Views from Stoney Street when travelling south are more limited because of intervening bands of woodland and trees.

Officers are in general agreement with the landscape and visual amenity assessment contained in the Environmental Statement that the development would be seen in the context of existing industrial development from all locations in the vicinity. The Chief Conservation Officer considers that the existing industrial estate is already a significant visual detractor in this area and that the addition of further building, which is large in terms of footprint, but not in terms of vertical style, would not worsen the situation, providing that substantial planting could be undertaken to screen the site from views from the south and west. Officers consider that it could not be argued that the proposal would have unacceptably adverse effects on the Area of Great Landscape Value. The Chief Conservation Officer considers that the proposed development would be acceptable visually if a strip of planting (native species) some 15 metres wide is established along the southern and eastern boundaries and a line of hedgerow trees is planted along the western boundary of the proposed car park. This would be in accordance with Policy 3 of the South Herefordshire District Local Plan Madley Airfield Policies, which states that:

"The Council will strive to achieve further landscaping as screening around the boundaries of the estate wherever appropriate and necessary as opportunities arise."

The applicants have explained orally that for technical (vehicle manoeuvering) reasons they cannot move the entire building to the north, but could pivot it northwards from its south-western corner. Officers believe that this would be sufficient to enable a thick belt to be planted along the greater part of the boundary, that this would acceptably mitigate the impact of the proposal and that if permission was granted would recommend a condition to this effect.

6.19 Design Considerations

The proposed building itself is largely functional in design, although efforts have been made to reduce its apparent size and scale by use of a curved roof, panels on the side and a different form for its offices. Officers consider that it would be beneficial if the design could be amended to reduce its size and scale. The unbroken ridge length of some 115 metres would be improved if it were to be broken up and more interest could be created if the walls were to be extended up to the level of the roller shutter doors, additional panels were to be added and if the ground floor piers were to be structured visually. The applicants have orally agreed to this in principle, and to accept a condition to this effect. Officers believe that these amendments to the landscaping around the site and to the design of the building would be sufficient to overcome their reservations and to make the proposal acceptable visually and in terms of its impact on both the wider and immediate landscape.

6.20 Effects on Matters of Archaeological Importance

Detailed discussions have been undertaken between officers and the applicant with regard to what is considered a potentially sensitive site. Officers consider that the archaeological interests of the site are acknowledged in the Environmental Statement and that the mitigation proposed is broadly acceptable. Officers would have no objection on archaeological grounds for planning permission to be granted subject to the imposition of the standard (Archaeology) condition D01.

6.21 Effects on Ground and Surface Waters and Drainage and Foul Sewerage

The Environment Agency have no objection to the application but express concern about the possible risks to groundwater from the nature of the previous use and the possibility of contamination associated with this, and the potential for contamination that might result from the processes applied for. They do not consider that sufficient site investigation has been undertaken to date and recommend that if permission were to be granted that conditions should be imposed to require further site investigation, the development of a conceptual model and risk assessment arising from the discovery of potential contaminants. They also recommend conditions to define and control how and where waste and waste waters are to be accepted, stored and processed, and how treated waste is to stored and waste water to be disposed of.

Although the issue is a matter of public concern and is specifically referred to in the South Herefordshire Local Plan, the Environment Agency state that the proposal is not located within the Agency's Indicative Flood Plain. The Council's Drainage Officer has also commented that it is necessary to ensure that there will be no pollution or increased flows to the local water course as a result of the proposal and recommends that a condition be imposed to require the approval of land drainage and surface water

disposal methods prior to commencement. All of these conditions are considered reasonable by officers and should ensure that if permitted the proposal could operate without detriment to ground and surface waters.

Structure Plan Policy E.14 makes a general requirement that the local planning authority needs to be satisfied that adequate provision for disposal of waste products exist or will be provided and the Local Plan Madley Airfield Policy 2 specifically states, inter alia, that "further developments on the estate will not normally be permitted until satisfactory drainage and foul sewerage arrangements are made ...". Objectors have also expressed concern about the adequacy of the existing network. Officers have consulted Dwr Cymru – Welsh Water specifically on this policy. Their full response is detailed above but in summary they state that "with regard to the domestic foul flows from the proposed development, these would have no adverse impact on the public sewerage system and we have therefore raised no objection to the planning application. In relation to a trade effluent discharge from the proposed development, which is independent of the planning process ... in order to discharge trade effluent ... the developer will either have to fund upgrading works to the public sewerage system to provide additional capacity or connect directly to the waste water treatment works."

The applicants state that they have employed the Owen Williams Consultancy who are currently discussing capacity and design issues with Dwr Cymru.

Officers' advice is that the adequacy of the foul drainage system is a material consideration but that in the circumstances the need for and nature of the above works are not such that they would justify the refusal of planning permission.

6.22 Effects on Matters of Nature Conservation Importance

There is a fundamental need to ensure that the interests of Great Crested Newts on site are protected. The issues arising are discussed above.

Objectors have drawn attention to other species on or near the site, English Nature are satisfied however that the proposal is more than 2 kms from any SSSIs and would not harm the special interest of the sites and the County Ecologist has assessed the Environmental Statement and undertaken his own site survey and has no objection subject to the imposition of conditions.

6.23 Effects on Local Settlements and the Amenities of Local People

Objectors have raised a wide range of concerns under these headings. It is important that Members should recognise that although there is some overlap between the planning process, pollution control regime exercised by the Environment Agency and the public and employee safety regimes exercised by the HSE, and the roles of the emergency services, the Courts and Government policy emphasise that the planning system should not be operated as to duplicate controls which are the statutory responsibility of other bodies and "that the planning system must focus on any potential for pollution, but only to the extent that it may affect the current and future uses of land." The Council must act on the assumption that all of these other bodies will exercise their powers appropriately and competently. None of the statutory consultees have objected to the application or raised issues relating to the protection of local amenities and people which could not be dealt with by the imposition of conditions. The Council does however have an independent role in supplementing

these bodies by the protection of local amenity. To consider the general headings in turn.

6.24 Noise

The Council's Senior Environmental Health Officer's advice is that the applicant's assessment of noise arising from the use of the process building is unlikely to pose a problem but that conditions could be imposed to limit the maximum night time noise level emitted to $43 \text{dBA} \ L_{\text{Aeq, 1h}}$ at the site boundary – in Officers' opinion this would be very unlikely to cause a statutory nuisance to the nearest houses, and further conditions to close doors at night and limit noise at weekends.

6.25 Noise from On Site Deliveries and Vehicles

The Senior Environmental Health Officer also advises that vehicles on site are unlikely to cause a statutory noise nuisance and that a condition could be imposed limiting vehicle movements in and out of the building to between 07.00 and 18.00 hours. The Environmental Statement acknowledges that there would be a moderate impact on housing close to the road network. Officers concur and would add that other properties between Madley and Hereford would also be adversely affected. However they consider that the restriction of vehicle movements to the hours recommended above would mitigate those effects to a satisfactory extent.

6.26 Noise from Construction

Officers do not consider that this should be a particular problem, but bearing in mind the low background noise levels, particularly at night, would recommend that a condition be imposed to limit the hours of noisy operations to normal daytime.

6.27 Air Quality - in the vicinity of the site

The Council's Senior Environmental Health Officer's comments are that:

"The application only considers emissions to air from the two gas fired boilers (used to raise steam) and the emission from increased traffic associated with the development. It therefore presumes that emissions from the autoclaving process will be negligible, on the basis that they internally vented, as they do not result from MSW (municipal solid waste) and CI (commercial/industrial) incineration via a stack. In this respect, it states that the only emissions from the process will be of steam, which will be released on an intermittent basis when the 'treatment' has finished and the autoclave door is opened. The application then states that much of this steam will be captured by a canopy and passed through a condenser for reuse in presumably a virtually closed system.

The application then states that any fugitive emissions escaping from this recirculatory system will be retained in the building (by negative air pressure) and will ultimately pass through dust abatement plant (a 'wringing separator') and odour abatement plant (a UV / ozonation system) before emitted to atmosphere.

From the observed 'scaled-down' trial, I would agree that the process is not combustion and would also agree that the only probable pollutant emissions will be contained within the intermittent steam release when the autoclave doors are opened. Therefore the contentious air pollutants and counter arguments normally associated

with thermal waste incineration would not appear to be the case here. However, no analysed sample of the steam and its emissions have been presented with the application in support of this.

It is my view that should permission be granted the installation should be regulated by the Environment Agency under:

(i) A permit to operate a "recovery of waste" activity, bearing in mind the application suggests that the resulting autoclaved fibre may be supplied to power stations as a bio-fuel. (See section 5.5, Part A1 of the Pollution Prevention and Control Regs 2000)

or at very least by

(ii) A waste management licence

Under PPG 23 "Planning and Pollution", it would not normally be appropriate to propose specific conditions relating to detailed air pollution control measures that will later be regulated by conditions under specific pollution/waste control licences or permits as mentioned above. However, I understand that owing to the nature of this application, some comments would be appropriate. I therefore would offer the following:

It is of paramount importance that the building is maintained under negative pressure and the application suggests this will be achieved. However, I have reservations about this as the building is very large and a significant 'air change per hour' rate will therefore be essential if large vehicular access doors are to be left open in the working day (as the application implies). No 'air lock' HGV entrance doors are offered in the application either, which would overcome the detrimental effects of opening doors. I therefore suggest the following condition:

- "All doors to the building shall be kept firmly closed when not in use."
- "The general building structure and ventilation shall be designed to contain fugitive emissions and ensure containment of steam, odorous air and dust within the building. To achieve this, the ventilation system shall be suitable and sufficient, so as to maintain negative pressure at all times when processing or when steam, odours or dust are likely to be present within the building.

Note: the requirements of a permit or waste management licence are likely to include such measures and in such a case the tighter standard shall prevail."

Abatement plant has been proposed for only dust and odour, although I am not clear of the exact final discharge point to atmosphere. Both proposed abatement systems are supported with text in the appendices, but I have no experience of these designs being used elsewhere in an industrial capacity in Herefordshire. The application presumes there will no emissions other than dust and odour from the autoclaves. I therefore offer the following:

 "Prior to the development of the site, a report shall be submitted to Herefordshire Council, which specifies the levels of all pollutants (including

dust and odour) within the steam/emissions from the autoclaves and process building and the predicted emission level of these from the discharge point to atmosphere.

Note: Herefordshire Council expects that this report shall be based on the analysis of captured autoclave or stack emissions."

 "Prior to the discharge of process air from the building, suitable and sufficient abatement plant shall be installed to abate dust and odour (and any other pollutant subject to the receipt of the above mentioned report), prior to its release to atmosphere. These schemes shall be submitted to Herefordshire Council for approval, prior to their installation.

Note: the requirements of a permit or waste management licence are likely to include such measures and set emission limits. In such a case the tighter standard shall prevail."

 "The discharge point from the odour and dust abatement plant shall be from a stack which emits at a sufficient height for adequate dispersal. An "HMIP D1" calculation showing the calculation of this stack shall be submitted to Herefordshire Council for approval, prior to its construction.

Note: the requirements of a permit or waste management licence are likely to include a similar control measure. In such a case the tighter standard shall prevail."

I understand that the boilers mentioned in the application are to be solely gas fired. I therefore agree that their emissions will be low for such pollutants as SO2, UHCs and particulates, although would point out that the pollutants NOx and CO would be released. As I am led to believe that the size of the boilers will be below those requiring a separate Part B permit under the Pollution Prevention and Control Regs 2000, I would ask you to remind the applicants to both confirm this to be the case and then to remind them to require prior consent for the stack(s) under the Clean Air Act 1993. I would accept an 'HMIP D1' calculation in support of this, which the application states has already been undertaken. If they choose to seek a permit from the Environment Agency as an A1 installation, this will not be necessary."

Members should know that if permission were to be granted a Waste Management Licence/Permit would be required and that the Environment Agency could impose process controls and/or conditions to regulate air quality in or around the site.

6.28 Air Quality – along the route used by HGV vehicles

The Environmental Statement includes a detailed assessment of the effects of traffic impact on air quality. The Council's Senior Environmental Health Officer acknowledges that the method used is appropriate and agrees that the changes in pollutant levels will be very low along the B4349 and will fall well below the objectives that Herefordshire Council has to meet under its local air quality management obligations.

However, the report does not consider the impact of increased HGV flows in Hereford, where pollutant levels are elevated. In this respect, an Air Quality Management Area was declared in 2001 by Herefordshire Council in Hereford City along the A49 corridor and in particular the Greyfriars Bridge / Belmont Roundabout. This was primarily due

to elevated traffic emissions and as a consequence this corridor will be subject to an 'Air Quality Action Plan' in the future.

The draft PPG.23 'Planning and Pollution' recognises that a negative air quality impact of a development due to traffic is a material planning consideration. Officers are of the opinion that this application is likely to have a negative impact on air quality in Hereford's Air Quality Management Area. However they consider that this is likely to be slight and unlikely to be sufficiently severe enough to warrant planning refusal on its own.

6.29 Odour

The proposal is to treat Municipal Solid Waste – a type of waste capable of generating unpleasant odours at every stage of the process. The applicants propose to enclose all operations handling this material within a building to limit storage periods to less than 24 hours, manage the process to minimise spillage, waste degradation and odour production, maintain negative air pressure and to treat odourous air steam to control odour escapes. The nearest houses (Dene Villa and Webstone Court) are relatively distant. The applicants consider that any negative odour impacts would be of low to moderate magnitude and significance to these premises. Other industrial buildings are closer and the area already has a number of intensive agricultural units nearby. Officer discussions with the Environment Agency confirm the potential of odour nuisance from autoclaves. The Environment Agency has powers to regulate the processes involved and any odour emissions through the Waste Management Licencing process and the Senior Environmental Health Officer has powers to regulate any nuisance which might arise. Officers generally consider the applicant's assessment to be plausible and reasonable and they do not consider that the effects of odours on amenities are likely to be so unacceptable as to either create a nuisance or to justify refusal. They recommend that if permission were to be granted that conditions be imposed to require negative air pressure to be maintained at all times within the proposed building and for all processes, including steam condensation, air filtration and odour control equipment to be maintained in accordance with the manufacturer's recommendation. A neighbouring factory, Gelpack Industrial Ltd makes packaging for the food industry. It would be desirable to ensure that there is no offensive odour at the boundary between the two units. Conditions recommended in para 6.27 would enable possible effects to be assessed and an appropriately tight specification for the odour plant ventilation rate and stock height to be prescribed.

6.30 Dust / Flies / Vermin / Litter

Dust

There are a number of potential dust sources at the proposed plant, notably from waste vehicles, vehicle movement, waste handling and construction. The submitted Environmental Statement includes an assessment of these and concludes that it is likely to represent a "low" or "very low" risk of dust nuisance and proposes a number of mitigation measures. Officers consider the assessment and proposals reasonable but repeat the need to protect adjoining businesses from dust pollution and recommend that if permission were to be granted that conditions be imposed to secure these. Members should note, however, that the adjoining area has a number of intensive rearing units which will emit dust and that other agricultural activities in the area will do the same.

Flies and Vermin

The application mentions various controls they will impose to minimise both potential rat infestations and fly nuisance in hot weather.

The application proposes that all waste will be stored internally, where such problems can be more easily controlled and that the application implies a 24-hour turn around of waste in any case. Officers consider that these issues are best regulated under the conditions of a waste management licence and the suggested planning condition to ensure that waste is not stored/handled externally should take account of potential bad practice.

Litter

The application mentions that incoming waste deliveries will be sheeted over or netted and that handling of waste will be internal only. Again, Officers advice is that these issues are best regulated under the conditions of a waste management licence, the proposed planning condition to ensure that site roads are regularly cleaned by road sweepers could protect local amenities.

6.31 Light Pollution

The need to illuminate the site could cause local light pollution but is a relatively minor consideration which would be controlled by condition.

6.32 Effects on the Local Road Network and Road Safety

The planning application is supported by a Transport Assessment (TA) which is contained within section 5 of the applicant's Environmental Statement (ES). The scope of the TA report was the subject of pre-application discussions between the applicant's consultants and HC Transportation Unit.

The applicant estimates that the proposal would generate about 112 HGV movements per day, with a maximum of 160 per day. Over the proposed opening hours for deliveries/removals (07.00 am to 18.00 pm) this would amount to an average of between 11/12 and 14/15 HGV movements per hour at the site, i.e. about one HGV every 4 or 5 minutes Monday to Friday. In practice some traffic movement might take place on Saturday – this is a requirement of the Council's Waste Contractor. The number of vehicles is likely however to be relatively low but would reduce weekday average movements. Sunday movements are likely to be extremely low and would be necessary only in the case of unusual or unforseen events. The applicant has already offered to agree to a condition limiting movements at weekends to 10 occasions per year with prior approval. Officers consider that this would be reasonable to both the operators, local people and users of the local highways.

The applicants estimate that the greater part of waste deliveries (95%) would be via the A465 through Hereford, the B4352 and Stoney Street, with only 5% coming from the Hay-on-Wye direction. Processed material is expected to be distributed in different directions with approximately 20% (mostly recycled metals and plastics) going to Hereford, 20% (waste) to be landfilled at Lower Moor, and about 60% further afield, probably along the A465, A49 and M50. Only limited markets for treated material are anticipated in the west and movements of treated material in that direction are considered unlikely to be very high. Staff car travel (14 people/shift) would be

based around two shifts – (06.00 to 14.00 and 14.00 to 22.00), and is likely to be concentrated outside the normal peak hours.

The possible effects of increased traffic movements arising from the development on local amenities and highway safety and congestion on the adjoining road network are a matter of great concern to objectors, very many of whom have commented on the potential seriousness of these effects. The applicant has included assessments of the existing flows, accident records and the effects of the proposal. It should be noted that these were undertaken at a time (school holidays) and when the bridge at Bridge Sollers is closed, both advantageous to the applicant. The Environmental Statement states that "due to the nature of the area it is not considered that the traffic flows measured will be significantly different to the norm." Officers consider this to be generally true. The applicants note that the section of Stoney Street to the south-west of the application site is unsuitable and accept that if necessary a routing agreement could be made to avoid this section. Policy Madley Airfield 2 in the Local Plan states inter-alia that "any further developments ... will not normally be permitted until ... the southern end of Stoney Street has been satisfactorily widened and improvements made to the junction of the Class III road from Kingstone."

Members should be aware that significant further developments have been allowed on the industrial estate since the policy was proposed and the Local Plan has been adopted and that no such widening or improvements have been required of any other applicant. They should also be aware that the above policy is not included in the emerging UDP. It remains nonetheless in the Development Plan and Officers advice is that if permission is granted it should be on the condition that the operator either makes a routing agreement not to use this section of Stoney Street or makes the necessary improvements.

Traffic Impact

The application site lies within the established Stoney Street Industrial Estate. The estate has a long history of planning approvals for all types of "B" class land uses within, some of which are at least as large, if not larger than that proposed. Specific permitted uses on-site have included, or do currently include, road hauliers' yards and an HGV weighing station. Land parcels within the estate, including the application site, could legitimately be proposed for any type of "B" class use, including offices, industry and distribution warehousing.

Therefore, the test of this particular application is to set the traffic generation associated with the proposed waste treatment plant against that which could be expected from the various "B" class land uses noted above. This has been undertaken with recourse to the nationally recognised TRICS trip generation database. This process is summarised in the table below with respect to the same floorspace (12,000sqm) as that proposed by the applicants.

Land Use	Daily Trips		
B1 - Offices	1,545		
B2 - Industrial	911		
B8 - Distribution Warehousing	656		
Proposed Waste Plant (Maximum Daily Trips)	216		

It is immediately evident from the above table that the proposed waste treatment plant would generate significantly fewer vehicle movements than would any of the legitimate alternative uses for this site, either on the basis of a single "B" class use or a mix of "B" class uses.

The proposed waste treatment plant would generate in the worst case a maximum of 160 HGV trips per day. This would constitute some 74% of total trips. Further interrogation of the TRICS database indicates that industrial sites can generate some 30% HGV's, while distribution warehousing sites can generate between 50 and 80% HGV's.

Based on the figures given in the above table, which reflect the same floorspace as proposed for the waste plant, a B2 industrial use could generate up to some 300 HGV trips per day while a B8 distribution warehouse use could generate between 325 and 525 HGV's.

It is standard practice to multiply by a factor of 2.5 trips made by HGV's of the size proposed to be used by the applicants in order to reflect their equivalent number of car trips. This would result in some 400 "car equivalent" trips to service the proposed waste plant, plus 56 staff trips, giving a total "car equivalent" number of trips of 456. This number is well below the figure noted above for B1 office use.

In light of the above assessment, it is concluded that the trip generation of the proposed waste treatment plant falls below that which could be expected from a site of this size, were it to be put to an alternative, legitimate "B" class land use.

As a result of the proposals, it is expected that traffic flows would typically rise by around 25% on Stoney Street, 10% on the B4352 east of the Comet Inn junction less than 3.5% on A465 at its junction with B4349 and even less in percentage terms on Belmont road. It should be noted that traffic flows on Stoney Street are currently very low, which does serve to magnify the increase in traffic due to Estech when considered on a percentage basis.

Regarding the wider road network, beyond the B4349 junction with the A465, information has been submitted by the applicants setting out the current routing of waste trips and the routing of trips that would result, post-development. These are summarised as follows:

- Greyfriars Bridge no change in flows of waste vehicles.
- Belmont Road there would be a net increase in trips on Belmont Road.

• Countywide road network - currently, there are some 2.576 million tonne miles of waste trips generated by Herefordshire waste disposal. Post-development, at current levels this would almost halve, to 1.358 million tonne miles.

Road Safety

The applicants have obtained data from Herefordshire Council for the most recent fiveyear period regarding personal injury accidents for the local road network and these are set out in full within the TA. The data reveals the following:

- There have been no injury accidents on Stoney Street;
- There have been three injury accidents at the Comet Inn junction, none of which involved HGV's; and
- There have been 5.4 injury accidents per annum between the Comet Inn junction and the A465 junction, none of which involved HGV's.

It should be noted that as part the programme of accident remedial measures Herefordshire Council has within the last 18 months carried out improvements at Comet crossroads and at "MacIntyres bend" on B4349. In addition a speed limit has been introduced, along with a speed camera. These should all serve to improve the safety of the route intended to be used in connection with this application.

Mitigation

The Transportation Manager notes that:

Stoney Street between the site and the junction with the B4352 is typically some 6.0m wide. However, there is a pinch point on Stoney Street, which constitutes a section of road that is some 4.0m wide over a distance of some 100m, rendering it too narrow for two HGV's, or a car and an HGV, to pass. The applicants have indicated a willingness to fund any reasonable improvement at this location. Officers advice is that this is necessary and that details would be finalised within a s.278 agreement.

In addition to this specific improvement, the applicants have indicated a willingness to make a contribution to the costs of maintenance on the County road sections of the agreed routes for site traffic. Again Officers consider this necessary.

- 6.33 The Highways Agency initially expressed concern at the potential impact of the proposal on the trunk road system, but do not comment or require further action.
- 6.34 The Head of Engineering and Transportation's conclusions regarding these effects are that there are no grounds for objection to the proposals on traffic and highways matters.

However, the following conditions are recommended:

- H13 Access, turning area and parking;
- H17 Improvements to the pinch point on Stoney Street to ensure safe flow of traffic;
- H21 Wheel washing;
- H27 Parking for site operatives; and
- H29 Secure cycle parking provision.

Members should be aware that if permission were to be given and if the operators were to treat the County's waste the Council could impose routing agreements through its integrated Waste Management Contract.

Other Grounds for Concern Raised by Objectors

These include many references to the potentially adverse effects from pollution, emissions and from the unknown potential environmental effects arising from the use of new technology, on local people, schools, farms and animals. Some of these concerns are simply mistaken misinterpretations of the proposal as some kind of incinerator. In general, however, these concerns are material, as described above, under the heading Safety, there is no evidence that they are well founded and in themselves cannot be given much weight. There is no suggestion from the statutory consultees that these issues are particularly significant.

Concerns have also been expressed about the potential effects of the proposal on tourism and the local economy, again although material there does not seem to be any evidence to support these concerns and they cannot be given much weight.

Some objections, e.g. regarding site security or the possible attraction of vermin and creation of litter are based on more reasonable grounds but are matters which could be addressed both by condition, if Members wished, and would also be part of any normal Waste Management Licence/Permit.

6.35 Cumulative Effects

Structure Plan policy specifically refers to the potential significance of the cumulative effects and it would be possible in principle to justify refusal on the grounds that although no individual consideration was sufficient, the cumulative adverse effects of an application were sufficient to do so. Officers do not consider that, subject to the imposition of conditions, that the cumulative adverse effects of this proposal are sufficient to justify such a decision.

6.36 Summary

To summarise the above, officers consider that the proposal would have some adverse effects, notably on a protected species (Great Crested Newt) and its habitat, on the amenities of local people and on highway safety and the local highway network, could have potentially adverse effects on ground and surface waters, foul drainage, and could be improved in its design and appearance. Local objections to the proposal are very numerous and raise material considerations. Local concerns about the safety of the proposal and the wisdom of permitting an unproven operation should be noted. Officers' advice is that none of these effects and considerations are such that they would justify the refusal of planning permission individually or collectively or in accordance with the precautionary principle. They consider that the issues raised could be controlled satisfactorily through the imposition of conditions and that other significant controls also exist which are the responsibility of other regulatory bodies. They also consider that there are sufficient precedents and that it would be in accordance with the emerging UDP to grant permission for a use of this kind on the application site. On this basis it is therefore possible to state that the application should be granted permission subject to conditions. It is, however, necessary to

emphasise that Members should only do so if they consider the proposal was the BPEO.

BPEO

Members' attention is drawn to the explanation in paras 6.5 to 6.9 inclusive above where what this concept means and how important it is, is set out.

- 6.37 The Council has undertaken a joint BPEO assessment for the Municipal Solid Waste (and other waste) Streams (to 2016) with Worcestershire County Council and has endorsed options for each of these. The BPEO for Herefordshire's Municipal Solid Waste is to achieve a combined recycling and composting target of 33% and landfill 22%, with the balance (45%) being managed through a form of thermal treatment, and for each county to have local treatment facilities.
- 6.38 The Council also agreed that it will be important to retain an element of flexibility when considering applications for waste management facilities, but that processes or technologies put forward as an alternative to those which comprise the BPEO for a particular waste stream will have to clearly demonstrate that the impact of that process or technology will be the same or perform better than those which have been modelled for the agreed BPEO.
- 6.39 Fundamental issues regarding this proposal are therefore:
 - Whether it is as good or better than the adopted BPEO for the County's Solid Municipal Waste Stream and
 - Whether the specific proposal is the BPEO for this stream at this time

There is guidance on making a BPEO assessment in Waste Strategy 2000 – but no set approach – in essence however the approach should be comprehensive, flexible, iterative and transparent and should take account of local environmental social and economic references. At the strategic level the Council closely followed the guidance in Waste Strategy 2000. In considering this application, Officers emphasise more local factors.

6.40 New technology

An important issue must be the fact that the proposal is of a relatively new kind and that this plant appears to be the first of its kind at this scale. Objectors have drawn particular attention to the potential problems of using relatively new technology. The applicants state that the technology was initially developed in the USA in the mid-1990s, and has since been further developed in the UK. Initially a "proof of concept" plant was transported from the USA and rebuilt at Sheffield. Estech Europe state that they were not party to this plant but that it was operated in accordance with a planning permission and given a Waste Management Licence by the Environment Agency. The plant has ceased operation and been returned to the USA.

A small scale commercial plant (40,000 tonnes p.a.) has been installed at Thygeston Landfill Site at Bridgend. The applicants state that:

"The process operates, but generally only on a demonstration basis. The two autoclaves break down the elements of waste in a similar way to Estech's demonstration plant. The post-processing equipment however is not the same as the

Estech process and does not appear to achieve the same quality of separation between the products."

Officers have discussed the operation of these plants with the responsible sections of the Environment Agency. They have been informed that they were granted and operated in accordance with Waste Management Licences and that there were no significant issues or problems in that respect.

6.41 It is at least reasonable to argue therefore that some evidence that the process works does exist. The comments from DEFRA are particularly pertinent in this regard in confirming that the recovery rates claimed are reasonable. It is also significant that other plants comparable to the proposal have been licensed by the Environment Agency. The Agency have not informed Officers that they perceive any particular licensing issues to be a problem, although at the time of writing the kind of licence or permit that would be necessary has not been resolved. It is not the function of the planning system to frustrate innovation. Again, DEFRA's comments that "for our part in Waste Strategy we are pleased to hear of local authorities actively considering new technologies such as autoclaving" is important. Officers have no evidence that the proposal would not work or be refused a Waste Management Licence, to the extent that it should be refused permission. A demonstration plant has been operated on site and observed by the Council's and Environment Agency staff. Officers consider therefore that it could not be argued that the concept is so innovative that it could never be the BPEO, or that uncertainties about it were so material that it should be refused permission on the ground that its novelty and inherent uncertainty were overwhelmingly significant. Objectors have widely circulated a "Report on Waste Processing Technology and the Oneida-Herkiner Solid Waste Authority Request for Proposals." (December 2003). Officers have established that the Oneida-Herkiner Solid Waste Authority is "a public benefit corporation, a governmental body established to manage (a) region's waste The report was written for (a) Board of Directors. area elected officials, RFP (Request for Proposal) respondents and the general public. (Its) purpose was to discuss (their) evaluations and make conclusions on the waste processing technology proposals put forward (by 3 respondents) as well as (to) outline post and future Authority policy and evaluations of waste processing technologies." The Authority is based in Utila, New York. Summarised, the report assesses 3 possible proposals to treat 50,000 tonnes of waste as an alternative to landfilling. None of the 3 proposals was adopted. One of the proposals was by Estech Rome LLC and was for an autoclave process which would have created a fuel for power generation.

The applicants have issued a statement that:

6.42 "USA Authority RFP (Request for Proposals)

1. Company Synergy: Estech Europe Ltd. (a recycling based company) has no direct relationship with Estech Rome LLC (an energy based company) other than both are independent licensees of the original technology owned by the Slane Company. The trade name Fibrecycle™ used to identify the process is common in name only. Since the licence was granted Estech Europe Ltd. has significantly developed the original technology and taken the Fibrecycle™ process to an advanced proven stage of effectiveness and completeness for the purpose of recycling up to 80% of municipal solid waste. The USA Company is developing the technology for a completely different market, predominantly the recovery of energy from materials market.

The Estech Europe Ltd. Fibrecycle™ Recycling Process has been approved as BAT (Best Available Techniques) for all of Belgium, including Brussels.

2. Basis of the Report: RFP (Request for Proposals) – the report is the result of a 'scatter gun' approach in an attempt to identify alternative solutions and new technologies for reducing landfill in NY (New York). The report states "It is important to note that the RFP was advertised locally (NY) and nationally (USA) twice but only three respondents came forward with proposals." This was not a planning proposal or tender request for a fully operational plant; it was a speculative venture in an attempt to establish what 'new' technology was available – no economically viable outcome could be predicted for the respondents. For this reason, it is quite possible that all three companies, once fully aware of the requirements of the Herkimer County, declined to submit further information beyond some initial presentations."

Officers' advice is that although Members should be aware of the objector's representation and that the American authority chose not to proceed for their own reasons but that beyond this the report has little bearing in terms of the determination of this planning application and should not be given much weight.

6.43 The applicants state that their "Fibrecycle technology has recently been approved under BAT (Best Available Techniques) in Belgium. This accreditation was commissioned by Estech Europe as part of the development of our process in Belgium. We are presently working with Biffa Belgium as their nominated technology supplier for the Brabant (Incovo) waste management project. Biffa Belgium has been appointed the local authority's Preferred Partner for this large waste management contract.

In Belgium, any process that is to be used for the treatment of waste must first have BAT approval. This approval, once given, allows the technology to be used for the treatment of waste at any site in Belgium subject to planning permissions and permitting. The Belgium authorities will not issue permits for the operation of a waste treatment facility if that facility has not been approved as BAT.

To gain accreditation as BAT, the technology in question must undergo a vigorous examination by a body approved by the Belgium authorities. There is one main body in Belgium which has the ability and approval to carry out these examinations. This acknowledged approval body is known as VITO and it has carried out a study on our technology and submitted its report to a government body known as OVAM. The study was reviewed by OVAM and it has been agreed that our Fibrecycle technology conforms to BAT."

6.44 This is a material consideration. Its significance is that Belgium is a member of the EU and it can be assumed therefore that the technology is considered to conform to EU Directives on Waste by the Belgian authorities. Their decisions are not binding on the Council but should be noted and indicate that in contrast to the American example, some reputable organisations do not consider new technology in principle, or this one in particular, unacceptable in terms of EU legislation.

On the assumption therefore that it is at least eligible for consideration, the proposal needs to be further assessed.

6.45 Could the proposal be BPEO?

Officers are developing guidance for assessing BPEO, but in the absence of a final, agreed methodology, have assessed the application against the following questions. Their aim in doing so and the prime consideration for Members, is to establish whether the proposal provides the most benefits or least damage to the environment as a whole, at acceptable cost in the long and short term, taking into account what is affordable and practicable, the Waste Hierarchy, Proximity Principle and Regional Self Sufficiency. If it does so it can be considered the Best Practicable Environmental Option and can be granted planning permission.

- 6.46 How does the proposal contribute to the Strategy, i.e. does the BPEO strategy require additional capacity? Yes.
- 6.47 Does the existing capacity meet the strategy requirements? No.

The current position regarding waste treatment in the two Counties is unsatisfactory. The Council is landfilling far too high a proportion of its waste and is not achieving its own or government targets for recycling/recovery. The Integrated Waste Management Contract and adopted BPEO both identify that new arrangements and facilities for the treatment of municipal waste are needed.

- 6.48 What is the capacity of the proposed plant? 100,000 tonnes, this would be adequate for the preferred Option.
- 6.49 Does the proposal provide a sensible contribution to the overall need? Yes.

It would cover the County's entire MSW output and allow for a reasonable amount of growth over the next 20 odd years.

- 6.50 Location and the Proximity Principle: Is there an existing facility in the vicinity? No.
- 6.51 Where would the proposal receive waste from? This is also dealt with under the heading "Transportation issues", but in summary the proposal would receive most of its waste from within the County, and if permission were granted conditions could be imposed to control this.

Municipal Waste arisings within the county are likely to grow to 100,000 tonnes per annum over the period of the Council's Integrated Waste Management Contract and officers believe it is sensible to develop facilities which could cater for this.

At present the Council's Household MSW arisings are about 61,000 tonnes per annum (plus a 2,000 tonnes per annum from Tenbury). The applicants anticipate eventually transporting up to 20,000 tonnes per annum of treated Waste to Lower Moor (Worcestershire) and argue that whilst there is such a shortfall in treatment facilities in the region that it would be sensible to carry the same volume in return loads for processing at Madley – whilst the site has capacity, rather than return empty. It is possible that about 7,500 tonnes (rising over time) of waste from Herefordshire's "Bring" sites could also be processed at Madley (subject to improved on site separation). The net total of "Herefordshire" Waste processed at the site at the outset could therefore be about 68,500

tonnes. In order to run the plant at capacity (100,000 tonnes) they need therefore to import about 40,000 tonnes of waste per annum until the supply from the Herefordshire "Bring" sites is established. This would reduce to about 33,000 tonnes per annum if the "Bring" sites material is used. As Herefordshire's own waste increased this importation would need to progressively reduce. Not to allow this waste to be processed, whilst Worcestershire does not have adequate facilities of its own, would mean that this waste would probably be landfilled at Lower Moor. This would be undesirable itself and because valuable landfill space on which Herefordshire itself depends would be unnecessarily used up.

Officers accept these arguments and believe that it is in accordance with the general principles of Regional Self-Sufficiency and the Proximity Principle to allow these imports. They consider it essential however that if permission were to be granted those principles require that conditions should be imposed to limit imports of waste to a maximum of 40,000 tonnes at commencement, reducing to 20,000 tonnes after 10 years and that such waste should only come from Worcestershire.

- 6.52 Is there an appropriate area having regard to the final disposal of residual materials? This is dealt with in more detail under the heading "What is the end product?" but in summary some of the product could be dealt with locally, some could be landfilled at Lower Moor, as most of the County's waste is currently. There is no suggestion that products need to be dealt with in any specific or distant a location which would so influence the decision as to justify the refusal of planning permission at this site.
- 6.53 How would the facility contribute to the Strategy? i.e. what does it propose to take? All of the County's Municipal Solid Waste, with a supplement from outside, possibly Worcestershire, to ensure full plant operating capacity is achieved.
- 6.54 What is the recovery rate? The applicants' proposals that recovery is as good as the BPEO for this waste stream is considered reasonable by DEFRA.
- 6.55 What is the end product and is there a possible market for it? The applicants state that these are:
 - "a) Ferrous and non-ferrous metals. The metals market is already wellestablished and the company will sell the material into this market. As there is continuous demand for metal, there is no requirement to enter contracts with any users of these materials. It is likely that ferrous metals will be supplied to businesses in the Hereford area, while non-ferrous metals will be taken further afield as more specialist plants are required, e.g. in South Wales.
 - b) Plastics. Like the metals market, the market for plastics is also well-established and this applies to specific types of plastics and mixed plastics. Our process currently produces a mixed plastic with no further separation. We will continually monitor prices for individual types of separated plastics and, should it prove commercially worthwhile, will consider installing additional equipment to separate the mixed plastics. However, to provide more detail, we have the opportunity to supply two companies with our mixed plastics. The main opportunity is with a company based in Dorset

who can use the materials to manufacture "timber-like" products including decking, joists, boarding and many other product that can be utilised in the building industry.

Fibre. There are an number of markets for the fibre. This provides the advantage that we are not subject to the vagaries of one particular outlet. These include using the fibre in the building products sector, composting. or as a biomass fuel source possible through anaerobic digestion. The fibre may be used as a composting base material. Tests have already been undertaken that show the fibre to comply with the standards set by the Composting Association. The only area where improvements are required to fully meet the standards is in relation to small amounts of contras (glass and plastics). The only reason for this is that the airclassifier in the demonstration plant is less than 1 metre long which does not allow these contras to be adequately separated and removed. The airclassifier on a commercial plant will be 5 metres long and will allow the contras to fall out of suspension first, thus ensuring that the fibre will then comply fully to the standard. Subsequent anaerobic digestion, if undertaken, would enhance the product still further.

The compost market is large but is dependant upon the quality of product produced and, in the case of the DIY market, public perception. Compost can be sold into the following markets (in order of value):-

- DIY market
- Horticultural market
- Agricultural market

As Herefordshire is a largely rural county, the fibre, as a compost or soil additive, could be readily disposed of within the horticultural and agricultural markets.

However, the preferred market for the fibre will be in building products. There are opportunities for it to be used in fibreboard, the market for which is considerable (50 million m³ per annum or 30 million tonnes per annum are produce throughout Europe). Estech are in negotiations to supply a major European producer of fibreboard with fibre.

In addition, the company is working closely with Ecobond, the manufacturers of a non-carcinogenic resin to utilise the fibre in the making of tiles, bricks, slabs, kerbstones and other building products. Samples have already been manufactured and shown at our mobile plant demonstrations and the proposed markets are substantial. As a safe 'fallback' or 'base' position, the company has secured a contract with a major coal factor who wish to use the fibre as a biomass fuel to be co-combusted with coal. The volumes required for this market are very substantial. For this purpose the fibre could go to any number of coal fired power stations as near to Hereford as possible.......I would re-emphasise that this is only intended as a short-term solution whilst we establish the fibre into the recycling markets"

Members must be aware that it is not the role of the planning system to fetter the market economy. Even if a specific end user were proposed by the applicants it would not be reasonable to condition this, insist that specific contracts are entered into or to maintain contracts by condition.

Officers advice is that the range of uses proposed has the potential to offer great and valuable flexibility. In a BPEO sense this is important in the long term. The idea of practicability has to be borne in mind and the proposed end products and possible uses seem practicable.

Members should also be aware that the Council can use its Integrated Waste Management contract to impose further controls on the end use and will be advised by DEFRA in this regard.

- 6.56 Is there significant diversion from landfill? Yes, equal to the BPEO for this waste stream, and if permission were to be granted the degree of diversion from landfill could be ensured through the Council's Integrated Waste Management Contract.
- 6.57 Is there another comparable plant? Nothing currently operational on this scale anywhere.
- 6.58 What are the environmental effects? -Members should note that the assessment of environmental effects in determining the BPEO for a specific proposal is not the same as that required for an Environment Statement or, in the way that these matter are usually assessed, for a planning application. Here an important issue is that there appear to be significant differences between the environmental impacts from what is proposed and those technologies examined in the BPEO study for the Municipal Solid Waste stream. The study identifies thermal treatment as a preferred option, e.g. incineration. Some of these technologies are established. It would be fair to point out that in general forms of incineration have not proved popular and are widely viewed as polluting (albeit to an extent that would be regulated to an acceptable degree). It is possible that other innovative technologies may be developed which may be both environmentally "better" and more popular. The proposal claims to produce minimal harmful emissions to air and water and to provide appropriately treated waste. It is for the Environment Agency and Health and Safety Executive to regulate waste treatment facilities but neither has suggested that the proposal would be "worse" environmentally than the "thermal treatment" proposed in the BPEO for the waste stream.
- 6.59 The applicant has submitted the evaluation of the methodology undertaken for VITO, the Belgian Best Available Technique accreditation body. The report submitted to the Belgian government on behalf of Estech basically compares/evaluates as a reference point a basic thermal process for waste incineration ("grate furnace with selective non catalytic reduction of NOx") with two versions of the 'fibrecycle' process (as proposed at Madley), namely:

A fibrecycle plant that recycles its fibres after the autoclaving process (i.e. fibres taken off site and reused in the manufacture of building materials etc.)

A fibrecycle plant that incinerates its fibres after the autoclaving process (i.e. fibres transported off site and used as biomass fuel to be co incinerated at a biomass or coal fired power station elsewhere.

The report acknowledges that theoretical variables for the fibrecycle processes had to be used for comparison, in the absence of real data. There will therefore be some uncertainty over their conclusions.

The report compares the different techniques using the following headings, which are summarised, interpreted and commented on:

Environment

General Environment Issues

A fibrecycle plant that recycles its fibres after the autoclaving process scores favourably against the reference thermal incinerator as it does not destroy the recyclables. It also uses the residual fibres in building products, soil conditioners etc.

A fibrecycle plant that incinerates its fibres after the autoclaving process scores the same as the reference thermal incinerator, although the report states that it will be more environmental than incineration, on the basis that the fibrecycle process still recycles much of the waste and then uses the fibres for incineration for electricity generation.

Carcinogenic Substances

As far as damage to human health by carcinogenic substances is concerned, the report finds that both the fibrecycle processes are slightly below the impact of traditional thermal incineration, (presumably because the fibre recycling version involves no combustion process). The fibrecycle process that incinerates its fibres has slightly higher releases of carcinogenic emissions than the recycling version and officers assume that this is due to emissions from a power station elsewhere receiving the exported fibres.

Respiratory Effects

As far as damage to human health by respiratory effects is concerned, the report finds that the fibrecycle processes will impact slightly higher than traditional thermal incineration, due to NOx (nitrous oxides) from the burning of natural gas within the steam raising boilers. Odours and dust is not mentioned.

Climate Change

Indirect damage to human health caused by climate change has also been mentioned in the report. This finds that the fibercycle recycling scenario compares very favourably to thermal incineration, as thermal processing (and therefore CO2) is much reduced. However, the fibrecycle version that combusts fibres off-site fares slightly worse, as more energy used will be needed, which will lead to CO2 being released from gas fired boilers.

Damage to Ecosystem Caused by Acidification / Eutrophication

This section relates to the release of acid rain forming gases from combustion (i.e. NOx, HCL and SO2) and high pH air pollutants (e.g. ammonia) that would lead to alkali precipitation, which could result in eutrophication in lakes and rivers etc.

The report finds that the negative impact of acidification and eutrophication is much less for the recycling fibrecycle scenario, although the impact is higher if fibres are

used as biofuel, due to NOx (nitrous oxides) from the burning of natural gas within the steam raising boilers.

Ecotoxicity

The report considers that the likely cause of this would be from heavy metal release from incineration. It finds that the damage to the ecosystem will be much reduced for both fibrecycle types, when compared to the reference thermal incineration technique.

Exhaustion of Fossil Fuels and Other Resources

The report states that the use of gas and externally generated electricity using fossil fuels is the most important feature here. Both fibrecycle techniques fare worse against the reference thermal incineration example, due to the amount of natural gas needed to fire the two boilers.

Minerals

The use of minerals for all types of plant is negligible (other than for the construction phase) and need not be considered further.

Energy

A fibrecycle plant that recycles its fibres after the autoclaving process scores less than the reference thermal incinerator because there will be no electricity generation.

A fibrecycle plant that incinerates its fibres after the autoclaving process scores about the same, as the fibres can be used to generate power, although the power generation is predicted to be approximately 9% lower than thermal incineration.

Material Recovery

A fibrecycle plant that recycles its fibres after the autoclaving process compares favourably with the reference thermal incinerator process because of the obvious benefits of recycled waste and re-use of fibres in building materials etc as opposed to destruction of waste to residue ash.

A fibrecycle plant that incinerates its fibres after the autoclaving process scores about the same as the reference thermal incinerator process, although it seems there would be slightly more levels of waste / final residue ash.

Process Management

Both versions of the fibrecycle plant score slightly less than the reference thermal incinerator process for 'process controls', although the report implies that the process and its procedures will be relatively simple. They both compare favourably for 'greater flexibility' although the reasons for this are not really expanded upon.

Costs

Both versions of the fibrecycle plant compare favourably to the reference thermal incinerator process in cost. The fibrecycle plant that recycles its fibres is estimated as

being 11% cheaper and the fibrecycle plant that incinerates its fibres as bio fuel is estimated to be 5% cheaper.

6.60 The Council's Senior Environmental Health Officer's comments that "Having regard to the above summary and its interpretation it is clear that the fibrecycle scenarios are very different to thermal incineration.

To highlight the main differences, the attached appendix summarises the differences between the reference incinerator mentioned in the main text of my memorandum, against a fibrecycle plant recycling its fibres and a fibrecycle plant exporting them offsite for biofuel combustion outside Herefordshire.

The appendix shows that both fibrecycle scenarios fare favourably to thermal incineration. It should however be remembered that this comparison is with the more basic thermal incineration design.

It is quite probable that to meet the requirements of the new EU 'waste incineration directive' (WID) and the subsequent tightening of pollution control under the IPPC regime, a thermal incineration alternative at Madley would be to a higher specification, i.e. with selective catalytic reduction of NOx. To contrast this higher spec incinerator against the two fibrecycle options, I have also included this in the attached appendix. Here it can be seen that the 'favourable' margin is not quite so great, particularly for off-site incineration of the fibres, if a market cannot be found for their alternative use."

Officers advice is that the 'higher specification' incineration methods are not yet mandatory and that a more basic thermal treatment is still possible. However in general it is clear that the use of the treated waste for off site combustion would not be in the long term best interests of the environment. The applicant states that the use of the fibre as a fuel is only intended as a short term solution whilst they establish the fibre into the recycling markets. The Council could use its Integrated Waste Management Contract to control the end use to ensure that any off site incineration was only in the short term. DEFRA have an important role in this respect and could refuse to accept end uses as meeting recycling targets if they were not acceptable environmentally or in the wider interests of sustainability. Officers advice is therefore that the least environmentally 'friendly' option, the long term off site combustion of the treated waste, can be prevented. Apart from one scenario therefore (the long term use of the treated fibre for incineration, given that such a scenario could be prevented, elsewhere) the proposal should be more favourable environmentally than other thermal treatments.

It is reasonable therefore for this Council to accept that the technology proposed would perform at least as well or better than those modelled for the agreed BPEO strategy.

6.61 Location

Aside from the question of whether the technology is acceptable, Members also need to consider whether the location of the site is BPEO. The Development Plan does not specifically identify sites for this kind of proposal. The Deposit Draft UDP sets out the criteria to be used when considering new waste management facilities and the proposal would comply with these. The applicants have undertaken their own assessment of 10 sites. They conclude that the Madley site is the best. Objectors have questioned both the methodology and its application. Officer's advice is that any

scoring system is subjective and it must be an important factor that there are no grounds within the existing Development Plans or emerging UDP to state that Madley could not be the best location. However, although they consider that the objectors' criticisms of the submitted Siting Study have some validity they do not agree that other sites are shown to be better. Objectors have particularly focussed on the idea that better sites might exist at Moreton Camp and Rotherwas. The applicants have submitted a letter in response, stating that:

"The Environmental Statement acknowledges that Moreton-on-Lugg enjoys better access than the application site and that Rotherwas Industrial Estate enjoys marginally better access than the application site. However, these two sites had other constraints which led to the application site being most suitable overall.

In relation to one issue both the Rotherwas Industrial Estate and Moreton-on-Lugg have particular constraints, namely the floodplain.

Following comment made by a number of objectors regarding floodplain issues, we asked the Environment Agency to provide more detail in relation to these two sites.....they have confirmed that both the locations lie within the Indicative Floodplain. In addition they state that "any site which is located in or within close proximity to the floodplain is considered at high risk of flooding"

This was one of the main reasons why these sites were not considered to be as suitable as Stoney Street. Officers can confirm that this is the Environment Agency's advice for these sites. Members may also be aware that the access into the Moreton Camp site is currently considered inadequate by the Highways Agency and these are reasons why officers would not score these sites as high as either the applicants or objectors do. Officers' advice is therefore that it could not be argued that there are grounds for asserting that any other site in the County is a better practicable option for this proposal than the application site.

6.62 Conclusion

In conclusion, the Council's BPEO Strategy identifies a preferred option for MSW that achieves sufficient recycling/composting/thermal treatment to reduce disposal to landfill to 22%; with all due acknowledgement to the uncertainty relating, to any new proposal, the application could reasonably be assumed to achieve this. As such it scores high in terms of the Waste Hierarchy. That the range of potential uses is wide is very important, allows for considerable flexibility if circumstances or markets change and makes the proposal inherently 'better' than any method of waste treatment which only serve more limited markets.

The proposal would achieve Regional (i.e. County) Self-Sufficiency for this waste stream. Achieving that self-sufficiency would require supplements of material until the full plant capacity is reached. That could be achieved in accordance with the Proximity Principle.

The Proximity Principle requires that waste should ideally be disposed of as close to its point of origin. The proposal is close to Hereford, the largest single source of the County's waste. It can realistically be supplemented until full plant capacity is achieved in a way which takes waste from other close sources (Tenbury and by return loads from Lower Moor). It could do so — with only a small and declining fraction (reduced to nothing in 10 years) needed from "other" sources. That such sources could themselves be close (e.g. Malvern) is also in accordance with the principle.

The proposal is generally environmentally acceptable in Planning terms and, on the information available, can reasonably be expected to be at least as good in overall sustainability terms, (apart from energy recovery in scenarios where fibre is incinerated off site in the long term) and better in some, than other available technologies.

The proposal is innovative and this must introduce an element of reservation but neither the HSE, Environment Agency, DEFRA or another EU country consider this necessarily makes it ineligible to be the Best Practicable Option. In Waste Hierarchy terms its innovative qualities give it flexibility in recycling/recovery terms which is very desirable.

A very wide range of other site options exist in theory but there are no 'better' sites in the Development Plan or emerging UDP which could so readily be developed. Although other technologies exist the proposal appears to be better in terms of environmental impact than thermal treatment and no better has been proposed.

The Council is failing to meet the targets set for waste treatment by government and it could not be argued that a better option is realistically available. Members can rely on the other regulatory bodies (e.g. the Environment Agency and HSE) to perform their duties properly and if permission were to be given the Council could exercise further controls through the Integrated Waste Management Contract.

In consequence, Officers consider that this proposal is the BPEO and that accordingly planning permission should be granted.

Human Rights Act 1998

The terms of the Human Rights Act have been considered in relation to this application and it is considered that no such rights would be breached.

In view of the existing restriction in the South Herefordshire Local Plan limiting development on the Madley Industrial Estate to B1 and B8 development, Officers have decided that the application should be treated as a 'departure', i.e. that it does not accord with the provisions of the Development Plan in force. The application was re-advertised accordingly on 11th March and therefore cannot be determined until a 21 day consultation period has expired on 1st April, 2004 and any responses have been duly considered.

RECOMMENDATION

That subject to no further objections raising additional material planning considerations by the end of the consultation period, the officers named in the Scheme of Delegation to Officers be authorised to approve the application subject to the following conditions and any further conditions considered necessary by officers.

1. A01 (Time limit for commencement (full permission))

Reason: Required to be imposed by Section 91 of the Town and Country Planning Act 1990.

2. No development shall take place unless and until a Great Crested Newt survey and appraisal has been undertaken and approved by the local planning authority

in writing. The survey shall only be undertaken by an appropriately qualified ecologist and only between the dates of 14th March and 14th June and the submitted appraisal shall propose either:

- a) that, if no Great Crested Newts are found, that appropriate mitigation features shall be constructed on site before any development takes place, or
- b) that if Great Crested Newts are found that no development shall take place until an appropriate mitigation scheme has been approved by the local planning authority in accordance with a DEFRA licence.

Reason: In order to protect the nature conservation interest of the site, with particular reference to ensuring the protection of Great Crested Newts and their habitat.

- 3. No development, site clearance, or demolition shall be undertaken until:
 - a) a desk top study has been submitted for the approval of the local planning authority. the submitted study shall include:
 - i) the identification of previous site uses,
 - ii) potential contaminants arising from those uses
 - iii) related issues which might affect or arise from the proposal and
 - iv) a conceptual model in accordance with best practice, of all potential contaminant sources, pathways and receptors, and
 - b) a site investigation has been submitted to and approved in writing by the local planning authority prior to that investigation being carried out on the site using the information obtained from the approved desk top study and conceptual model. The submitted investigation scheme shall include a risk assessment to be undertaken relating to:
 - i) the receptors associated with the proposed new use
 - ii) those uses that will be retained
 - iii) other receptors on and off the site that may be affected
 - iv) proposals for the refinement of the conceptual model, to take account of the risk identified and
 - v) a Method Statement detailing the remediation necessary to enable the proposal to be undertaken without unacceptable risk to the environment and human health, and
 - c) the site investigation and risk assessment have been undertaken and reported in accordance with details approved by the local planning authority. Future monitoring proposals and the method of reporting shall also be detailed in the report. Thereafter the remediation shall be carried out in full, in accordance with the approved method statement and risk assessment, and
 - d) a completion report verifying that the work has been undertaken in accordance with the method statement shall be provided to the local planning authority for approval.

Only when the local planning authority has confirmed in writing that all of the elements of the above have been completed and a monitoring scheme is in place shall development, site clearance or demolition take place.

Reason: To ensure that potential sources of contamination are identified and methods established to ensure that the site is fit for the approved use, in order to prevent pollution, particularly of the water environment.

- 4. No development shall take place until proposals for the location and construction of the areas and means of:
 - a) waste acceptance into the site
 - b) waste storage
 - c) waste processing
 - d) waste water storage
 - e) waste water disposal and
 - f) storage of treated waste and
 - g) a report specifying the levels of all pollutants (including dust and odour) within the steam/emissions from the autoclaves and process building and the predicted emission level of these from the discharge point to atmosphere.

have been submitted to and agreed in writing by the local planning authority.

Reason: To prevent pollution of the environment and in the interests of the amenity of local people and businesses.

5. F20 (Scheme of surface water drainage)

Reason: To prevent the increased risk of flooding by ensuring the provision of a satisfactory means of surface water disposal.

6. F21 (Scheme of surface water regulation)

Reason: To prevent the increased risk of flooding.

7. D01 (Site investigation – archaeology)

Reason: To ensure the archaeological interest of the site is recorded.

8. A04 (Approval of reserved matters)

Reason: To enable the local planning authority to exercise proper control over these aspects of the development.

9. A05 (Plans and particulars of reserved matters)

Reason: Required to be imposed by Section 92 of the Town and Country Planning Act 1990.

10. G13 (Landscape design proposals)

Reason: In the interests of visual amenity.

11. G14 (Soft landscaping works)

Reason: In the interests of visual amenity.

12. G15 (Landscaping implementation)

Reason: To ensure the site is satisfactorily landscaped.

13. G27 (Landscape maintenance arrangements)

Reason: In the interests of visual and residential amenity.

14. G33 (Details of walls/fences (outline permission)

Reason: In the interests of residential and visual amenity.

15. G40 (Barn Conversion – owl box)

Reason: In order not to disturb or deter the nesting or roosting of barn owls which are a species protected by the Wildlife and Countryside Act 1981.

16. F16 (Restriction of hours during construction)

Reason: To protect the amenity of local residents.

17. E02 (Restriction of hours of delivery)

Reason: To safeguard the amenities of the locality and to allow the operator flexibility if necessary to cater for unforeseen events without excessive adverse effects on the locality.

18. No material shall be processed on site other than Municipal Solid Household and Commercial Waste collected by or on behalf of, or for disposal by, the County of Herefordshire District Council or Worcestershire County Council.

Reason: In order to define the permission and to ensure that the permission is operated in accordance with the principles of BEPO, Waste Hierarchy, Proximity Principle, Regional Self-Sufficiency, and to safeguard the amenities of the locality.

19. No material shall be processed on site unless and until one week's notice of the date of commencement is given in advance in writing to the local planning authority.

Reason: In order to define the date of commencement and to enable the permission to be monitored in accordance with the conditions imposed on it in the interests of nature conservation, pollution control and the amenities of local people.

20. Not more than 100,000 tonnes of waste shall be processed on site in any 12 month period.

Reason: In order to define the permission and to ensure that the permission is operated in accordance with the principles of BEPO, Waste Hierarchy, Proximity Principle, Regional Self-Sufficiency, and to safeguard the amenities of the locality.

21. Not more than 40% of the material processed on site in any 12 month period shall ever originate from outside of the county of Herefordshire and not more than 20% of the material processed on site in any 12 month period shall originate from outside of the county of Herefordshire after 10 years of the date of commencement of processing.

Reason: In order to define the date of commencement and to enable the permission to be monitored in accordance with the conditions imposed on it in the interests of nature conservation, pollution control and the amenities of local people.

22. No treated or untreated waste shall be stored on site other than within the plant building.

Reason: To protect the appearance of the locality, the amenities of local people and to prevent pollution.

23. F42 (Restriction of open storage)

Reason: To protect the appearance of the locality.

24. The level of noise emitted from the proposed development shall not exceed 43dB $L_{Aeq,\ 1h}$ between 2300 to 0700, as measured at a distance of 25m from the building, in a south easterly direction in a direct line towards Dene Villa (as identified on Plan 1 attached). All measurements are to be taken in Accordance with BS 4142, 1997.

Reason: To protect the interests of residential amenity.

25. No activities from the operation or deliveries from the site shall be audible at the nearest residential property on Sundays, bank holidays or public holidays.

Reason: To protect the interests of residential amenity.

26. All doors and building openings on the eastern elevation of the building (i.e. in the direction of Kingstone) shall be kept closed during the period 2300 to 0700.

Reason: To protect the interests of residential amenity.

27. All doors to the process building shall be kept firmly closed when not in use.

Reason: To safeguard residential amenity.

28. All incoming deliveries of waste shall be sheeted over with tarpaulin when on site.

Reason: To safeguard residential amenity and adjoining businesses.

29. Vehicles on site shall not exceed the speed of 10mph to minimise dust release from haul roads on site.

Reason: To safeguard residential amenity and adjoining businesses.

30. Haul roads on site shall be hard surfaced and maintained in good condition, to the satisfaction of the local planning authority to enable adequate cleaning and sweeping.

Reason: To safeguard residential amenity and adjoining businesses.

31. Daily road sweeping of all on-site haul roads shall be undertaken and all spillages and litter outside the building cleared as soon as is practically possible.

Reason: To safeguard residential amenity and adjoining businesses.

32. F32 (Details of floodlighting/external lighting)

Reason: To safeguard local amenities.

33. The general building structure and ventilation shall be designed to contain fugitive emissions and ensure containment of steam, odorous air and dust within the building. To achieve this, the ventilation system shall be suitable and sufficient, so as to maintain negative pressure at all times when processing or when steam, odours or dust are likely to be present within the building.

Reason: To prevent pollution of the environment and in the interests of local people and businesses.

34. Prior to the discharge of process air from the building, suitable and sufficient abatement plant shall be installed to abate dust and odour (and any other pollutant identified) prior to its release to atmosphere. Details of these plant shall be submitted to Herefordshire Council to the satisfaction of the local planning authority prior to their installation.

Reason: To prevent pollution of the environment and in the interests of local people and businesses.

35. The discharge point from the odour and dust abatement plant shall be from a stack which emits at a sufficient height for adequate dispersal. An "HM1P D1" calculation showing the calculation of this stack shall be submitted to Herefordshire Council for approval, prior to its construction.

Reason: To prevent pollution of the environment and in the interests of local people and businesses.

36. H13 - Access, turning area and parking;

Reason: In the interests of highway safety and to ensure the free flow of traffic using the adjoining highway.

37. H17 – Improvements to the pinch point on Stoney Street to ensure safe flow of traffic.

Reason: To ensure the safe and free flow of traffic on the highway.

38. H21 - Wheel washing.

Reason: To ensure that the wheels of vehicles are cleaned before leaving the site in the interests of highway safety.

39. H27 - Parking for site operatives; and

Reason: To prevent indiscriminate parking in the interests of highway safety.

40. H29 - Secure cycle parking provision.

Reason: To ensure that there is adequate provision for secure cycle accommodation within the application site, encouraging alternative modes of transport in accordance with both local and national planning policy.

Informative(s)

- 1. HN4 Private apparatus within the highway;
- 2. HN5 Works within the highway;
- 3. HN7 Section 278 Agreement.
- 4 N15 (Reasons for the granting of planning permission)

Notes:	

Background Papers

Submitted Environmental Statement and further submissions by the applicant.

Internal consultation replies

Comparison of thermal incineration with Fibrecycle/Estech Europe

Category	Fibrecycle (Recycling fibres) V Basic (SCNR) 'reference' thermal incineration	Fibrecycle (Off site combustion of fibres) V Basic (SCNR) 'reference' thermal incineration	Fibrecycle (Recycling fibres) V Higher spec (SCR) thermal incineration	Fibrecycle (Off site combustion of fibres) V Higher spec (SCR) thermal incineration
General Environment Issues	+	0	0	-
Carcinogenic Substances	+	+	+	0
Respiratory Effects	+	-	0/+	-
Climate Change	+	-	+	-
Damage to Ecosystem Caused by Acidification / Eutrophication	+	-	+	-
Ecotoxicity	+	+	0	-/0
Exhaustion of Fossil Fuels and Other Resources	-	-	-	-
Minerals	0	0	0	0
Energy	=	0	-	0
Material Recovery	+	-/0	+	-/0
Process Management	-/0	-/0	-/0	-/0
Costs	0/+	0/+	0/+	0/+

Key

-	Compares less favourably
-/0	Slightly less favourable
0	Same
0/+	Slightly more favourable
+	Compares more favourably

